Risk publications

LiborRisk

Risk.net Q4 2019

Quarterly report

Trouble for loan systems
Lenders face costly updates to ageing legacy platforms

Asia: a SOFR solution
Replacing Libor in Singapore, Thailand and the Philippines

Lloyds flips to Sonia
Another milestone in the Libor transition

Risk training

Hosted by:
Risk.net

Risk training Regulation

Transitioning from Ibor to Risk-Free Rates

Get 20% discount* by quoting SUPAD20
*T&C apply

Attend one of our Ibor courses in 2020 to gain in-depth knowledge on how to deal with the implications of the transition to risk-free rates on cash products, the treasury, operations functions and derivatives market. The courses will be delivered by expert practitioners and consultants who will provide practical examples of overcoming the challenges of the transition.

London
June 17–18, 2020
December 2–3, 2020

New York
March 24–25, 2020
June 22–23, 2020
September 23–24, 2020
November 30–December 1, 2020

Paris
March 11–12, 2020

Amsterdam
September 16–17, 2020

Singapore
March 23, 2020

T: +44 (0) 207 316 9000
E: risk.training@infopro-digital.com

www.training.risk.net
#risktraining

UK swaps carrot for stick in Libor switch

UK regulators are losing patience with a growing stock of Libor exposures. The Bank of England's Financial Policy Committee last month threatened policy action to more-forcibly detach participants from the discredited rate before the end of 2021, when it could vanish from view.

"In Q4, the FPC will consider further potential policy and supervisory tools that could be deployed by authorities to reduce the stock of legacy Libor contracts to an irreducible minimum ahead of end-2021," says the FPC in its October report.

Participants may be dabbling in regulator-preferred risk-free rates (RFRs) such as Sonia in the UK and SOFR in the US, but there appears to be no let-up in firms writing new Libor contracts despite risks to the benchmark's existence after 2021. The stock of Libor-linked instruments set to mature after the rate's impending death jumped by around 50% to approximately £12 trillion ($15 trillion) between April 2018 and August 2019, according to LCH data included in the report.

The FPC warns there is "no justification" for firms to increase their Libor exposures. "The pace of market participants' transition efforts to alternative benchmark rates now needs to accelerate," it adds.

The latest bout of sabre rattling comes amid growing frustration among UK regulators at the slow pace of transition. The Prudential Regulatory Authority and Financial Conduct Authority are ramping up efforts to closely monitor Libor exposures and transition plans for more firms, starting with an expanded round of 'Dear CEO' letters. In September, the FCA called for banks to be making loans pinned to Sonia by the third quarter of 2020 and demanded dealers embed the rate as the norm when quoting sterling swaps.

When it comes to cranking up the pace of transition, regulators have a range of policy tools at their disposal – all of which are complex and time-consuming to implement. One well-flagged option is a hike in the risk weight of Libor-linked assets under Basel III capital rules. Another route is counterparty credit risk. If the regulator identifies a counterparty as a higher credit risk due to a weighty stock of Libor exposures, trading with that institution could attract higher credit valuation adjustment charges.

More likely, according to one London-based consultant, is a 'skilled person review' under Section 166 of the Financial Services and Markets Act. This permits the regulator to appoint a third party to perform a forensic assessment of a firm's transition plans and activities to ensure there is an active winding down of positions.

There appears to be no let-up in firms writing new Libor contracts despite risks to the benchmark's existence after 2021

It's an intrusion most will be keen to avoid.

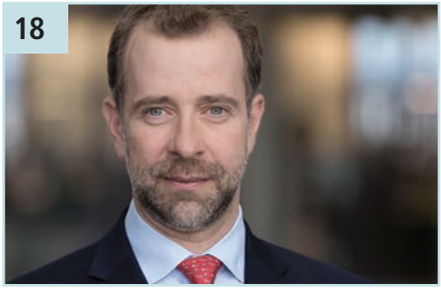
"Section 166 is the trump card as you have to throw so many resources at it and you're under a microscope. Before that, there are a series of actions regulators could take. You could be fined privately or it could become a reputational risk issue. There are a lot of actions available before you need to make a policy change, which takes an inordinate amount of time," says the consultant.

Other measures already under discussion include plans to restrict Libor collateral in the Bank of England's sterling liquidity pool. The most radical option would effectively prohibit Libor assets from the sterling monetary framework – a £322 billion source of liquidity for more than 200 banks. The result would likely be to drive a wedge between Libor and Sonia-linked bond valuations, incentivising issuers to switch the rate underlying floating debt instruments through consent solicitation exercises.

Helen Bartholomew, Editor-at-Large

NEW ANGLES

FEATURES



SPONSORED FEATURE

€STR swap trading gets under way

HSBC and JP Morgan strike first swap linked to the new euro short-term rate. By Lukas Becker

HSBC and JP Morgan have struck what is thought to be the first interest rate swap trade linked to the new euro short-term rate (€STR) – a one-week transaction that allowed the two parties to check their ability to execute swaps using the new benchmark.

Swap volumes in the new reference rate were expected to grow rapidly after the products were made available for clearing from October 21. Some market participants even expect them to exceed volumes in the doomed Eonia benchmark before the end of this year.

"We have many clients looking at €STR-based transactions, so it's important for us to be involved as much as we can at this early stage," says Olivier Herregods, head of flow rates for Europe, the Middle East and Africa (Emea) at HSBC.

The spot-starting €100 million ($109 million) trade has a one-week maturity and was entered into on the morning of September 30. It saw €STR traded against a one-week fixed rate of –0.55%, with Eonia over the same period trading at –0.465%. With spot-starting trades taking two days to settle, the start date was October 2 – the day the European Central Bank is set to begin publishing the new €STR benchmark.

Tom Prickett, co-head of Emea rates trading at JP Morgan, says the bank needed to execute a hedge of its short-term euro rates exposure and decided it was a good opportunity to try an €STR swap.

"Because any trades that are spot starting would be able to reference €STR as of September 30, we thought 'Why not try to use €STR for short-term risk management and send a positive message to the market?'," says Prickett.

"We feel the ECB would want people to start trading it as soon as possible in place of Eonia swaps, so we wanted to send a message that we want to provide liquidity and start trading it from day one."

The trade was arranged and executed between the two banks over Bloomberg's chat feature, not via the broker market, so the banks could monitor booking and settlement more closely.

While the amount of risk involved in the swap was small, Prickett says JP Morgan is now confident it could trade any size in €STR that it could do in Eonia.

On October 2, Eonia also became linked to €STR with an 8.5 basis point spread on top to account for the historical difference. Given this, HSBC's Herregods says the trade was simply booked and valued using Eonia as the base curve minus 8.5bp.

> "We have many clients looking at €STR-based transactions, so it's important for us to be involved as much as we can at this early stage"
>
> Olivier Herregods, HSBC

Now that it has launched, €STR represents the borrowing costs of eurozone banks generated from data reported to the ECB. It effectively replaces Eonia, which is being dropped because of concerns that the trade volumes underlying the fixing are too thin.

The two rates will run in parallel until the end of 2021, when Eonia will stop being published as it does not comply with the EU's rules on benchmarks. Temporary protections allowing Eonia to be used today will end in 2022.

The €STR swap was traded under the two banks' existing bilateral collateral agreement, known as a credit support annex (CSA), which covers all its euro interest rate derivative trading.

Clearing of €STR swaps began on LCH on October 21 and will beging on Eurex on November 18. Bloomberg is now offering electronic trading of €STR swaps, while Tradeweb followed on October 21.

Two floating rate notes have been announced that will be linked to €STR – one from the European Investment Bank and one from German provincial lender, L-Bank – which some believe could generate some hedging flows ahead of the start of clearing.

HSBC's Herregods expected swaps referencing the new benchmark to be limited ahead of clearing, as trading the swaps bilaterally attracts higher capital charges, and most clients have no need to move immediately given the fixed spread between €STR and Eonia. "It might make sense for some clients to wait until more volume goes through to make sure that prices are tight enough and there is more liquidity," he says.

JP Morgan's Prickett says €STR swap clearing volumes could build quickly, and may overtake Eonia in the interdealer market before the end of the year. ■

>> Further reading on www.risk.net

- Scrapping of Eonia revamp piles pressure on ECB *www.risk.net/5419961*
- Eonia jump forces rethink of euro swap pricing *www.risk.net/5368451*

Synthetic Libor mooted as 'tough legacy' fix

Recalibration of doomed rate or catch-all legislation under debate as lifeline for lingering contracts. Helen Bartholomew **reports**

Libor could be allowed to live on – at least in name – for long after panel banks have thrown in the towel on the rate. A modified, formula-based Libor is just one of a range of extreme measures currently being considered as part of a rescue mission for financial contracts most stubbornly welded to the discredited benchmark.

So-called synthetic Libor, which would see the rate calculated as a spread over an overnight risk-free rate, is one fix being discussed by a new "tough legacy" subcommittee of the sterling risk-free rate (RFR) working group. The subcommittee is working to future-proof legacy contracts that may be impossible to prise away from Libor and risk being thrown into disarray after 2021, when panel banks are free let the rate die.

Rich Fox, head of markets policy at the UK's Financial Conduct Authority and chair of the new subcommittee, warns there is no easy fix. Proposals up for discussion, which also include blanket legislation to sweep up remaining Libor contracts and flip them on to alternatives at the point of its death, each have their pitfalls.

Fox is clear, though, that market participants must assume that Libor will no longer exist at some future point.

"All of the avenues people tell us to explore are difficult to deliver. They all have drawbacks even if they can be delivered. Ultimately from my point of view, you come back to cessation."

Fox was speaking at an Ibor transition event on September 27. He said the committee will publish a range of options later this year for public comment.

"I'm not advocating for any one of them. But to have an intellectually coherent conversation about this, we need to talk about the different options," Fox said.

