

LIBOR Transition

Market update:
16-31 March 2021

274
820 days to
31 December 2021
30 June 2023

1 Highlights

ARRC's progress report

What happened? The Alternative Reference Rates Committee (ARRC) [published](#) a report on the transition away from USD LIBOR. Amid slower than hoped for transition progress, especially in the loan markets, the committee suggests that “the transition needs to accelerate quickly” for firms to meet regulatory expectations for an end of issuances of new LIBOR-based products by year end 2021. This sentiment was [echoed](#) later in the day by Fed Vice Chair for Supervision Randal Quarles, who in his keynote address at the ARRC’s [SOFR Symposium](#) suggested regulators would place “intense supervisory focus” on firms’ transition progress, specifically with respect to efforts to end the use of USD LIBOR in new products.

Compared to estimates of industry-wide exposures published by the committee just over three years ago, the use of USD LIBOR appears to have increased rather than decreased. While the continued publication of USD LIBOR into June 2023 will allow for the majority of exposures to mature prior to LIBOR’s cessation, roughly \$68 trillion in derivatives and \$5.1 trillion in cash products are set to mature sometime after June 2023.

With the ISDA IBOR Fallbacks Protocol as well as plans for a preemptive conversion of outstanding LIBOR trades at the central clearing counterparties (CCPs) in place, there is now a clear transition path for the vast majority of legacy LIBOR-based derivatives. The picture remains mixed in the case of cash products, however. The report notes that an increasing number of recent issuances have adopted the ARRC’s recommended hardwired fallback language, providing a backstop of last resort at the time of LIBOR’s cessation. Uptake of hardwired fallback language, however, has not been consistent across all product classes. That leaves a potentially



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significant number of contracts that might rely on the amendment approach, contain inadequate fallback language not contemplating LIBOR's permanent cessation or not contain any fallback language at all.

To address the issue of legacy contracts containing either inadequate or no fallback language, the ARRC had put forward a legislative proposal in New York State. That proposal has recently been [passed](#) by the state's legislature and is expected to be signed into law by the governor. The legislation would allow for the statutory replacement of certain LIBOR references in the afore described contracts upon LIBOR's cessation, should they fall under New York State law.

Our take: Many of us followed the recent news story of a container ship blocking the Suez Canal. Widely circulated pictures of a seemingly tiny excavator working to free the bow of the immense vessel sparked plenty of humorous commentary across the globe. But while the excavator paled in size next to the supersized ship, it wouldn't be entirely accurate to call it "small" — given that it weighs about 20 tons. The same holds true for USD LIBOR exposures in cash products with maturities extending past June 2023. A small percentage of \$223 trillion remains a rather large amount, as the comparisons included in our table below seek to put into perspective.

Even amid the prospect of supervisory actions targeting institutions falling behind in their transition efforts, firms have been slow to reduce their reliance on

USD LIBOR, especially in the loan markets. Some held out hope for a credit sensitive alternative or supplement to SOFR, while others counted on the emergence of a forward looking term rate version of SOFR. Between the ARRC's progress report, the unsurprising concession that a SOFR term rate was unlikely to arrive until later in the year — if at all — and Quarles' reminder that regulators would be watching banks' transition progress intently over the coming months, it is becoming abundantly clear that time has already started to run out. Embracing SOFR in its current forms as a lending rate, at least for the time being, should represent the most practical, direct path to meeting regulatory expectations for ending LIBOR-based issuances before year-end. Other alternatives may well, and should be expected to, evolve over time. But with the deadline approaching, any bank that continues to hesitate in moving away from USD LIBOR is bound to face difficult questions from its regulators.

Any acceleration in the shift away from LIBOR not only entails establishing the operational capabilities to price and process new RFR transactions but also needs to be supported by increased customer outreach and engagement. Amid the continued publication of USD LIBOR, corporate borrowers might not feel the same urgency to make the shift to alternative reference rates. For banks to be successful in accelerating the move away from LIBOR, they will need an effective strategy to educate and communicate the urgency to change gears to their corporate customers.

(in \$ trillion)	Year-end 2016 ¹		Year-end 2020 ²		
	Product type	Gross outstanding	Gross outstanding	Maturing after June 2023	Post June 2023 balance compares to... ³
OTC derivatives	145		171	66	2019 Global GDP (est.): \$88 trillion
Exchange traded derivatives	45	▲	43	2	National debt - Germany: \$2.4 trillion
Business loans					
Syndicated loans	1.5		2.0	1.1	National debt - Spain: \$1.4 trillion
Non-syndicated business loans	0.8	▲	1.3	0.4	National debt - Singapore: \$0.4 trillion
Non-syndicated CRE/commercial mortgages	1.1		1.5	0.8	National debt - Mexico: \$0.7 trillion
Consumer loans					
Retail mortgages	1.2	▶	1.3	0.8	National debt - Korea: \$0.7 trillion
Other consumer loans	0.1		0.1	0.1	
Bonds					
Floating/variable rate notes	1.8	▼	1.1	0.3	National debt - Switzerland: \$0.3 trillion
Securitizations					
Mortgage-backed securities (incl. CMOs)	1.0		0.8	0.8	
Collateralized loan obligations	0.4	▶	0.5	0.5	National debt - Canada: \$1.6 trillion
Asset-backed securities	0.2		0.2	0.2	
Collateralized debt obligations	0.2		0.1	0.1	
Total USD LIBOR exposure	199		223	74	

Please note: This table has been revised from an earlier version to reflect updates made by the ARRC to its progress report.

¹Source: Second Report, The Alternative Reference Rates Committee, March 2018

No term rate, no problems?

What happened? The lack of term structures in the recommended RFRs expected to replace LIBOR has long been a key topic of discussion. Over the past two weeks, a number of developments across different markets have provided some additional clarity on the role term reference rates can, or cannot, be expected to play.

The ARRC [announced](#) that the committee would not be in a position to recommend a forward-looking SOFR term rate by the end of Q2 2021, citing insufficient liquidity in SOFR derivatives required to construct such a rate at this time. Market participants are encouraged to continue their transition efforts without relying on a SOFR term rate, as the committee continues to evaluate a limited set of cases in which a term rate might be used. The announcement followed a related discussion at the ARRC's 17 February [meeting](#).

The ARRC also [published](#) a [white paper](#)

recommending the use of 30-day average SOFR set in advance in asset-backed securities (ABS). An "in advance" setting applies a reset of the rate at the beginning of the interest period, which differs from the committee's recommendation for the use of SOFR in arrears for business loans and other products, which would involve a reset of the rate toward the end of the accrual period.

In the UK, the FICC Markets Standards Board (FMSB) [published](#) a draft [standard](#) on the use of term SONIA reference rates. The paper describes a set of principles intended to guide market participants in determining whether there is a robust rationale to employ a term reference rate for a specific financial instrument. Most of the provided use cases that could be expected to fit the described criteria align with previous suggestions made by the WG on Sterling RFRs, such as trade finance loans, Islamic finance products or working capital products. The standards also leave the door open for the occasional use of a term rate in mid corporate, private, retail, export finance or emerging markets lending — as long as a specific situation complies with the described principles. The FMSB also suggests that the use of a forward-looking term rate may be appropriate in derivatives used in the hedging of cash instruments based on a term rate or tough legacy exposures referencing a synthetic LIBOR. The WG on Sterling RFRs, along with the FCA and BOE, issued a [statement](#) welcoming the draft. Comments are requested by 28 May 2021.

In Japan, Quick Benchmarks [announced](#) that it would start publishing a production version of the Tokyo Term

Risk Free Rate (TORF) on 26 April 2021. A prototype version of TORF had been published since May 2020. TORF is determined using TONA overnight index swap transactions and will be published at 17:00 JST on Tokyo business days in one month, three month and six month tenors. The Cross Industry Committee (CIC) on Japanese Yen Interest Rate Benchmarks had [selected](#) Quick Corp. as recommended publisher early last year.

Our take: It is becoming increasingly clear that the role of term rates in the transition away from LIBOR is going to differ between jurisdictions — and in some cases significantly so.

No term SOFR...

While the ARRC's announcement may have been the least surprising announcement of last week, for some it may have been the most disappointing one.

Both the ARRC and regulators have clearly communicated that a formal recommendation for a SOFR term rate would require robust liquidity in the SOFR derivatives market, from which it is expected to be derived. Unfortunately, the USD derivatives markets today are far from being anchored in SOFR. For the sake of comparison: When production versions of Term SONIA were made available in the UK earlier this year, notional traded in SONIA swaps over the preceding 12 months had roughly been equal to notional traded in GBP LIBOR swaps. SOFR swaps, even after the CCP switch to SOFR for PAI and discounting in October of last year, have rarely accounted for more than 2% to 3% of the USD derivatives markets.

The sheer size of the USD market, combined with the continued publication of USD LIBOR into June of 2023, might make it difficult for SOFR to replace USD LIBOR as a primary reference rate in the near future. But while that might not necessarily be required for a term SOFR rate to become sufficiently robust, trading clearly needs to increase. Even in absolute terms trading in SOFR swaps continues to be less developed than that in SONIA swaps. In the last week of March, SOFR swaps saw \$57.5 billion in notional traded, compared with \$250.7 billion in SONIA-based swaps.

Whatever desire there may be for a term rate, market participants will need to find practical solutions to enable life without a term rate, at least for the time being.

...means SOFR in advance for ABS

The ARRC's recommended use of 30-day average SOFR in advance in ABS represents such a practical solution. The proposal is the result of three (!) years of discussions within the subgroup on securitizations,

which is comprised of a broad range of stakeholders. The white paper describes the compromises that needed to be struck between the economic accuracy of an in arrears based SOFR solution, contrasted with the practical realities of operating in the market.

An in arrears solution would have the economic advantage of aligning coupon receipts to incurred funding costs in the same time period. For operational reasons, however, an in arrears use in securitizations would likely require at least a 7 business day lookback. Given the prevalence of monthly paying instruments in the market, such an extended lookback period could reflect 35% or more of the payment period, negating much of the economic advantage of alignment. At that point, the operational ease of an in advance rate, combined with the frequency of reset, appears a more palatable compromise. There is little doubt that additional variations in conventions will continue to be developed. But for now, the ARRC's proposal appears to provide a practical solution adhering to an age-old principle — don't let perfect be the enemy of good.

Some term SONIA

The principles-based approach laid out by the FMSB puts the burden of proof to justify the use of a term rate squarely on the end user's back. As is the case with recommendations made by the WG on Sterling RFRs, such as suggested end dates for the issuance of new GBP LIBOR products, issuers should expect regulators to hold them to the FMSB standards.

Some might point to the explicit mention of a potential use case for derivatives as a diversion from existing guidance or indication that the use of term SONIA will become more widespread than expected. The reality is likely to be quite different, with the use of a term rate being scrutinized heavily going forward, especially in new products.

The FMSB's standard arrived just shortly before the WG on Sterling RFR's end of Q1 target (read: deadline) for an end to issuances of new GBP LIBOR loans — and after the publication start of production-ready SONIA term reference rates. The late arrival of the standards seems to indicate that the emphasis lies primarily on term rates as a solution for legacy products who absolutely require it.

Yes, term TONA

With less than nine months to go until cessation of JPY LIBOR, the publication of the official term rate for TONA, known as TORF, starting on 26 April is bound to receive a very warm welcome. This will be true especially in cash markets, as the industry continues to

progress towards meeting the 30 June 2021 target cessation date for new issuance of JPY LIBOR-indexed loans and bonds, as recommended by the CIC, the Bank of Japan and Japan's Financial Services Agency (FSA). With some institutions hesitant to embrace RFR-based lending (i.e., based on TONA), TORF can be expected to play a significant role in both new product issuances and the transition of existing loans and bonds away from JPY LIBOR. In contrast to the US and the UK, there has not yet been an indication that the use of a term rate would be similarly restricted.

Market participants now have the rates they have been waiting for. We anticipate new cash instrument issuance away from LIBOR to pick up this summer, setting the stage for completion of the transition away from JPY LIBOR by the end of the year.

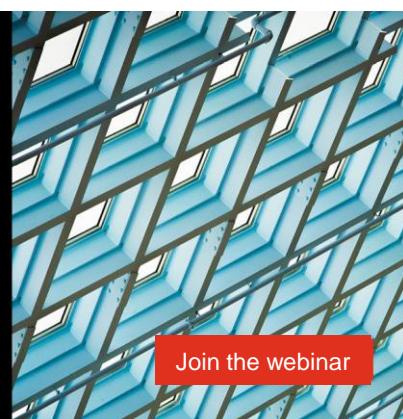
EC consultation on CHF LIBOR replacement

The European Commission (EC) [launched](#) a [consultation](#) on the possible designation of a statutory replacement rate for CHF LIBOR in saving accounts, mortgages and small business loans. The consultation follows the FCA's recent announcement on the cessation of CHF LIBOR at the end of 2021. The commission is looking to address concerns that the cessation of CHF LIBOR could impact the financial stability of various consumer markets in the European Union (EU), as most outstanding contracts maturing after 2021 might not contain robust — if any — fallback language to address the benchmark's permanent cessation.