A synthetic Libor would see the rate continue in name without the need for submissions from panel banks. Instead, it would be calculated via a formula – likely a spread over a regulator-supported benchmark such as Sonia, the chosen RFR for sterling markets.

It's a possible lifeline for the stickiest Libor-linked contracts such as long-dated, widely held floating rate bonds whose terms may not even envisage a discontinuation of the underlying rate.

Changing the nature of Libor may be a step too far for some users

"Between the two possibilities of synthetic Libor or legislation, perhaps synthetic Libor has more legs," said Jacqueline Heng, capital markets lawyer at Norton Rose Fulbright. "It's probably a bit more achievable, and probably a bit more helpful."

A precedent already exists. On October 2, Eonia will be recalibrated as a fixed 8.5 basis point spread over the new euro short-term rate, €STR, due to be published by the European Central Bank on the same day.

But changing the nature of Libor may be a step too far for some users – and the benchmark's administrator. Eonia and €STR are both risk-free overnight rates, so naturally linked and economically similar. Libor is a forward-looking measure of wholesale bank funding, making it economically distinct from overnight Sonia. For example, as the bank credit risk spread is fixed, if that risk increases, the synthetic benchmark won't rise like it would with regular Libor.

"The concept of publishing Libor with a formulaic approach of Sonia plus a spread, fixed into perpetuity is a de facto change to the underlying economic proposition so it's taking away contract rights. Participants would start to trade on something that's not what they signed up for," says an industry source.

Such a change could only be achieved with the consent of Ice Benchmark Administration, which manages the suite of Libor benchmarks. The administrator's approval could be a major stumbling block, Fox said, given the magnitude of the alterations.

"It would be a material change to the rate, and if there are winners or losers as a result of that, [IBA] would be very worried about the risk of challenge so it's not obvious how you get that rate calculated," Fox added.

A spokesperson for IBA declined to comment.

One solution touted in some quarters is legislation that would remove the legal risk from the administrator.

"When you disturb or fundamentally alter contract rights, it's typically done through legislation. If you're providing numbers and saying they're Libor and they're not Libor, it should be done by legislation," says the source.

This adds yet another hurdle, however, as the UK parliament would need to be able to pass legislation to that effect.

Although a wider legislative fix is being considered by the committee, the FCA is wary of any solution contingent on the UK government to table and pass new laws, particularly in the current political climate.

"It's an interesting time to rely on the ability of parliament to sort something out for you," said Fox. "It's very clearly contingent on the government and they need to be willing and able to be able to deliver it through this parliament or the next."

"Even if it transpires, it only governs your English law contracts so you need the same problem to be solved through difficult politics in at least New York State," he added. ■

>> Further reading on www.risk.net

- Isda sets two options for Libor fallback spread *www.risk.net/7013936*
- FCA urges dealers to quote Sonia swaps on Clobs *www.risk.net/7010556*

FCA official: stick with overnight rates for all new contracts

Schooling Latter limits term rates to legacy contracts and wants backward-looking method for loans. Philip Alexander reports

The UK's Financial Conduct Authority has urged banks to use backward-looking versions of overnight rates in all new contracts referencing risk-free rates (RFRs), rather than relying on the build-out of new forward-looking term rates to replace Libor.

While derivatives markets are already coalescing around compounded-in-arrears versions of Libor successor rates, Edwin Schooling Latter, the FCA's director of markets and wholesale policy, has stepped up the call for newly issued cash instruments, including bonds and loans, to follow suit,

"There is quite a consensus around the table at the RFR working group in the UK that in the future, all interest rate markets will be focused around the overnight rates compounded in arrears, including the loan markets," said Schooling Latter, speaking at a conference organised by the Association for Financial Markets in Europe on October 4.

He warned that term versions of RFRs currently under construction are not intended for use in new contracts and should instead be viewed as a transition tool for legacy instruments.

"I want to make the message from the authorities' side very clear. In terms of new business, and the ability to do business without Libor, people should not be waiting for the term rates, because the people who are in on the design picture are expecting future rate products to be based on overnight rates," he added.

Libor and other legacy interest rate benchmarks are forward looking, with interest payments at the end of a period of, for instance, three or six months agreed in advance. By contrast, replacement RFRs such as Sonia in the UK, SOFR in the US and €STR in the eurozone are overnight rates. The swaps market is already moving toward compounding daily interest in arrears to calculate the final payment at maturity.

However, speaking on the same panel, Frédérick Lacroix, head of financial services at law firm Clifford Chance in Paris, said bond and loan markets had not yet clustered around a single convention for handling overnight rates. For instance, the final rate could be crystallised toward the end of the interest period, which has been the pattern with SOFR-linked bond issuance, or there could be a look-back period separated from the interest period, which is more common in the Sonia-linked market.

"I want to make the message from the authorities' side very clear. In terms of new business, and the ability to do business without Libor, people should not be waiting for the term rates" Edwin Schooling Latter, Financial Conduct Authority

"Different counterparties will be different – for instance, market counterparties who are more sophisticated, or SMEs [small and medium-sized enterprises] or corporates more generally," said Lacroix. "You also have the basis risk to take into account with the hedge, and if you talk about securitisation you will have an additional layer of discussion between bond and loan-level swaps."

Schooling Latter suggested that the replacement of Libor was "a good opportunity" to standardise industry conventions for calculating rates on indexed products.

"The swaps market already has [done that] pretty much. There is an opportunity to align bond and loan conventions with those, to take basis risk out of those hedges going forward. I see in the national working groups quite a big appetite to take that opportunity, for instance to move away from simple averaging for loans toward compound averaging to match the derivatives markets better."

But Carlos Molinas, global head of business compliance at Crédit Agricole Corporate and Investment Bank, warned that moving all clients onto compounded overnight rates would be a tall order, especially for less sophisticated corporate segments.

"They were used to entering into a taxi and they knew how much they were going to pay. Now they will have to trust the taxi meter. They will pose questions on how you will compound the interest, when are they going to know the rate, and so on," said Molinas. "I really invite the authorities to come to a client negotiation with a French farmer, who is going to say 'I used to pay Euribor plus 120 [basis points], now I have to pay €STR compounded' – it is really going to be tough for some users to understand how the new risk-free rate works."

His view was supported by James Grand, head of the global Libor initiative at law firm Simmons & Simmons, who warned: "The question around forward-looking rates is something where there has been a technical engagement among regulators and product technicians around how to make the change. We have yet to really join the debate in with the end-user community."

Schooling Latter accepted that some smaller borrowers without sophisticated treasury functions may need more certainty on the final rate for their loan at the initial pricing, but suggested there were ways to offer that without relying on a full set of forward-looking rates. He said corporate loan pricing may not need to track the daily rates market exactly – in contrast with, for example, swaps products.

"It may be perfectly possible for [corporate loans] to have a backward-looking version of SOFR or Sonia, but with the payment determined in advance for some time later," he said. ■

>> Read the full story here:
www.risk.net/7065666

FCA urges dealers to quote Sonia swaps on Clobs

Regulator co-ordinates efforts to stream firm prices as part of ramped-up transition plans. Helen Bartholomew **reports**

The UK's Financial Conduct Authority is encouraging dealers to stream firm Sonia swap prices to lit venues as part of plans to create a term version of the new risk-free rate for sterling markets.

Rich Fox, head of markets policy at the FCA, said the regulator has been sounding out dealers over their willingness to quote firm prices on electronic central limit order books (Clobs), and the possible timing for such a move. The venues would provide a data source for any future term rate.

"In the context of a forward-looking term rate, if it is to be robust it needs to be based on depth of liquidity in real transactions or actionable quotes," Fox said. He was speaking at an industry conference on September 19.

While a backward-looking, compounded-in-arrears Sonia term rate is under development, cash market participants view the payment certainty offered by a forward-looking rate as crucial to aid transition.

Regulators, initially lukewarm on the idea, have begun to relent. The working group on sterling risk-free rates (RFRs), overseen by the FCA and Bank of England, recently held meetings with three firms vying to build term rates on the overnight benchmark.

The FCA is now turning its attention to the necessary infrastructure developments to ensure robust and transparent pricing for the derivatives products that would underpin a forward-looking term rate.

"We at the FCA are committed to supporting that but there is a critical tension in the timing," he said. "This is not an excuse to wait. The constant message the FCA has from market participants is that they say they're waiting for the term rate. Well, that is the wrong strategy because it may not come."

Swaps linked to RFRs such as Sonia and the US's SOFR are currently traded only via request-for-quote protocols. As well as helping the swaps market shift from Libor, the streaming of firm Sonia swap prices through Clobs is also a crucial step to transition other parts of the derivatives market from Libor.

For example, swaptions and many rate-linked structured products rely on the Ice swap rate – a measure of term swap rates out to 30 years – for settlement. Ice Benchmark Administration, which manages and publishes the Ibor-based rate for sterling, US dollars and euros, currently takes live swap pricing from three multilateral trading facilities, BGC Partners' BGC Trader, Icap's i-Swap and Tradition's Trad-X.

IBA is currently consulting on a Sonia version of the swap rate, which would initially be developed via request-for-quote pricing.

Speaking at the same event, Axel van Nederveen, treasurer at the European Development Bank, said streaming of RFR swaps on lit venues could play an important role in driving the shift.

"It's important to get going with streaming RFR-type products. Once people see what is lit and what is available, they'll start on the road to transact in them" he said.

The sterling risk-free rate working group has tabled a new set of priorities to accelerate adoption of Sonia before Libor is left to die after the end of 2021, when the FCA will no longer compel panel banks to submit quotes.

The push, which aims to enable banks to lend in Sonia by the third quarter of 2020, comes after rapid growth in swaps linked to the Libor successor rate has stalled. Over the last six months, around half of all new cleared sterling swaps were underpinned by Sonia, equating to around 20% by risk.