The EC proposes to limit the use of a statutory replacement rate to CHF LIBOR contracts entered into before 1 January 2018 and maturing after December 31, 2021. A replacement rate would be proposed only for the 3M CHF LIBOR setting — all other CHF LIBOR tenors are not considered in the consultation. The replacement would align with the recommendations from the Swiss National Working Group on CHF

CHF LIBOR: What comes next?

Join PwC CH on Wednesday, April 7 2021, from 2:30 to 3:30 p.m. CEST

[Join the webinar](#)

Reference Rates, consisting of a three-month compounded SARON rate plus a spread adjustment. That adjustment, intended to account for the economic difference between CHF LIBOR and SARON, would align to that proposed by ISDA as fallback for derivatives contracts, i.e., based on a historical median approach over a five-year lookback period.

According to the EU Mortgage Credit Directive, any changes in the borrowing rate for mortgages would need to be communicated to a retail client in advance. In line with these consumer protection considerations, the EC proposes that the SARON-based replacement rate would be calculated based on the “last reset methodology.” Under this method, the rate applicable for the following three months is determined based on the daily SARON overnight rates over the last three months. The proposed methodology aligns with the recommendation of the working group on euro RFRs for fallbacks in adjustable rate EURIBOR mortgages, consumer and SME loans, in cases where a forward-looking term rate is not available. The Swiss National Working Group on RFRs has long made it clear that it would not recommend a forward-looking SARON term rate.

The consultation closes on 18 May 2021. Thereafter, the EU Commission will adopt an implementing act to designate such a replacement rate for CHF LIBOR.

Our take: The consultation constitutes a prerequisite for the EC to exercise its new powers under the recently amended EU Benchmark Regulation (BMR) to designate a replacement rate for LIBOR in contracts with inadequate fallback language. The EC has previously communicated that market participants should not rely on a legislative solution, as it would only provide for a safe harbor or backstop of last resort. As such, the restrained scope of the consultation is not surprising. In limiting a possible replacement to a products entered into prior to 2018, and the three-month CHF LIBOR setting, the EC appears to indicate that it is willing to address areas with the greatest transition risk, but stopping well short of providing a holistic solution for any and all legacy exposures.

As the consultation concludes only in May 2021, even an immediate turnaround into rulemaking would leave only a few months until CHF LIBOR’s permanent cessation at the end of the year. While it remains unlikely that the scope of the proposed legislation will be narrowed further, it’s not a given that it will eventually be enacted either. Market participants should look to proactively remediate legacy CHF

LIBOR contracts to the greatest extent possible, simply to be prepared for all eventualities.

In the absence of a term rate and considering EU consumer protection rules, the last reset methodology might in fact represent the only option as replacement rate for adjustable CHF LIBOR mortgages, unless market participants were willing to transition to a fixed rate. However, the last rest methodology could give rise to interest rate risk, resulting from to potential changes to the observed SARON during the current interest period compared with the previous observation period. It is expected that the EC will publish similar consultations for EONIA, GBP LIBOR and USD LIBOR in due course.

Math class: Updated guidance for GBP loans

What happened? The WG on Sterling RFRs published an updated version of its best practice guide for GBP loans, supporting slides on loan conventions and worked examples to provide additional detail on calculation methodologies, incorporation of floors and prepayments, as well as clarifications on using noncumulative and cumulative rate compounding approaches.

A new technical appendix describes various system capabilities required to support the recommended conventions for the use of SONIA in loan products. The guide, as well as the worked examples, were also updated to reflect changes in the guidance on rounding methodologies with the intent to address possible discrepancies between a bank’s application of the noncumulative and cumulative compounded RFR formulae. The amendments clarify that interest payment amounts should only be rounded to two decimal places at the end of the interest period — rather than daily — to ensure that the results of the final interest rate calculation align.

The updates also include clarifying comments on the application of prepayments and floors, as well as recommendations for the automation of credit adjustment spreads made possible by the fixing of ISDA’s credit adjustment spread following the FCA’s announcement on LIBOR cessation.

Finally, an additional point of guidance was added for lead or coordinating banks looking to remediate a legacy LIBOR-based syndicated loan. The Sterling WG suggests that borrower consent should be sought prior to engaging in discussions about the mechanics of active transition with other members of the syndicate.

The updates were also taken into account by the Loan Market Association (LMA), which issued revised

versions of its full suite of RFR documentation. In addition to upgrading exposure drafts to recommended forms, the LMA also provided additional SONIA and SOFR single currency agreements, one based on an observation shift and one without.

Our take: At first glance the updates appear to describe technical nuances of limited consequence. In reality, a number of market participants had indicated that a lack of common standards for precise details such as rounding conventions presented not insignificant challenges in the transition to RFRs.

Banks now need to react quickly to ensure that any calculation logic implemented in internal systems is aligned to the revised guidance. Legal departments need to ensure that loan documentation is updated as needed, taking into account not only the WG's revised guidance, but also the comprehensive updates provided by the LMA. All that should literally be finished by yesterday, as we have now passed the WG on Sterling RFR's end of Q1 target for an end of issuances of new GBP LIBOR products.



Math class (extra credit): ARRC whitepaper on CMS fallbacks

What happened? The ARRC [published](#) a [white paper](#) describing a potential methodology and formula to calculate a fallback for the USD LIBOR ICE Swap Rate (or constant maturity swap rate, also CMS) to a spread-adjusted SOFR Swap Rate. Earlier this year, the WG on Sterling RFRs had published a corresponding discussion document on a SONIA- based replacement for the GBP LIBOR ICE Swap Rate (ISR).

Our take: Both proposals result in similar, rather straightforward replacement rates, as a function of the RFR swap rate (i.e., the SOFR or SONIA swap rate) and the respective ISDA fallback spread adjustment. But as a result of differences in frequency and day

count conventions, the fallback rates have a number of different characteristics that market participants need to be aware of.

For operational simplicity, the calculation of the fallback rate assumes a flat yield curve, rather than having a term structure. It's not clear, however, that adding further accuracy to the calculation would provide much additional benefit. Backtesting conducted by the WG on Sterling RFRs showed that, since 2008, the proposed fallback rate based on SONIA deviated at most 0.175 basis points from the ISR it is looking to replace. The difference was at its peak in 2008-2009, when rates were the highest. Remarkably, the results also evidence a positive bias when the curve is positive upward sloping. While the ARCC did not publish an equivalent test, we estimate that it would yield similar results.

Further, LIBOR fallbacks may differ for different products. These differences might create basis risk between LIBOR swaps subject to the ISDA fallback mechanisms and instruments based on the RFR-based fallback rate. Managing this basis risk will require valuation adjustments, such as convexity adjustments, and fallback risk reserves.

Dear CEO: Hanging on to LIBOR should have consequences

What happened? The UK's Prudential Regulation Authority (PRA) and Financial Conduct Authority (FCA) [wrote](#) to the CEOs and senior management accountable for LIBOR transition at the largest and most complex institutions. The regulators are cementing their expectation that firms cease the issuance of new GBP LIBOR-based products after the end of Q1 2021, in line with the milestones put forth by the WG on Sterling RFRs.

In addition to ceasing the issuance of new GBP LIBOR products, the letter's appendix sets out a series of additional priorities for firms. These include accelerating the establishment of system readiness, active transition of legacy exposures, conduct risk mitigation, development of liquidity in RFR markets, model change management and the selection of appropriate LIBOR alternatives.

The PRA and FCA suggest they would intensify their supervisory focus not just on firms' transition progress, but also on the "management and oversight of the risks associated with transition." As part of oversight and governance over the transition, regulators expect that the variable compensation of senior management accountable for the transition should be influenced by the level of progress in the transition away from LIBOR.

Our take: Over the past two years, nearly every piece of regulatory guidance, speech or statement on the transition from LIBOR has become incrementally more strongly worded. Some may have wondered how regulators could possibly amplify their message even further. The answer: A lack of progress should hit the accountable managers where it hurts — their wallet.

A successful transition requires collaboration from the sell-side, buy-side, corporates, third-party service providers, CCPs and other market participants. But the explicit tie in of transition progress to variable compensation seems to make it clear that bankers should not be permitted to place the blame for any potential lack in progress on others. Rather, large and complex firms should assume leadership positions in the transition, acting as change agents to lead the industry into a future free from LIBOR.

For more information, read [Regulators use bonus reduction as the latest threat to accelerate LIBOR transition efforts.](#)

The latest on LIBOR transition

A podcast about the complexities of LIBOR transition

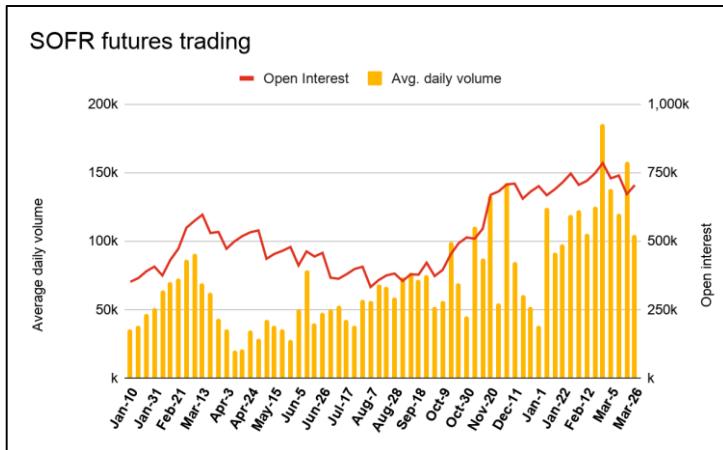


pwc.co.uk/LIBOR-transition

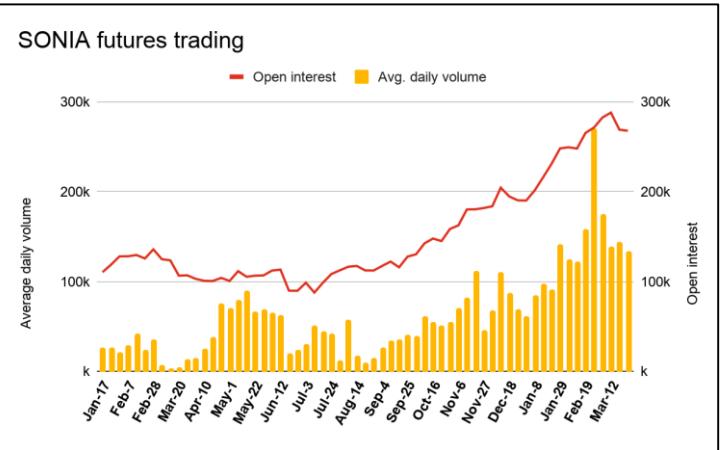
Listen [HERE](#)

2 RFR adoption: Derivatives

Futures and options



Source: CME, ICE (accessed March 29, 2021)



Source: CME, LCH, ICE (accessed March 29, 2021)

Our take: The pullback in volume and open interest in RFR futures trading from the record highs seen in February continued in the final two weeks of March. For now, the provided certainty on fallback spreads has not yet translated into a significant increase of derivatives trading, may it be futures or swaps.

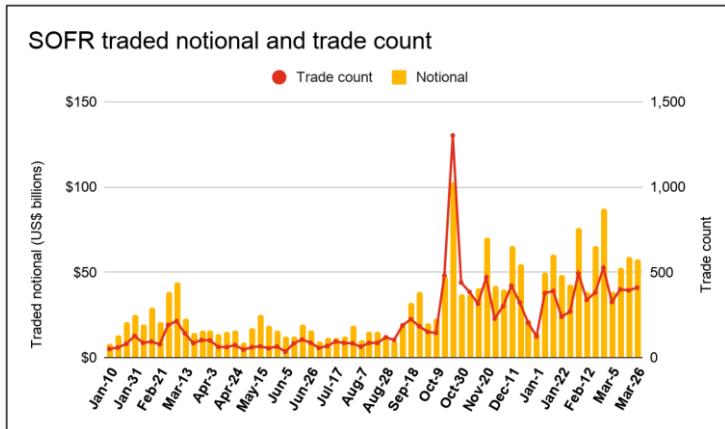
For both SOFR and SONIA futures, open interest and average daily trading volumes remain higher in 3M contracts than in 1M contracts.