"That swap progress is really good but it has plateaued," Fox said. "The focus of the group is what needs to happen to flip the convention. We still think when clients call up dealers, they're quoting in Libor as a default and we want that to change."

The five priorities also include improvements in contractual robustness for Sonia instruments and the development of a forward-looking term rate.

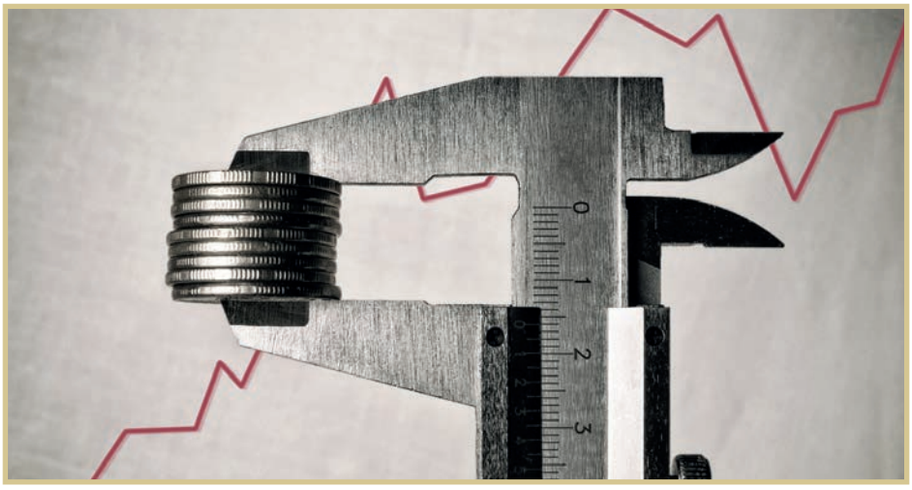
As a follow-up to the "Dear CEO" letters, sent by FCA chief Andrew Bailey to large institutions in 2018, the regulator plans to request detailed information on Libor exposures and transition plans from a wider range of firms.

Fox warned market participants not to expect a legislative fix that would automatically switch contracts to an alternative rate in the event of Libor's demise. Legislation has been touted as a last-resort fallback solution in cash markets, where it is necessary to secure overwhelming majority approval from noteholders through a consent solicitation to change an underlying rate or insert new fallback language into documents. ■

>> Read the full story here:
www.risk.net/7010556

Isda sets two options for Libor fallback spread

Historical spread adjustment to be based on five-year median or 10-year mean. Lukas Becker reports



A derivatives industry association has given swaps users two preferred choices for calculating the fallback rate for contracts referencing Libor, as the financial markets push to complete plans for shifting away from the discredited benchmark.

The International Swaps and Derivatives Association released a consultation paper on September 19 to determine the final parts of the methodology for setting the new rate that would apply to swaps contracts if Libor was to cease.

Two previous consultations for the various Libor currencies, plus other interbank rates such as the Australian bank bill swap rate, decided on a framework where transitioned contracts would reference backward-looking risk-free rates, plus a spread representing the historical difference between the Libor tenors and the new RFRs.

But decisions on how that historical spread should be calculated – specifically, how long the lookback period for the spread should be, and whether to use a mean or median calculation – were left unresolved due to lack of consensus.

Based on feedback from previous responses, the new Isda consultation sets out two so-called primary options: a median measurement over five years, or a trimmed mean over 10 years.

It said the five-year option received the most support in the first consultation in 2018, and "considerable" support in the 2019 consultation. The 10-year option received "considerable" support in both consultations "and reflects feedback from market participants who indicated support for a mean calculation provided that the lookback period was relatively longer".

"There was a split in opinions as to whether a mean or median approach should be used and also what length of lookback period should be adopted," said Rick Sandilands, senior counsel for Europe at Isda.

> "I know it might be tempting to think that the difference between the mean and median is the one that isn't important but I really urge you to respond to this consultation just as you have the other ones"
>
> Richard Fox, Financial Conduct Authority

The consultation paper allows users to express support for other unspecified options, but the paper "strongly encourages" users to limit their responses to the primary two. Speaking at an industry conference on September 19, Sandilands reinforced this point.

"The consultation sets out two preferred options and asks for comments on those. You're allowed to comment on other proposed solutions, but we encourage you to look at the ones that we've proposed instead," he said.

The lookback period would apply from the date of announcement of the cessation of Libor, or the publication of information regarding the cessation. Respondents may also propose other approaches for the start date.

The difference between the two methodologies for calculating the fallback rate can be significant. Based on data up to May 20, the spread for a six-month sterling Libor swap using a 10-year untrimmed mean would be 31.9 basis points, or 19.8bp for the five-year median approach.

Richard Fox, head of markets policy at the UK Financial Conduct Authority, emphasised the importance of the decision facing respondents.

"I know it might be tempting to think that the difference between the mean and median is the one that isn't important but I really urge you to respond to this consultation just as you have the other ones. It's really important to the official sector," he said at the same conference.

The new consultation also asks whether to retain the proposed one-year transition period for the fallback spread. The 2018 consultation set out a mechanism where the spread during the year would be calculated using a linear interpolation between the spot Libor/RFR spread at the time the fallbacks are triggered, and the final calculated Libor/RFR fallback spread.

In other words, any difference between the spot Libor/RFR spread and the calculated fallback spread would be bled in over a year in a linear fashion to avoid a cliff-edge valuation change on the day of the transition.

Isda says there was support for this in previous consultations, but concerns were also raised over complexity. Isda expects that Bloomberg, which will be calculating the fallback spread, should be able to calculate the different transition spreads throughout the one-year period. ■

>> Further reading on www.risk.net

- Isda set to launch fallback spread consultation *www.risk.net/6993171*

TriOptima Now part of CME GROUP

Opening the buy-side liquidity pool

Vikash Rughani, business manager at TriReduce and TriBalance, outlines a new approach enabling buy- and sell-side participants to optimise the transition of legacy Libor over-the-counter swaps contracts to alternative reference rates

How will TriOptima's optimisation services assist the market in the event of the discontinuation of the Libor benchmark?

Vikash Rughani: With banks no longer compelled to support Libor beyond the end of 2021, the industry is focused on developing alternative benchmarks worldwide – with the US, the UK, Europe, Switzerland and Japan leading the way. While Libor and these alternative rates will likely co-exist for some time, the next stage is facilitating the transition to trading in the new rates.

In the meantime, to help market participants mitigate risk in the transition of legacy over-the-counter (OTC) Libor contracts, TriOptima operates a regular series of portfolio compression cycles, bringing together 20 or more buy- and sell-side participants to compress existing Libor trades where the vast majority of trading remains for maturities beyond 2021. These compression cycles can also act as the nucleus of a liquidity pool that will be essential for delivering new conversion methodologies for migrating away from the Libor benchmark for OTC derivatives.

TriOptima will be introducing its benchmark conversion functionality to offer a unique opportunity for new buy-side entities that traditionally may not have been involved in portfolio compression – hedge funds and asset managers with directional portfolios, for example – to join our established network of compression participants in converting their remaining Libor transactions once compression opportunities in a given exercise have been exhausted. The addition of these new participants will be crucial to the success of benchmark conversion because they represent the cashflow and risk offset – which itself is crucial in maintaining the central counterparty's (CCP's) cashflow neutrality. This is akin to a market participant needing to execute a new transaction that is equal and opposite to their original position to compress its position in the CCP. In multilateral services such as ours, the strength of the network provides the mechanism for finding offsets that already exist as opposed to having to execute new transactions with liquidity providers.

Performing these benchmark conversion exercises iteratively over time means TriOptima can help the market achieve a mass conversion from legacy Libor risk on OTC contracts maturing beyond 2021 into alternative reference rates (ARRs).

Which OTC instruments are supported?

Vikash Rughani: The new benchmark conversion functionality will initially be available in compression cycles that include plain, vanilla and fixed-float interest rate swaps, basis swaps, overnight index swaps covering all ARRs, zero coupon swaps and forward rate agreements. Further down the line on the bilateral side, in addition to these products, TriOptima intends to include this functionality in cycles including cross-currency swaps referencing Libor.

Vikash Rughani

Benchmark conversion will be offered in all currencies as alternative risk-free rate (RFR) transition plans take effect. For now, we see momentum in US dollar, sterling, euro, Swiss franc and Japanese yen. We can expect the sterling market to be a leading indicator for conversion due to greater established Sonia liquidity when compared with the other alternative RFRs. However, we continue to wait for the tipping point in longer-dated Sonia trading volume.

What results can participants expect?

Vikash Rughani: Based on simulations TriOptima has been able to run, with sensible risk-based tolerance levels we may be able to help achieve up to a 70% reduction in cleared sterling Libor gross notional through compression alone. Importantly, the simulations showed we can help remove up to half of the remaining 30% by enabling firms to optimise on reducing Libor gross notional beyond 2021 and utilising risk replacement trade functionality made available by the CCPs.

How does the process work?

Vikash Rughani: After firms register for a specific compression cycle, TriOptima receives their trade population in that currency from the CCP. Participants then confirm which trades to include by sending us the trades they are interested in including in the cycle. Through the same exercise, we will suggest trades to either terminate, amend or replace using risk-replacement trades. The outcome is that each trade is either left untouched, terminated fully or amended in some way, such as a change to the notional, the direction, the spread or the coupon. If none of these are suitable for maximising the objective for Libor reduction, the result would terminate the legacy Libor trade and replace it with a risk-replacement trade referencing the alternative RFR. This latter step facilitates the conversion of netted OTC positions.

All participants gain access to the same secure platform and risk-based constraints. The entire exercise is performed under each participant's own valuations and risk sensitivities. These constraints are defined by each firm within their own risk appetite levels. This combination means there's no uncertainty when firms verify the resulting compressions and risk-replacement trades in their own system for risk impacts.