ISDA IBOR Fallbacks Protocol adherence (as of 31 March 2021)

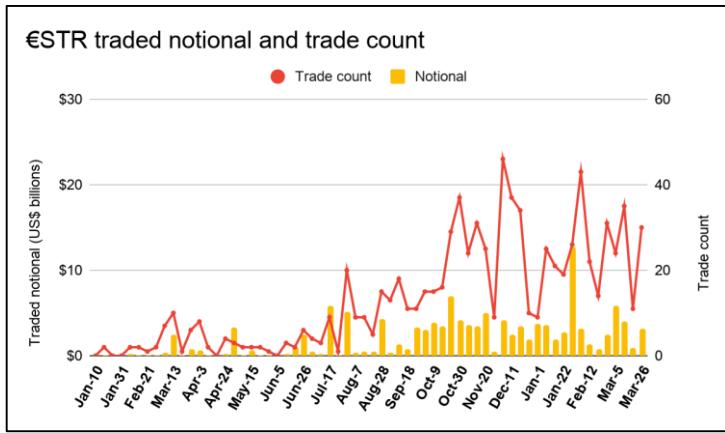
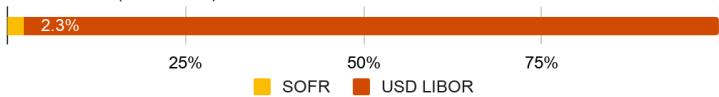
- 13,681 total entities (up from 13,552)
- 1,467 sign-ups on or after the effective date
- 29 out of 30 G-SIBs (unchanged)

Source: ISDA

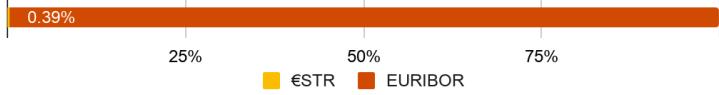
Swaps trading



Total Notional (March 2021) - SOFR vs. USD LIBOR



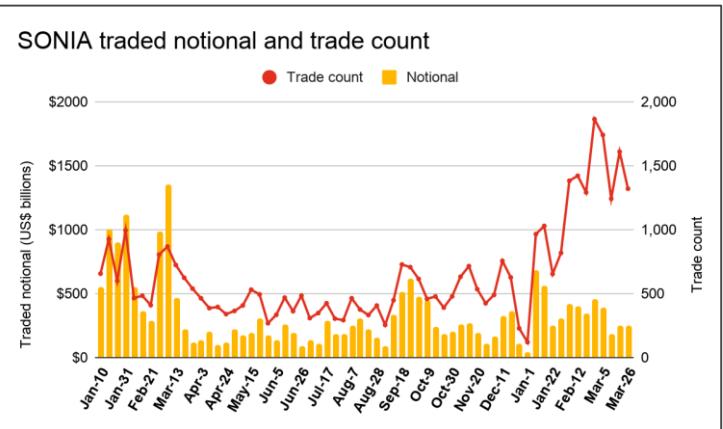
Total Notional (March 2021) - €STR vs. EURIBOR



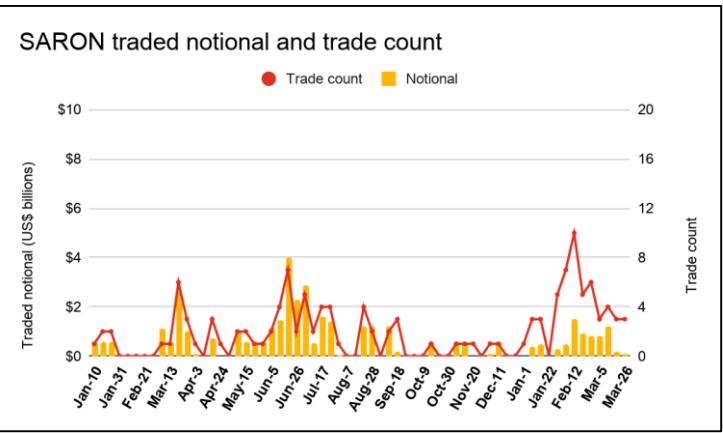
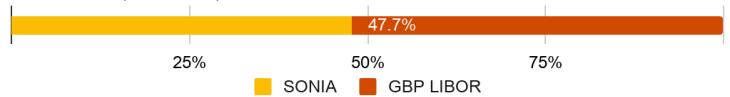
Our take: Trading in RFR swaps remains a mixed bag — and a concern in the transition away from LIBOR. Both the ARRC's recent announcement on the delay of a recommendation for a potential SOFR term rate, as well as the UK regulators' Dear CEO letter, drew attention to the need for increased liquidity in RFR derivatives trading. That increase is of particular importance in the US markets, where several market participants continue to show a strong preference for a forward-looking term SOFR.

With respect to the sterling swaps market, it now remains to be seen whether the passing of the WG on Sterling RFR's Q1 target date for an end of new GBP LIBOR issuances will further accelerate the move from GBP LIBOR to SONIA derivatives.

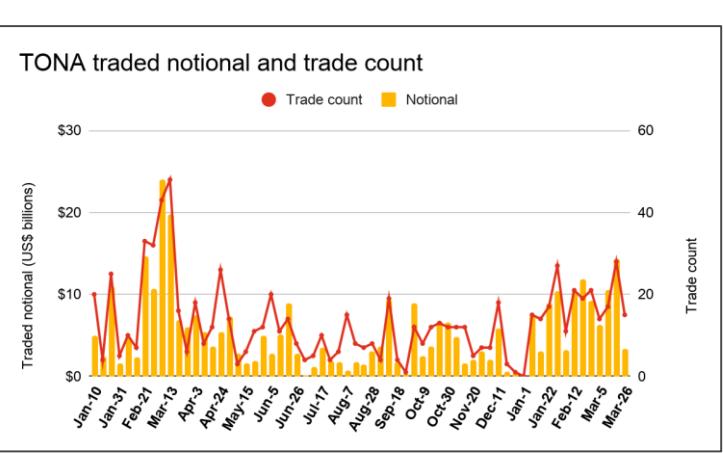
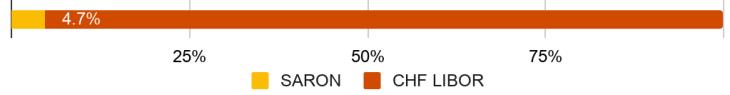
Trading in the remaining RFRs remained somewhat indifferent in March. While small changes in trading volumes tend to be very noticeable amid the generally lower volumes, there has not been any sustained momentum toward a significant increase in liquidity.