How do you see the process evolving?

Vikash Rughani: Considering that around 85% of outstanding Libor gross notional exists in the cleared world, TriOptima's initial focus will be on CCPs, aiming to tackle the biggest pool as early as possible and freeing up resources across the industry to focus on the more complex bilateral cash positions and non-linear products, such as swaptions.

Initially, we will be offering benchmark conversion for cleared OTC trades at LCH, CME and the Japan Securities Clearing Corporation. However, we expect sterling conversion from Libor to Sonia could kick off as early as the second quarter of 2020, with US dollar conversion commencing once CCPs' transitions to the secured overnight financing rate (SOFR), discounting, price discovery and liquidity improve. We would then expect conversion activity to take centre stage for the industry in 2021 and will be ready to support the industry with its efforts.

How does this offering compare with other solutions?

Vikash Rughani: There's talk of auctions with the purpose of migration away from the Libor benchmark, and we're likely to see other solutions offered by brokers on the execution side, but numerous challenges remain. The market is yet to achieve sufficient comfort in pricing maturities greater than five years. Longer-dated risk exposure won't simply appear overnight. It is natural for firms to trade at the short end to begin with; the rest will depend on building momentum. The SOFR discounting change next year may help, but brokers will need to be able to quote reliably, spreads will need to tighten and the market will need to work out how ARRs behave in different conditions compared with Libor. The market will also look for greater certainty and clarity from regulators on potential margin impacts of amending transactions or replacement, as well as from tax and accounting standards boards with regard to treatment and hedging benefit provisions.

Instead, beyond continued compression activity, TriOptima is embarking on a 12- to18-month period of education and onboarding for buy-side firms in preparation for a full-scale roll-out of the service in 2021, or when the market indicates its desire to commence conversion if there is a Libor fallback. What is unique to our solution is the liquidity pool and facilitating the conversion through compression in a measured way while participants maintain control of the risk effects that conversion can give rise to.

Firms may need to consider what they want to do with their legacy Libor book. Are they prepared to rely on implementing Libor fallbacks in the event of cessation, or do they want to participate in a proactive conversion to ARRs?

What should buy-side firms think about when preparing for benchmark conversion?

Vikash Rughani: Firms need to think about the process of adhering to TriReduce's legal documentation, the data submission requirements, the consumption of output data from TriOptima or even from the CCP, and how they will adapt throughout next year to ensure they are maximising their compression potential as well as readying themselves for the conversion component. Some firms will require additional technology development to support the process for benchmark conversion, so it's important to start thinking about this now and build it into budgets for the coming year.

As a multilateral exercise, benchmark conversion will require all-or-nothing acceptance. Participants will want to review the proposed results before providing their firm's acceptance. Only once all parties accept the unwind proposal does it become legally binding and get processed by the CCP. This ensures all participants take responsibility for their submission, including the accuracy of their valuations and risk data to maintain the integrity of the exercise.

Learn more about TriOptima's optimisation services by contacting *BenchmarkConversion@trioptima.com*

Libor switch spells trouble for loan systems

Lenders face costly updates to ageing legacy platforms to cope with new risk-free rates By Natasha Rega-Jones

Need to know

- In the race to replace Libor, banks have yet to update their risk management systems to accommodate new backward-looking rates such as Sonia and SOFR.
- While updating derivatives systems is fairly straightforward, overhauling creaky loan systems is no simple task – as firms are now discovering.
- Third-party loan platforms from vendors such as Finastra and Calypso can be up to 30 years old, requiring extensive system updates depending on how well banks have been regularly updating their systems.
- Banks that have fallen behind in regular system updates face a six- to 24-month process to update software, perform regression testing and go live with loan systems that can cope with new compounding-in-arrears risk-free rates.

As the end of Libor draws closer, banks are making plans to upgrade their vendor-provided risk management systems to be able to handle backward-looking rates. But overhauling creaky loan systems is no simple task, as firms are discovering.

"There is a significant amount of lead time to get your lending systems up and ready," says a senior source at a US investment bank. "It's not as simple as just building a new curve as it is on the derivatives side. It's a lot more complicated than that."

Third-party platforms for loans can be up to 30 years old. This needn't be a problem if users have diligently updated their systems as required. But some firms are running old versions that could take many months to change, given the extensive testing needed.

Industry working groups around the world are scrambling to develop a new suite of risk-free rates to replace the ubiquitous Libor benchmark, which is likely to fall out of use at some point after the end of 2021. In most major currencies, the new fixings are based on overnight lending and users are keen for the industry to reference backward-looking compounded versions of the rates.

Alex Harris, Calypso

Loan market participants have misgivings about backward-looking rates because, unlike Libor, they prevent users from knowing what the accrued amount of interest on a loan will be ahead of time. For banks, rewiring systems that currently work on forward-looking cashflows will require multiple changes.

The necessary changes will not be easy to perform. While derivatives system infrastructure tends to be configured to nimbly implement new products and rates, loan systems are geared for volume and consistency instead – making the task of executing even general loan system updates a challenge in itself.

"We've even come across instances where there are loan systems that send out a paper confirmation every time you've got a reset on the loan rate date, so on a daily compounded rate that system would be generating a paper confirmation every day," says Shankar Mukherjee, partner at EY.

The stakes are high: failure to repurpose systems to adapt to new loan rates could cut lenders out of markets and hobble new issuance.

"There's a significant impact to the financial markets if systems can't be upgraded and banks can't lend compounding-in-arrears – the whole lending market would reduce quite dramatically," says the senior source at the US bank.

Patch or scratch

Vendors are offering plug-ins that enable firms to repurpose elements of their risk and pricing systems, such as accrual calculation and curve configuration.

But for some institutions, a series of patches won't suffice. Depending on how well banks have been regularly maintaining and updating

their systems, the only route to Libor transition may be a lengthy and costly full system update.

"Most systems are 30 years old," says Pedro Porfirio, global head of capital markets at Finastra, a tech vendor. "Let's use Windows as an example – if you're using Windows 3.0 from the 1990s and suddenly you want to upgrade to the very latest version, that's going to be painful. Similarly, banks and financial institutions which have not been regularly updating their core solutions will have a hard time updating their systems."

Finastra claims to have a 50% market share of the global syndicated loans market via its Loan IQ platform.

Laura Heaphy, associate partner at McKinsey & Company, says some systems are so old that the people with the technical know-how to update them are no longer available.

> "There is a significant amount of lead time to get your lending systems up and ready"
>
> Senior source at a US investment bank

"In some cases those people who know the code and can make these changes have left because it's been years – if not decades – since some of these systems were last updated. So there's a question of talent availability," she says.

According to the senior source at the US bank, some financial institutions run anywhere between one and four updates behind because the latest version of the system isn't always essential. However, he warns that if a bank falls too far behind in updating their systems then it could take anywhere from six to 24 months to upload the latest version of the software, perform regression testing, and go live so that the system can cope with new functions such as compounding-in-arrears rates.

Users of Calypso's multi-asset platform, for example, need to upgrade to newer versions of the system to accommodate specific products like floating-rate notes and SOFR futures – as market conventions around such products have either changed or only recently been created, says the tech provider's director of product management and head of front office, Alex Harris.

A chief operating officer for fixed income trading at an international investment bank says the majority of banks tend to update their systems every few years.

"You try to stay on fairly recent versions

Pedro Porfirio, Finastra

because if you don't then you won't get the most recent updates. It's like your iPhone – you might not take every upgrade but at some point you might fall too far behind and can't run certain apps or don't benefit from certain support and warranties," he says.

However, for banks that have lapsed in their system maintenance and are unable to execute full system updates in time for Libor's likely demise at the end of 2021, Jason Granet, head of Libor transition at Goldman Sachs, argues the best option might be to scrap your systems and start again.

"If you have a really old system then sometimes it's easier to just buy a new one so you can get on with it instead of trying to fix the old one," he says.

Blowing the budget

Whether a bank is forced to start from scratch or resort to patches, the cost can be considerable. Shankar Mukherjee, partner at EY, estimates that the largest banks could be looking at spending $300–$400 million in total on their Libor transition programme – with around 50–60% of that being spent on legal contract remediation and IT.

Although none of the vendor systems interviewed by *Risk.net* explicitly stated how much system updates tend to cost, Calypso's Harris says the updates they provide clients are included in the licence fee.

"But that doesn't mean these updates are free from the client's perspective," he says. "Updates will obviously require banks to implement specific processes to accommodate these system updates within their institution and test them before going live with them."

Given the potential costs involved, the senior source at the US bank says it's therefore crucial for banks to properly budget for such system updates now.

> "If you have a really old system then sometimes it's easier to just buy a new one so you can get on with it instead of trying to fix the old one"
>
> Jason Granet, Goldman Sachs

"The reality is that most technology budgets for 2020 are being discussed right now so if you get to December or January and have to spend a bunch of money on a system update which you haven't budgeted for then that's a big challenge."

Finastra has developed a cloud platform that prevents clients from having to execute a full-scale loan system update by providing them with access to third-party APIs for specific elements.

"If banks' accrued interest calculations come from a monolithic piece of code then it's a painful upgrade process as you need to replace that whole piece of code," says Porfirio.

Tech vendor Murex believes banks are better off focusing on modular system updates rather than full-scale ones, particularly as 2021 not only marks the beginning of the end of Libor but also is a deadline for Fundamental Review of the Trading Book compliance and the final phase of initial margin rollout.

"Customers simply don't have the time and capacity to run multiple cycles of planning, testing and deployment for each of these changes before the end of 2021," says Alexandre Bon, head of marketing for Asia-Pacific at Murex.

Despite the uphill struggle ahead, EY's Mukherjee expects some loan system updates for risk-free rates to launch over the course of this year, with the majority of system changes being executed over the course of 2020 – although he estimates this will "undoubtedly" stretch into 2021.