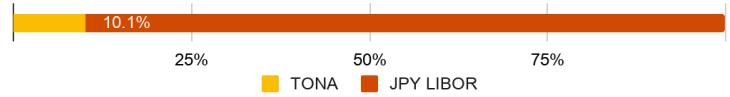
Total Notional (March 2021) - SONIA vs. GBP LIBOR



Total Notional (March 2021) - SARON vs. CHF LIBOR



Total Notional (March 2021) - TONA vs. JPY LIBOR



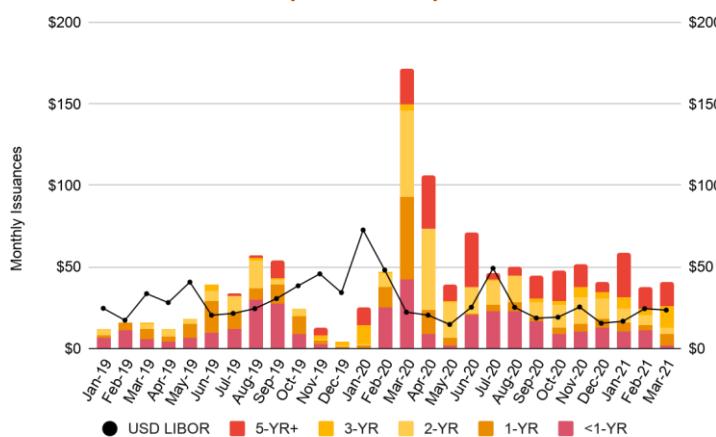
Source: analysis.swapsinfo.org (interest rate and credit derivatives weekly trading volume): Week ending March 26, 2021, accessed March 29, 2021.

3 RFR adoption: Cash products

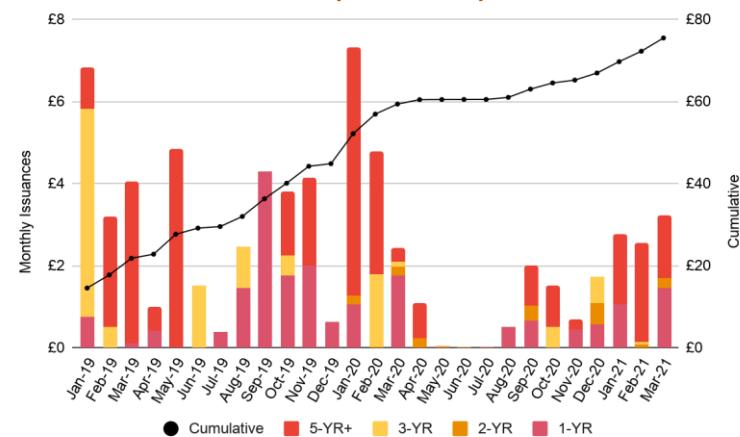
FRN issuances (as of 31 March 2021)

Source: Bloomberg

USD FRN issuances (in billions)



SONIA FRN issuances (in billions)



Our take

We have now seen over \$4 billion in USD LIBOR-based FRNs since January, i.e., since the ARRC's target date for ending such issuances has passed. While most of these have remained relatively small in size, there are several issuances of \$250 million or greater, including one offering of \$1 billion with a maturity of five years.

But at the same time, momentum continues to build for SOFR FRN issuances. March saw the first two sets of issuances from corporate issuers, with more expected to follow in Q2 of 2021. Additionally, over 75% in total amount issued for the month of March has come from non-GSE market participants, the highest such share in over a year. In fact, issuances from non-GSE firms have accounted for more than two thirds of total amounts in Q1 2021, compared with just over 40% in Q4 of 2020.

Notable cash product issuances and other RFR adoption¹

RFR	Company	Detail	Resources
SOFR	Verizon	The telecommunications company is looking to raise money via a US high-grade bond issue, including three- and five-year floaters that will be priced over SOFR.	Press coverage
	PIMCO	Issued the largest, non-agency SOFR-based RMBS (residential mortgage-backed securities) to date.	SFA research
	Southern CA Edison	Issued its first floating rate bond using compounded SOFR (referencing the SOFR Index) to calculate each quarterly interest period.	Prospectus
	Arch Mortgage Insurance	Completed the first mortgage insurance-linked note (MILN) transaction tied to SOFR.	Press release
	IADB	Issued a \$500 million 7-year SOFR-linked FRN, reportedly its longest ever in the format.	Press coverage
	NextEra Energy	Became one of the first non-financial corporate bond issuers to issue a SOFR-linked FRN.	Term sheet
	State Bank of India	Extended its first corporate loan linked to SOFR to Indian Oil Corporation.	Press coverage
SONIA	Aviva Investors	Extended its first SONIA-linked senior debt facilities to an alternative investment manager. The five-year deals were made on behalf of external clients.	Press coverage
	Kensington Mortgages	Issued the first social RMBS that complies with new ICMA social bond guidelines, based on SONIA.	Press release (ext. counsel)
	Yorkshire Building Society	Issued an RMBS featuring both GBP and USD notes, with the GBP tranche referencing SONIA.	Press coverage

For additional details on employed conventions and other parameters of recent RFR-based loans, see the Loan Market Association's (LMA's) [regularly updated list](#) of RFR referencing syndicated and bilateral loans.

¹ Please note: This information has been obtained from publicly available sources.

4 Publications at a glance

National working groups

Alternative Reference Rates Committee (ARRC)

- Published a [progress report](#) on the transition away from USD LIBOR.
- Hosted a [symposium](#) on the use of SOFR in new loans, including remarks from the chairs of both the WG on Sterling RFRs and the ARRC itself, followed by panel discussions on the use of SOFR in new business loans. A [recording](#) has been made available.
- [Announced](#) that it would not be in a position to recommend a forward-looking SOFR term rate by the end of Q2 2021.
- [Published](#) a [white paper](#) that suggests the use of 30-day average SOFR in advance in asset-backed securities (ABS).
- [Published](#) supplemental, simplified versions of its [recommended fallback language](#) for syndicated and bilateral business loans, incorporating information on cessation timing and spread adjustment values known as a result of the FCA's recent announcements.
- [Published](#) a [white paper](#) describing a potential methodology and formula to calculate a fallback for the USD LIBOR ICE Swap Rate based on a spread-adjusted SOFR-based Swap Rate.
- [Selected](#) Refinitiv as vendor to publish recommended spread adjustments and spread-adjusted SOFR rates for use in cash products.
- Published its [newsletter](#) for February/March 2021.

WG on Sterling RFRs

- Published a [summary of responses](#) to its consultation on a successor rate in GBP LIBOR legacy bonds.
- Published [minutes](#) of the group's 23 February meeting.
- Published an updated version of its [best practice guide](#) for GBP loans, [supporting slides](#) on loan conventions and [worked examples](#) to provide additional detail on calculation methodologies, incorporation of floors and prepayments, as well as clarifications on using noncumulative and cumulative rate compounding approaches.

NWG on CHF Reference Rates

- Updated its [starter pack](#) on LIBOR transition in Switzerland to reflect recent announcements on LIBOR cessation.

Cross-Industry Committee on JPY IR Benchmarks

- Minutes from March 26 included an [update](#) from the sub-group on term reference rates. Market participants are expected to end the issuance of new JPY LIBOR IR swaps by September 2021. Liquidity providers should switch the convention for quoting IR swaps from TONA to LIBOR by the end of July 2021.

Steering Committee for SOR & SIBOR Transition to SORA (SC-STS)

- [Announced](#) a [new timeline](#) for the end of issuances of new SOR and SIBOR-linked products. Firms are expected to end the issuance of new SOR based derivatives and SIBOR based contracts by the end of Q3 2021.

Regulators

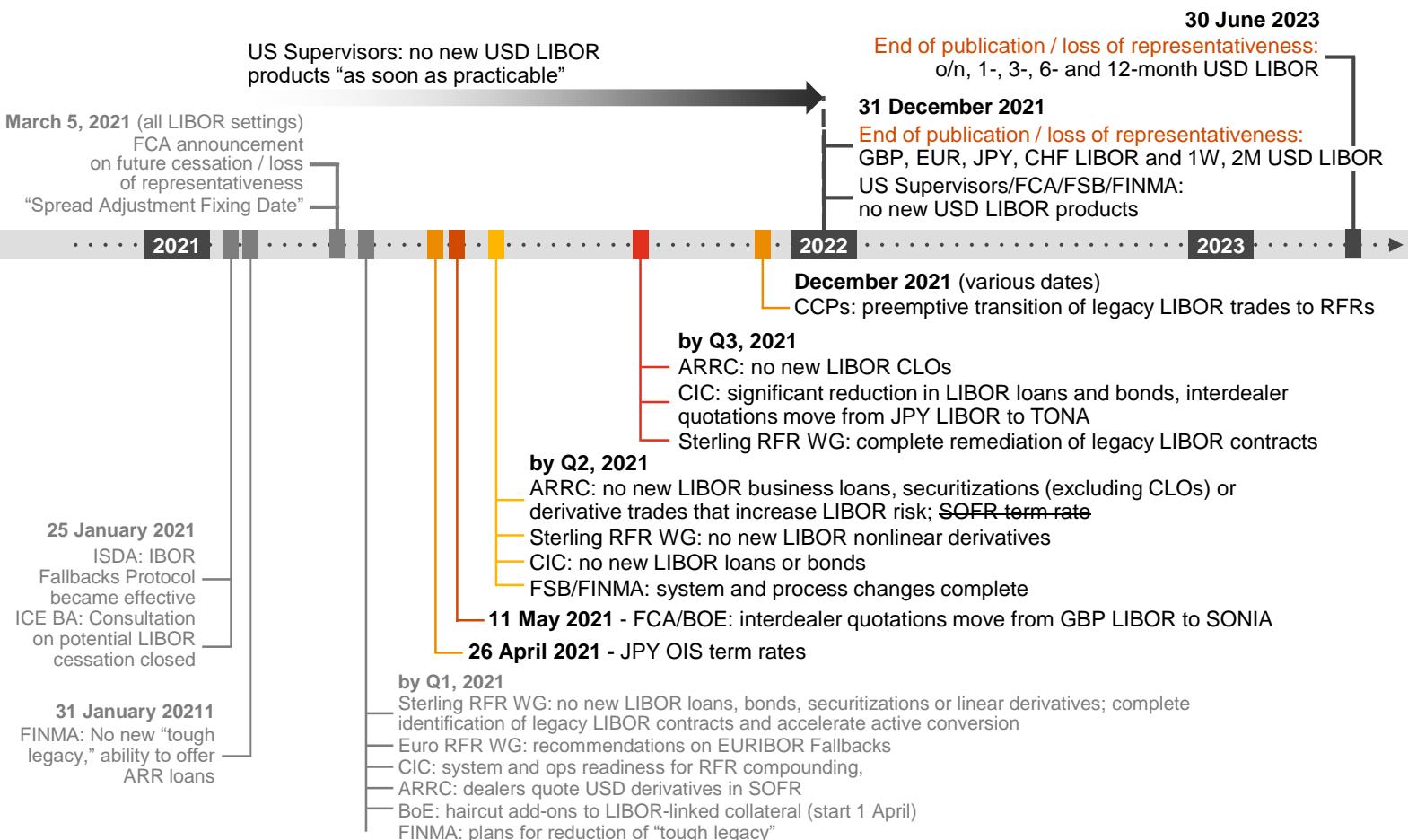
- Fed:** Vice Chair for Supervision Randal Quarles [spoke](#) at ARRC's SOFR Symposium, reiterating the call for market participants to end the use of USD LIBOR in new contracts. He suggested regulators would place "intense supervisory focus" on firms' transition progress.
- US Treasury:** In [testimony](#) before the House Committee on Financial Services US Treasury Secretary Janet Yellen echoed Fed chairman Jerome Powell's comments on the necessity of a federal legislative solution to address tough legacy USD LIBOR contracts.
- OCC:** Requested [comments](#) on its collection of information through its LIBOR self-assessment tool released earlier this year.
- FHFA:** The agency's Office of the Inspector General published an [update](#) on Fannie Mae and Freddie Mac's transition from LIBOR to SOFR for single-family ARMs, discussing the potential risks faced by the enterprises should SOFR not be widely adopted.
- New York:** The state's legislature [passed](#) a bill based on ARRC's legislative proposal, allowing for a statutory replacement of LIBOR in contracts containing no or inadequate fallback language as well as providing a safe harbor from litigation for the use of such a replacement rate. The governor is expected to sign the bill into law. The ARRC [welcomed](#) the passage of the bill, as [did](#) SIFMA.
- PRA / FCA:** [Wrote](#) to the CEOs and senior management accountable for LIBOR transition at the largest and most complex institutions, cementing their expectation that firms cease the issuance of new GBP LIBOR based products after the end of Q1 2021.
- FCA / BOE:** [Asked](#) GBP nonlinear derivatives market liquidity providers to base quoting of inter-dealer trading on SONIA after May 11.
- Bank of England:** Published [minutes](#) of the SONIA Stakeholder Advisory Group meeting on 25 February. Updated its [market notice](#) on its risk management approach to LIBOR-based collateral, confirming 1 April as the start date for haircuts applied to such collateral. Collateral referencing any USD LIBOR setting will no longer be accepted after 1 January 2022.
- European Commission:** [Launched](#) a [consultation](#) on the designation of a statutory replacement for CHF LIBOR in mortgages and small business loans entered into prior to 2018. Responses are due by 18 May 2021.
- European Central Bank:** [Announced](#) the publication of compounded ESTR averages and index beginning 15 April of this year.
- ESMA:** [Updated](#) its [statement](#) on Brexit's impact on the BMR, noting that the extension of the provisional period would also apply to third country benchmarks recognized in the UK. The agency's [report](#) on trends, risks and vulnerabilities includes an analysis on outstanding LIBOR exposures in the EU and the UK.
- FSA:** [Published a Q&A](#) on transitional measures for OTC derivative transaction regulations related to legacy contracts that are impacted by benchmark reform (permanent suspension of publication of LIBOR) (in Japanese).
- HKMA (w/ TMA):** [Announced](#) they no longer expected institutions to cease issuances of new LIBOR-based products by the end of Q2 2021. Firms are expected to continue their transition efforts, ceasing the issuance of new LIBOR-linked contracts by the end of 2021. Senior Exec. Dir. Edmond Lau [spoke](#) at a recent industry event, noting that he believed the work ahead remained substantial.
- Reserve Bank of Australia:** Assistant Governor Christopher Kent [reiterated](#) the FSB's LIBOR transition milestones and addressed specifics of the transition in the Australian markets during his keynote address at a recent industry event.
- Bank of Thailand:** Updated its [milestones](#) for the transition to THOR, extending the end date of THBFIIX publication until June 2023. As THBFIIX relies on USD LIBOR for calculation, its continued publication allows for the continued publication of THBFIIX as well.
- Central Bank of Malaysia:** The Shariah Advisory Council [ruled](#) that [an RFR](#) as LIBOR replacement is permissible.
- Florida:** The state senate's finance and tax committee has [advanced a bill](#) that would clarify that changing the rate on certain financial instruments as a result of benchmark reform would not constitute a renewal, and hence not be subject to document excise tax.