The US industry group responsible for Libor transition planning held a system vendor workshop in June where tech firms were invited to debate the challenges involved in shifting to a compounded SOFR. On September 5, the group held its regular update meeting during which it discussed operational readiness for the Libor switch.

Market participants remain confident that system updates can be accomplished before the 2021 deadline – if banks take action now.

"One of the obvious things in human psychology is to say, 'Oh the end of 2021 is so far away. I have more important things I need to focus on now so I'll get to that later'," says Goldman's Granet. "That's why it's important to engage with counterparties, clients and stakeholders to make sure they're moving at the appropriate speed." ■

DERIVATIVES A DODDLE

Compared with the loans market, system updates for derivatives products are fairly straightforward. For a bank to be able to trade new risk-free rate (RFR) products like Sonia and SOFR swaps, they simply need to introduce the new fixing to their system by building a new basis curve against an existing rates curve.

"Sonia is just a compounded overnight rate so the biggest thing to change is just making slight tweaks in the system calculations," says Jason Granet at Goldman Sachs. "We've issued RFR debt and are actively trading RFR swaps and bonds so our systems can already handle RFRs."

As forward curves already exist for Sonia and SOFR, the senior source at the US investment bank says he would be surprised if banks weren't capable of booking derivative trades referencing the new RFRs today. NatWest already produces a free Sonia calculator on its website, allowing market participants to know what a compounded Sonia interest rate is for any defined period since the Bank of England started publishing the benchmark.

Similarly, Alex Harris at Calypso says his firm's system already supports RFRs like Sonia because it's a well-established index within the market.

"We don't have a Sonia index built into the system but we do have an index product which allows banks to create new indexes based on market developments and conventions, so the set-up of a Sonia index is a pretty standard one," he says.

A SOFR solution for local benchmarks

Singapore, Thailand and the Philippines look to replace Libor in benchmark calculations. By Chris Davis and Narayanan Somasundaram

Need to know

- Development of a forward-looking term SOFR is crucial to the continuity of swaps linked to Singapore's SOR, Thailand's THBFIX and the Philippines' PHIREF, experts say.
- The three benchmarks reflect the cost of borrowing US dollars before swapping back to the local currency at the same tenor.
- So far only a fallback for Singapore's SOR benchmark has been finalised – it will apply a spread to SOFR, calculated using the same methodology used to calculate fallbacks for US dollar Libor.
- However, some observers say that a 'compounded setting-in-arrears adjustment' – one option being considered for the US dollar Libor fallback – would be problematic if applied to the three benchmarks.
- They point out that a backward-looking term adjustment would create a mismatch with the forex forward rates used in the calculation methodologies, an issue that could be avoided if a forward-looking term SOFR emerges.

Asia's benchmark administrators are closely watching efforts to establish a term version of US dollar Libor's replacement, the secured overnight financing rate. The continuity of contracts that reference three South-east Asia interest rate benchmarks – and design of term risk-free rates in other Asia markets – might well depend on it.

A forward-looking term SOFR would allow the benchmark to be used instead of Libor to calculate contractual fallbacks for Singapore's Swap Offer Rate (SOR), the Thai baht Interest Rate Fixing (THBFIX) and the Philippine Interbank Reference Rate (PHIREF), limiting disruptive changes to the present value of existing contracts.

It could also be used to generate term risk-free rates in markets that currently lack them, such as Hong Kong – something that could prove valuable to cross-currency swap users once other markets switch to risk-free rates such as SOFR (see box: *Term RFRs for Asia*).

"Asia desperately needs a one-month, three-month and six-month SOFR rate," says a Sydney-based market specialist at a company that provides benchmark services. "Without [a US dollar term risk-free rate] you cannot get a three-month forex forward point to calculate benchmarks like SOR. I don't think there is a solution until we have a term fixing."

SOR, THBFIX and PHIREF interest rate benchmarks are implied from foreign exchange forward rates, reflecting the cost of borrowing in US dollars before swapping back to the respective local currencies at the same maturity. Each of the benchmarks uses Libor as a reference for US dollar borrowing costs, a forward-looking benchmark in which interest payments are fixed at the start of the payment period.

Four main inputs are used to calculate the forward rate in forex forward and non-deliverable forward trades exchanging, say, US dollar and Singapore dollar: the spot rate for the currency pair; the interest rate for the base currency, US dollar; the interest rate for the term currency, Singapore dollar; and the cross-currency basis. If the forex forward rate and three of the four inputs are known, the term rate for Singapore dollars can be extrapolated from the equation.

As Libor limps to its predicted demise in 2022, SOFR is the mooted replacement in the US dollar market. But while benchmarks based on forex forwards are intrinsically forward looking, current proposals would see SOFR based on backward-looking rates. This mismatch between the US dollar borrowing rate and the forward forex rate would stymie the calculation of the three benchmarks. Market participants say the only solution would be to use a forward-looking version of SOFR, which currently no vendor produces.

Fallback mismatch

The official group tasked with developing a new risk-free rate in the US is considering how to build a SOFR term rate as part of its transition planning, and publication of the forward-looking rate is expected to begin in 2021.

Industry committees convened by the administrators of the three Asian benchmarks have been pondering how to use SOFR in Libor's place. Markets generally expect the discredited benchmark to cease at some point after the UK regulator gives up its power to compel banks to take part in the pricing panel at the end of 2021.

In Singapore, authorities plan to replace SOR in swap contracts with an adjusted version of the rate that will apply a spread to SOFR in order to account for the value of Libor's embedded term and credit risk. SOFR, a risk-free rate based on transactions in the repo market, fixes on average 30 basis points lower than Libor, according to data from consultancy Oliver Wyman. Some industry observers are not convinced that a term adjustment will mimic the current fixing, however.

"My thinking is that we probably won't have a SOR as we now know it, and there is not likely to be a viable like-for-like replacement," says Jason Valoti, a partner at Simmons & Simmons in Singapore. "The market will have to get used to a rate that provides a different output, which is likely to be along the lines of adjusted SOR proposed by the International Swaps and Derivatives Association."

The fallback will be introduced for legacy trades through amendments to the 2006 Isda definitions, and is intended to allow contracts to roll over to a new rate in the event of the death of Libor, a key input for SOR.

Talks on the future of THBFIX and PHIREF are ongoing, meanwhile, with the Bank of Thailand, THBFIX's administrator, saying that it is monitoring the development of a SOFR term rate as it considers its approach to the design of fallbacks for existing contracts.

Life after Libor

For the Sydney-based market specialist, the all-pervasive nature of Libor as a benchmark is forcing the industry into a frenzy of planning and preparation on a grand scale.

"The magnitude of this transition has probably not been seen since Y2K," he says, referring to the push to eliminate calendar bugs from computers in the lead-up to the new millennium.

Although often overlooked in estimations of global markets' exposure to Libor, which quantify financial products directly linked to the benchmark, volumes of interest rate swaps linked to Libor indirectly through rates like SOR, THBFIX and PHIREF are not immaterial.

According to a 2017 Isda analysis of data from the Bank for International Settlements, the Singapore dollar accounted for 17% of total turnover of interest rate derivatives in the Asia-Pacific region, the second most-traded currency behind the Australian dollar. Data from the Depository Trust & Clearing Corporation shows that $579 billion of notional has been traded in interest rate swaps and cross-currency swaps linked to SOR benchmarks since the beginning of 2018.

The swap market's next largest linkage to US dollar Libor through local South-east Asian benchmarks comes through THBFIX. According to a Bank of Thailand presentation from June 2018, over 99% of Thai baht-denominated interest rate swaps are linked to THBFIX, and the outstanding notional at that time was $2.5 billion. The notional outstanding on non-deliverable swaps cleared at LCH was $159 billion on June 11, meanwhile. Non-deliverable interest rate swaps are contracts that are settled in US dollars in order to circumvent convertibility restrictions on the currency of the underlying.

"There are lots of derivatives trades in Thailand," says William Shek, head of credit and rates for Asia-Pacific at HSBC in Hong Kong. "THBFIX versus US dollar Libor basis swaps are actively traded onshore, in addition to THBFIX-linked interest rate swaps."

Since non-deliverable Philippine peso swaps are not presently eligible at any major clearing houses there is no equivalent volume data. But Shek suggests the Philippine peso swap market is small relative to Singapore and Thailand.

In-term-inable wait

Ensuring the continuity of swap contracts in the three currencies by replacing Libor with SOFR in the calculation methodologies is far from straightforward.

The Isda fallback methodology chosen to replace sterling, Swiss franc and yen Libor, and Australia's bank bill swap rate, takes a two-step approach. First, the RFR is compounded-in-arrears to the same tenor of Libor that it is replacing. Second, a historical spread is calculated between the two rates, over an as-yet unknown timeframe, using either a mean or median approach, and added to the rate as a top-up.

The results of the consultation for these four currencies, released in November last year, included feedback from market participants that this was also the preferred approach for US dollar Libor. The consultation for US dollar Libor fallbacks, released in May 2019, included this approach as an option.

In Singapore, a working group formed by the Association of Banks in Singapore and the

TERM RFRS FOR ASIA

The development of a term version of SOFR could be used in Asia markets struggling to develop their own term RFRs, sources say.

In markets that lack term RFRs, a situation could arise in the cross-currency swap market where an RFR such as SOFR has to be referenced on one side of the trade and an Ibor rate, with embedded bank credit risk, is referenced on the other side – potentially leading to basis risks in cross-currency swaps.

Hong Kong is one market in Asia that currently lacks a term RFR. The administrator of Hong Kong's Libor equivalent, Hibor, and the Hong Kong overnight rate, Honia, the Treasury Markets Association, has already explored the idea of developing a new term RFR using wholesale funding transactions. However, it concluded that such a rate would exhibit a high level of daily volatility, making it an unsuitable alternative to Hibor.

The TMA has said it will attempt to develop an overnight index swap curve from Honia at a later date, but concedes that the success of such an initiative will depend on market conditions.

Even though Hibor has a term structure, once interest rate benchmarks in other currencies move to RFRs, there will likely be a growing demand in the cross-currency market for risk-free reference rates on both sides of the swap.

John Feeney of Martialis Consulting believes the development of a term SOFR could provide the solution, enabling markets like Hong Kong to create term RFRs using a similar methodology to SOR.

"At some point in the future, a US dollar term RFR will be available and the way that could be applied is interesting," he says. "Theoretically we can produce a term RFR for any currency that has a forex forward market or a non-deliverable forward market in whatever tenor we need."

That could then potentially "free up regulators and administrators from worrying about coming up with their own term versions of RFRs", he concludes.

Singapore Foreign Exchange Market Committee has decided to incorporate whatever the Isda fallback approach will be for US dollar Libor into adjusted SOR.

However, some industry observers say a compounded setting-in-arrears adjustment is an imperfect solution for the three South-east Asian interest rate benchmarks that use US dollar Libor. The trouble is dollar borrowing costs need to be captured in advance. Knowing what the rate is at the end of the interest period – as is the case with a compounded rate – is of no use when the output is needed to determine the amount of a forex forward. The same argument for term RFRs has been made repeatedly by users of cash products.

Simmons & Simmons' Valoti foresees a discrepancy between SOR and the adjusted SOR fallback if the latter is not calculated with reference to a forward-looking US dollar term interest rate benchmark.

"I don't think you'll be able to replicate the SOR approach in terms of forward-looking funding easily based on the existing methodology," he says. "If at some point in the future forward term rates become available you could perhaps then look to further revise the rate."

John Feeney, a partner at Martialis Consulting and until November 2018 the head of pricing and conduct at National Australia Bank in Sydney, agrees, pointing out that the adjusted SOR fallback would require different observation times, something which he says is "not advisable".

"In the SOR example, the only way the Isda proposal would work is to note the forex forward at the start of the period and use the compounded SOFR at the end to calculate the SOR," he says. "This is quite different to the current SOR and could cause problems for many users."

The Sydney-based market specialist agrees that a US dollar term rate is important for the development of fallback rates for the three benchmarks. Assuming this hurdle can be cleared, users only have to worry about applying a credit spread adjustment, which is a simpler task.

"If you migrate from three-month Libor to a three-month RFR, instead of a two-factor problem you have a one-factor problem," he says. "Then it is all about the credit spread."

The current lack of a term rate might explain why the administrators of THBFIX and PHIREF are yet to finalise the design of a fallback rate.

The Bank of Thailand, the administrator of THBFIX, says it is keeping a close eye on efforts to create a term SOFR, and hopes to finalise an adjusted rate by the end of 2020.

"The Bank of Thailand is fully aware of the potential impacts of the Libor discontinuation and exploring an alternative rate for THBFIX calculation is currently under way," says Sarut Ruttanavijit, a spokesperson at the Bank of Thailand. "We have studied SOR's approach and consider this an option for THBFIX. In parallel, the BoT closely monitors the development of new RFRs, in particular the transition to SOFR including the creation of a term reference rate."

The Bankers Association of the Philippines said in an emailed statement that it was unable to comment since "discussions within the organisation are still ongoing". ■

Lloyds flips to Sonia

The conversion, backed by 99.84% of bond holders, marks another milestone in the Libor transition. By Helen Bartholomew

Need to know

- An estimated £62 billion of bonds linked to sterling Libor are scheduled to mature after 2021, when the discredited benchmark could cease to exist
- Associated British Ports became the first issuer to switch a public bond to Sonia in June, after receiving approval from noteholders on a £65 million narrowly held issue via a consent solicitation.
- Participants questioned whether the exercise could be replicated for widely held transactions, given the need for consent from 75% of eligible holders.
- On October 7, Lloyds Bank won 99.84% bond holder approval to transition a £1 billion covered bond from Libor to Sonia, offering a test case for other widely held issues.
- Santander UK won approval from more than 90% of holders to transition two securitisation notes to Sonia on October 11.

Lloyds Bank has received overwhelming support from debtholders to switch the reference rate on a £1 billion ($1.26 billion) covered bond maturing in 2023 from Libor to Sonia.

The change, which was put to noteholders at a meeting on October 7, passed with 99.84% of eligible holders voting in favour. The first Sonia-linked coupons will pay out in March 2020.

At £1 billion, the conversion of Lloyds' covered bond was widely seen as a test case for transitioning outstanding debt with a large number of dispersed holders onto Libor's successor rate for sterling markets.

"It will be interesting to see what other issuers do to address legacy bonds but investors have generally been positive about the process and engaged in active feedback on how processes could be improved in the future," says Peter Green, head of public senior funding and covered bonds in the group corporate treasury at Lloyds Bank.

An estimated £62 billion of Libor-linked floating rate notes and securitisations are set to expire after 2021, at which point the UK's Financial Conduct Authority (FCA) will no longer compel panel banks to submit quotes for the benchmark, leaving it to wither.

In June, Associated British Ports won plaudits from global regulators for changing the reference rate on a £65 million floating rate note from Libor to Sonia. As a narrowly placed bond, consent approvals – 75% of holders on 75% quorum – rested on the shoulders of just a handful of investors.

Lloyds ran a parallel process to transition a £300 million floating rate credit card securitisation from Libor to Sonia. While the covered bond switch required positive consent, the securitisation was running on a negative consent basis, with approval assumed unless investors objected before an October 14 deadline. This was later extended to November 6.

In early October, debt holders approved the transfer of an additional £550 million of Libor-linked debt to Sonia in separate votes.

Santander UK also secured the requisite approval to switch two Libor-linked mortgage bonds issued from its Holmes Master Trust securitisation programme to Sonia. At a noteholder meeting on October 11, approval rates hit 98.33% for the £250 million Series 2017-1 securities and 93.04% for the £300 million Series 2018-1 notes. The multi-stage process, which was led by NatWest Markets, gauged investor appetite for a switch prior to the consent solicitation – an approach NatWest believes will act as a template for future switches.

Lloyds' Green says the response from debtholders suggests consent solicitations will be the primary tool for transitioning legacy bonds

> "Absent a legislative solution to tackle the legacy positions, we would certainly see good application for consent solicitations as a means to convert Libor notes to RFR notes" Peter Green, Lloyds Bank

$1.26 billion

Lloyds Bank received overwhelming support from debtholders to switch the reference rate on a £1 billion ($1.26 billion) covered bond maturing in 2023 from Libor to Sonia.

to regulator-approved risk-free rates (RFRs).

"Absent a legislative solution to tackle the legacy positions, we would certainly see good application for consent solicitations as a means to convert Libor notes to RFR notes," he says. "We have seen other issuers announce similar processes and expect others to come to market in the near future."

Extreme measures

The FCA has thrown its weight behind consent solicitations, but extreme measures including legislation and a lingering 'synthetic Libor' are being discussed by the UK RFR working group committee on so-called tough legacy contracts.

"We've seen some consent solicitations to change the terms of bonds and we're going to see more, but we're realistic and the market is realistic that not all those bonds are going to flip," Rich Fox, head of markets policy at the FCA, said last month. "There are around 260 sterling bonds linked to Libor that mature after 2021. What we want to do is have a debate with the industry about what we do with those rates."

Lloyds declined to comment on the number of noteholders who voted in favour of changing the reference rate. Typically, jumbo covered bonds are sold to around 50 investors. However, the debt may have changed hands multiple times in secondary trading since the March 2018 issue date. Lloyds relied on communications via clearing systems, bond custodians and the consent solicitation agent – in this case, Lloyds Bank Corporate Markets – to boost participation.

Crucially, there is a clear convention in Sonia debt markets to underpin transition. New and amended bond issues have coalesced around a methodology for calculating Sonia coupons in a manner that minimises value transfers and aligns with plans for fallback language in Libor swaps.

"We are focused on the positives that we have in the UK of a fairly standardised market convention for Sonia coupons," says Lloyds' Green. "Other markets are less evolved than the sterling market so issuance opportunities are less obvious where there is no market convention."

This is true of the US market, where more than $690 billion of Libor-linked bonds are due to expire after 2021, according to estimates from RBC Capital Markets. Standardisation has been slow to materialise and a variety of coupon methodologies have emerged among the $279 billion of FRNs now referencing the secured overnight financing rate. Further complicating matters, many bonds require 100% approval to amend terms – a hurdle even Lloyds fell short of.

Photo: Money Bright

"There are around 260 sterling bonds linked to Libor that mature after 2021. What we want to do is have a debate with the industry about what we do with those rates" Rich Fox, Financial Conduct Authority

Lloyds followed the Sonia convention, which it has also used in recently issued floaters referencing the RFR directly. Coupons on the amended debt will pay Sonia – compounded in arrears with a five-day lag – plus 0.25% and an additional basis reflecting the gap between Sonia and Libor.

The basis will be interpolated from the three-year and four-year Libor-versus-Sonia basis. This aligns with the remaining maturity of the issue as of the December 27 effective date, when the last Libor-linked coupon will be paid. The basis calculation will be made on December 17, allowing the compounding period to begin five business days before the start of the new interest rate period and end five days before the payment is due.

98.33%

At a noteholder meeting on October 11, approval rates hit 98.33% for the £250 million Series 2017-1 securities and 93.04% for the £300 million Series 2018-1 notes.

Now a standard in the Sonia bond markets, this five-day lag helps to provide some visibility for issuers ahead of payment. Re-hitching debt from forward-looking Libor to overnight rates results in some loss of visibility on coupon payments for issuers – one reason why some are reluctant to take the plunge. Libor's term nature means floating payments based on the three-month tenor are known three months prior to the coupon being paid.