Industry groups, infrastructure providers and other items

- **FICC Markets Standards Board:** [Published](#) a draft [standard](#) on the use of term SONIA reference rates, describing a set of principles to guide market participants in determining whether a term reference rate is suitable for a specific financial instrument. Comments are requested by 28 May 2021. The WG on Sterling RFRs, along with the FCA and BOE, issued a [statement](#) welcoming the draft.
- **LSTA:** Published a [concept document](#) for syndicated multi-currency loans based on simple average RFRs (member access only). [Summarised](#) the rationale for ARRC's simplified hardwired fallback language. [Commented](#) on the passing of the ARRC's legislative solution for legacy LIBOR contracts in New York State. [Cautioned](#) market participants that an ARRC recommended term SOFR rate may not be available for quite some time.
- **LMA:** Updated its [various exposure drafts](#) for RFR based facilities to recommended forms. Among other items, the documents were refreshed to reflect the Sterling WG's revised guidance for GBP loans referencing SONIA. The LMA also replaced existing single currency SONIA and SOFR exposure drafts with two recommended single currency agreements, one based on an observation shift and one without (18 documents in all, member access required). [Published](#) a set of considerations for the use of a forward-looking term SONIA reference rate in loan products (member access only). [Published](#) an interview with a law firm representative, focused on a recent multicurrency deal employing a rate switch mechanism. [Published](#) an updated list of RFR referencing syndicated and bilateral loans.
- **Structured Finance Association:** [Recapped](#) a busy month in the transition away from LIBOR, including a closer look at the status of the transition in the structured finance markets.
- **LCH:** [Announced](#) the timing and additional details on its planned preemptive conversion of existing LIBOR based contracts. The conversion will take place on 3 December 2021 for CHF, EUR and JPY LIBOR contracts, and on 17 December 2021 for GBP LIBOR contracts. Details on the conversion for USD LIBOR trades can be expected later.
- **LCH SA:** Issued a [member notice](#) on the transition from EONIA to €STR.
- **ICE Futures Europe:** [Proposed](#) 17 December 2021 as the date for conversion of 3M GBP Sterling Futures & Options into 3M SONIA Futures & Options, and 3M EuroSwiss Futures into 3M SARON Futures & Options.
- **Bundesverband Deutscher Banken:** The German banking association [published](#) an [IBOR fallback supplement](#) to its widely used master agreement (Deutscher Rahmenvertrag, or DRV).
- **Quick Benchmarks:** [Announced](#) it would begin the publication of production versions of the Tokyo Term Risk Free Rate (TORF) for use in cash products on 26 April 2021. A beta version of the forward-looking term rates has been published since October 2020.
- **Japan Securities Clearing Corporation:** [Announced](#) plans to preemptively convert JPY LIBOR referencing instruments to TONA (OIS) instruments shortly prior to LIBOR's cessation at year end. The methodology is expected to mirror that employed by the LCH for the preemptive conversion of contracts in other currencies.
- **JBA TIBOR Administration:** As part of its latest [statement on IOSCO compliance](#), the JBATA [announced](#) that it would look to consult on its intention to retain yen TIBOR and discontinue euroyen TIBOR at the end of December 2024.
- **ISDA:** [Confirmed](#) that JBATA's announcement on a coming consultation on yen TIBOR and euroyen TIBOR did not constitute an index cessation event under the ISDA IBOR Fallbacks. [Published](#) a [press briefing](#) on what the FCA's announcement on LIBOR's end means for the derivatives markets. [Clarified](#) the treatment of the anticipated gap in SOFR publication on April 2, 2021 (Good Friday) in the context of ISDA's 2006 Definitions.
- **International Islamic Financial Market:** [Published](#) a [white paper](#) on the implications of IBOR transition on Islamic finance.



5 LIBOR transition target dates



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