Term RFR rates, which aim to mimic the forward-looking nature of Libor, are currently being built with the support of regulators and official RFR working groups. FCA officials insist term rates should only be used to transition the toughest legacy contracts and that issuers should not wait for their emergence to move other contracts to new RFRs. ■

In partnership with: accenture Eurex

Preparing for €STR

While momentum is building around alternative reference rates in the US and UK, Europe's transition to post-Libor benchmarks has been more tentative. *Risk* convened a panel to assess the prospects of the newly launched euro short-term rate in relation to Eonia and Euribor, and to discuss how market participants should best prepare for transition

The euro short-term rate, otherwise known as €STR, has officially launched. The benchmark rate is set to replace the current overnight money market rate – the euro overnight index average (Eonia) – in January, 2022.

For European regulators, that is one benchmark down, one to go. Euribor, which measures interbank funding costs over different tenors, operates exactly like its UK cousin Libor – a rate that has been declared defunct and in need of replacing.

The UK Financial Conduct Authority said in July 2017 that it would give up its power to compel banks to submit data to the various Libor panels for US dollar, sterling and yen, among other currencies, from the end of 2021, meaning the pervasive benchmark could die soon after.

However, Euribor is not going anywhere for now. Administered by the Financial Services and Markets Authority of Belgium, the regulator declared in July that Euribor is compliant with the EU's Benchmark Regulation. Furthermore, no announcement regarding an end-date for the benchmark has been made.

The fates of both Eonia and Euribor, while different, are still interlinked. Now that Eonia's replacement, €STR – which is based on the borrowing costs of around 32 banks, with data reported to the European Central Bank – has begun daily reporting, the Eonia methodology has been changed to €STR plus an 8.5 basis point spread.

Discounting transition

The challenge for the market is what to do with Euribor swaps discounted at this reformed Eonia rate. Do you amend them to be €STR plus 8.5bp, keep the economics largely unchanged and bake in the spread for the life of the swap? Or do you amend them to be €STR 'flat' but then have to deal with the compensation changes?

"My expectation, based on the conversations I have had with market participants, is that the switch to flat €STR overnight index swaps will go fairly quickly"

Matthias Graulich, Eurex Clearing

A recent ECB risk-free rate working group report said it is up to the market to decide what to do next. Matthias Graulich, chief strategy officer and member of the executive board at Eurex Clearing, said the central counterparty (CCP) will make the discounting switch from Eonia to €STR flat, rather than using the 8.5bp spread, next year. This will include cash compensation.

"The recommendation is the second quarter next year, and we would be very happy to support this timeline. However, we believe, and this is the other recommendation coming out of the working group, that ideally this switch is aligned among the relevant CCPs in this switch process," he said.

The concern from participants is that there could be a split between CCPs, as has been observed in the US for its transition away from Federal funds discounting to the Secured Overnight Financing Rate. CME Group is advocating a July date while LCH.Clearnet would prefer October.

Barry Hadingham, head of derivatives and counterparty risk at Aviva Investors, believes it is necessary for CCPs to move at the same time.

"I think it's absolutely crucial," he said. "There's already basis between CCPs, which is not ideal. If you introduce other elements such as this, discounting being different across the CCPs, then it just muddies the water further and at some point you've got to align those transactions anyway."

While that takes care of the centrally cleared portion of the derivatives market, the bilateral market will need to seek its own solution. This could be complicated by the individual negotiations between counterparties and, as a result, will be difficult for the cleared and bilateral market to move at the same time.

"I think it's impossible procedurally to align the two. You're effectively entering into a CSA negotiation process, which is something I'm doing right now. As soon as lawyers and procedures are involved, things tend to slow down quite significantly," said Jasper Livingsmith, director, treasury at the European Bank for Reconstruction and Development.

To make things easier, Livingsmith believes this is an area where the International Swaps and Derivatives Association could help out.

"This is probably one of those areas where the Isda protocol may work well for the bilateral space, because… it shouldn't be a complicated negotiation. Effectively you're striking out a rate that's calculated on one basis and switching to another. I think that's potentially an option here," he said.

Discussions between counterparties have

varied to date, said Livingsmith. This could fall on the XVA desk, where a change in the discount rate might affect calculations as to whether it is a favourable trade to the bank or not.

"I'm not getting as uniform a response as I had hoped…Most banks are, let's say, willing and keen but some are not. I can't tell if it's just to have a legal point or if it's an XVA desk issue," he said.

One of the other major challenges for the industry is that Eonia has moved to a T+1 rate, which will affect collateral settlement.

For bilateral trades, firms will need to start looking at their overnight batch processing, operations procedures and also the various transactions for hedging options, index swaps and Eonia futures.

"If you haven't already looked at the impacts into your processes and systems you should probably move on quite quickly on that particular aspect," said Sharon Freeman, an independent consultant at Antevorta Consultants.

"I think the liquidity will move fairly quickly. I also think the discounting change next year will be helpful" Barry Hadingham, Aviva Investors

Euribor

For the other European benchmark rate, the future is less certain. Euribor doesn't have the same explicit deadline pressure as its Libor peers, and regulators want to instead reform and retain the rate.

Euribor, according to various consultations and written papers, has lower transaction volumes than US dollar Libor, which is likely to disappear because of that issue. It also relies to a large degree on expert judgement – 69% of the time for its three-month rate and 82% of the time for its six-month equivalent.

"All the risk management activities are probably going to be on the €STR rate. So yes, market forces will play a role, but for retail banks it is probably going to be a long road" Adnan Niazi, Accenture Consulting

Furthermore, since the start of the year, two bank submitters have left – Banca Monte dei Paschi di Siena and the National Bank of Greece – leaving 18 contributors. So how long does Euribor have?

The European Securities and Markets Authority has indicated the rate will be around for at least the next five years. This creates an issue in developing a market-backed compounded version of €STR, said Eurex's Graulich.

"People have very little incentive to support that and drive that forward as long as there is no kind of expiry date for Euribor being defined. This makes me not too optimistic that we will see a build-up of strong liquidity, for example in €STR futures, as long as Euribor is around and has no expiry date," he said.

So why are regulators keen to keep the benchmark if it might impede take-up in €STR?

For one, there is the sheer volume and variety of contracts linked to Euribor, including roughly €100 trillion of exposures, with products such as retail mortgages that could prove very difficult to shift.

"I think the tough legacy is really the retail exposure. That may require political intervention at some point to give cover to a transition, because I think it's almost impossible to do otherwise," said Livingsmith.

Help could arrive in the form of the cross-currency market. Any switch to €STR here could shuffle the rest of the markets along.

"I can see that shift happening," said Hadingham. "It would seem surprising to me that, if there's a credible risk-free rate, the market would continue to use Euribor, with a term rate on one side and RFRs on the other."

For retail banks that specifically issue Euribor products and hedge that with €STR, it could be a "long road" said Adnan Niazi, senior principal at Accenture Consulting.

"On the retail side, they will most likely be issuing products on an ongoing basis in Euribor. All the risk management activities are probably going to be on the €STR rate. So yes, market forces will play a role, but for retail banks it is probably going to be a long road," he said.

Despite the uncertainty over Euribor, the industry has been pondering what fallback language might look like for those contracts. In other Libor currencies, Isda's consultations on the topic have shown a preference for a compounded in-arrears approach.

However, European regulators have left Euribor open to using a forward-looking approach, putting it out of step with other markets that have ruled out this method.

This also puts it at odds with the Financial Stability Board and its official sector-steering group, which has been clear in its preference for a compounded in-arrears rate to harmonise with the overnight indexed swap market.

"The whole conversation around the need for forward-looking rates is ultimately around cashflow certainty and the degree to which end-users require that," says Livingsmith.

€STR swaps

The next development of the €STR market will be the launch of swaps linked to the new fledgling rate, with both Eurex and LCH set to offer clearing solutions for the products this year.

Both Graulich and Hadingham expect liquidity to build in those products quite quickly.

"My expectation, based on the conversations I have had with market participants, is that the switch to flat €STR overnight index swaps will go fairly quickly. The simple reason is there is an expiry stamp on Eonia," says Graulich.

Hadingham agrees. "I think the liquidity will move fairly quickly. I also think the discounting change next year will be helpful," he says. ■

For more on this topic, view the webinar www.risk.net/regulation/7044271/preparing-for-eustr

In partnership with: LCH The Markets' Partner

Spotlight on SOFR

The US has chosen the secured overnight financing rate (SOFR) as its Libor replacement. SOFR swaps could get a boost when clearing houses start using the new rate in discounting, but there are some caveats. For other products, the US is drawing up Libor fallbacks, creating potential clashes. *Risk* convened a panel to discuss the outlook for SOFR's development

The secured overnight financing rate, known as SOFR, was selected by a group of industry participants in June 2017 to be the preferred replacement for US dollar Libor as the benchmark for roughly $200 trillion of interest rate products.

The decision to make the switch away from Libor – an integral part of the financial system for decades – was made following revelations that the benchmark had been manipulated during the financial crisis – suspicions that were first reported by *Risk* in January 2008.

Following this, the Financial Stability Board convened a group of regulators, the Official Sector Steering Group, to recommend a solution. Their report, delivered in 2014, called for alternative reference rates to be identified – they should be nearly risk-free and derived from a robust underlying market, making them hard to manipulate.

The original intent was for there to be a multi-benchmark world, but that all changed in July 2017 when the UK Financial Conduct Authority, which regulates Libor, announced it would no longer compel banks that submit quotes for the Libor benchmark to continue doing so post-2021.

Since that moment, the race has been on for financial centres around the world to get ready for the very real threat that Libor may no longer exist in just over two years' time. In the US, the Alternative Reference Rates Committee (ARRC) – convened by the Federal Reserve Bank of New York – has been busy leading the charge to help participants in the derivatives and cash markets get ready for Libor's death, and the New York Fed started publishing SOFR in April 2018.

SOFR, unlike Libor, is an overnight rate based on transactions in the US repo market. Its overnight nature means it has to be compounded in arrears to create a term version of the rate that is backward-looking, as opposed to Libor's ever-present forward-looking term rates.

"We want the liquidity to be there as best it can be, so we can get good attendance at the auction and the re-hedging will work"

David Horner, LCH

Term versions of SOFR are in the works but are not in place yet.

Because the new benchmark is derived from repo markets, that means SOFR is a secured rate, meaning it would likely behave very differently to unsecured Libor benchmarks which incorporate bank credit risk and react differently during stress periods.

Regulators are urging the market to adopt SOFR for new business now, and hope it will have largely replaced Libor as the US-dollar reference rate for new trades and new issuance before the end of 2021.

For derivatives, the International Swaps and Derivatives Association is creating a protocol that would allow the market to use a standard fallback rate once Libor ceases to be published. Standard fallbacks for other products have been – and are being – drawn up by the ARRC.

SOFR has had a tricky time in getting adopted. For example, in notional terms year-to-date, interest rate swaps linked to the benchmark currently have 0.25% of the volume of Libor equivalents, according to Isda data.

Volatility in the underlying repo market has been blamed in the past for putting people off SOFR. It spiked to 5.25% on September 17 and had a similar one-day surge on December 31 last year. But given SOFR is a compounded, average rate, this shouldn't make a difference, said Subadra Rajappa, head of US rates strategy at Societe Generale. "The volatility should get averaged out over a certain period. It's a backward-looking rate and it's averaged over a certain period of time, so, if there is volatility from a day-to-day basis, that shouldn't really affect it," she said.

"It's been a little unnerving to the clients I've spoken with because they're not familiar with the benchmark and they're not really familiar with what drives [it]," she adds.

Jason Granet, head of firm-wide Libor transition at Goldman Sachs, agreed, and argued historical volatility in Libor is actually higher. "If you look at average SOFR over a period of time – even including the spikes that have happened, whether it be in September or on other statement dates or other things – and you compare that to the volatility in Libor historically, the volatility in Libor is still greater," he said.

Volatility in SOFR has prompted some to scrutinise activity in the underlying repo market as a possible driver. For example, one of the explanations for the sudden rip in the SOFR rate in September has focused on the amount of excess reserves in the system and the demand from banks for those reserves now.

"These are all nuanced topics that I would say, for the most part, repo traders or money-market traders were in the weeds trying to understand all the details," said Rajappa. "But broader market participants – and even swaps traders, for instance – didn't really pay attention to what

drives repo rates on a day-to-day basis. As long as cash markets were well funded, there was just not that much of an issue."

In response to the SOFR surge, which subsequently affected the effective Federal funds rate, the Fed said it would conduct temporary overnight and term repo operations into next year – something it has not done in a decade.

Pre-financial crisis, the Fed would participate in the repo market on a daily basis and it was considered very normal as a way of conducting monetary policy. But since quantitative easing, there has been a massive jump in the amount of reserves in the system, which has shifted the way the Fed conducts monetary policy, explains Granet. Combined with the introduction of SOFR, this has even brought the possibility that the benchmark could one day replace Fed funds as the Fed's target rate.

"If you look back at some of the old minutes from Fed meetings, there are discussions on whether the Fed funds market is still the appropriate market to manage policy. So, obviously this is going to be a developing story, but I think it's important to separate monetary policy from the SOFR market, but the Fed definitely has a lens," he said.

Regardless of the central bank impact, getting SOFR up and running as a benchmark underpinning financial contracts is a clear priority for regulators and industry participants.

One of the major concerns is building liquidity. In derivatives, most of that is concentrated in shorter-dated tenors. According to Isda data, 75% of SOFR swaps have a maturity of one year or less with a smattering of volume across the rest of the curve.

"It is still mostly short-dated. We do see some volume further out in the curve – two-year, five year, even the odd 10-year and 30-year trades," said David Horner, head of risk for rates services at LCH.

For the cash market there has been more immediate success. More than $250 billion has been issued in floating rate notes to date and volume has been growing most months.

"We are seeing it concentrated, really, in the government-sponsored entities, so Freddie Mac, Fannie Mae are no longer doing Libor, [and] really only doing SOFR. The home-loan banks are doing both but increasingly issuing SOFR," said Gary Horbacz, principal, fixed income structured products at PGIM Fixed Income.

Some issuers still remain on the sidelines. Corporates, for example, are less involved, and

"We've got assets and liabilities in the trust, and you really need them both to be either both SOFR or both Libor, or you incur basis risk"

Gary Horbacz, PGIM Fixed Income

Horbacz puts that down to a preference for a term rate rather than an overnight equivalent.

Structured products have been much slower going. "Part of the reason is the complexity of structured products, where it's not just a corporate borrower," said Horbacz. "You've got an owner of a mall that takes out a loan from a lender and so it's really the lender that makes the loan, and then the lender pulls the loans and puts them into a structure then issues those liabilities."

"So, we've got assets and liabilities in the trust, and you really need them both to be either both SOFR or both Libor, or you incur basis risk."

System updates

Part of the delay in getting the cash market up and running could be related to updating internal systems so that they can do the trades, said Granet. "A lot of people are going to be ready, but there is work to be done. Once you have the loan market and the underlying systems ready, you'll see a lot of different growth," he said.

For derivatives, much hope has been pinned on the so-called 'Big Bang' set to happen in October next year, when the rate used to discount the present value of US dollar swaps and the rate used to determine interest payments on cash collateral for US dollar swaps – so-called price alignment interest – will change from Fed funds to SOFR.

"That might get asset liability managers… more involved in the market. Once they see a robust curve going out to 30 years in SOFR, I think that could be a good starting point [for them] getting involved more actively and using SOFR-based swaps," said Rajappa.

LCH's Horner said the planned discounting switch is "probably the biggest and most important project we have going on in the clearing house right now".

LCH is planning on making the switch on October 17, and aims to provide compensation for the change in present value of the dollar swap portfolios. To do that, the clearing house plans to provide what Horner describes as "compensating swaps" to account for the change in discounting, a cash option for client accounts, as well as an auction process for those institutions that are not able to enter into swaps to hedge discounting risks or simply do not have the trading mandate.

"We want the liquidity to be there as best it can be, so we can get good attendance at the auction and the re-hedging will work. That's where we've drawn the balance of sufficient readiness in the industry to really take on what is a pretty big change," says Horner.

Some industry participants worry about how easy it will be to implement an auction mechanism, but Horner says that is one of the reasons the industry has given itself a good amount of lead time before the switch takes place.

How to convert swaptions contracts is also proving somewhat problematic. For swaptions that physically deliver into swaps that clear at the clearing house before the conversion process has taken place, LCH will use Fed funds for discounting and PAI before going through the conversion and compensation process.

For those swaptions that expire post-conversion process, the underlying swaps will go straight into SOFR discounting.

"That is of interest to people who have, I would say, deep in-the-money swaption contracts right now, so the resulting swap would have a large present value and, therefore, a high discounting risk. That kind of compensation on the trade – or lack of – I think is a concern," said Horner. "We are dedicated to trying to be as helpful as we can be in this space, and make sure that we are not, through our plans, being unnecessarily disruptive of other parts of the market, but fundamentally in the clearing house we have no direct jurisdiction over the operation of these bilateral contracts," he added. ■

For more on this topic, view the webinar www.risk.net/regulation/7044366/shining-the-spotlight-on-sofr

Swaps data: are the new RFRs on track to replace Libor?

There are more sources of over-the-counter derivatives data available today than at any point in the market's history. In this series of monthly articles, Amir Khwaja, chief executive of Clarus Financial Technology, analyses trends in the data

In just over two years' time, Libor could cease to exist, so it's no surprise to see regulators turning up the volume on transition to risk-free rates (RFRs). There's a clear trend of rising activity in futures and over-the-counter swaps linked to replacement rates. What's not so clear is whether participants are switching out of Libor exposures.

September 2019 was a watershed for US Libor's successor, the Secured Overnight Financing Rate, or SOFR. The repo-based rate spiked to 5.25% on September 17, from just 2.43% the previous day. CME SOFR futures clocked up record trading volume in response, helping the contracts on their way to an impressive 11-fold jump in open interest compared to a year prior.

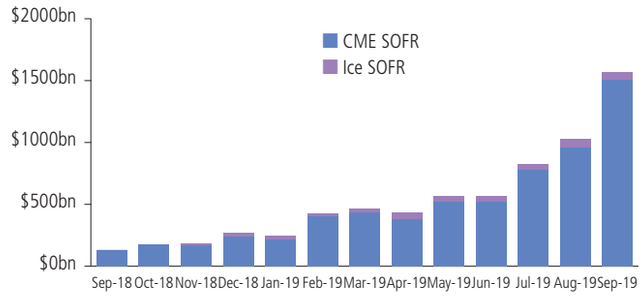
There are positive signs in the UK too, as swaps linked to the Sterling Overnight Index Average, or Sonia, continue to increase. But activity in sterling Libor swaps has also been rising. Worryingly for regulators, there's little sign of a move away from Libor contracts expiring from January 2022, when the benchmark will be left to wither.

Libor transition in the UK may have enjoyed a head-start thanks to the selection of a pre-existing rate, but SOFR seems to have caught a slipstream. September's volume jump may yet prove to be an anomaly, but there are clear triggers for wider SOFR adoption – most notably, a planned 2020 move by clearing houses to replace Fed funds with SOFR as the discount rate for all US dollar swaps.

SOFR futures

Let's start with the largest currency, US dollars and futures on the SOFR index. We can chart the growth in open interest over the past year for CME and Ice contracts.

1. Open interest in SOFR futures



Source: ClarusFT

Figure 1 shows:

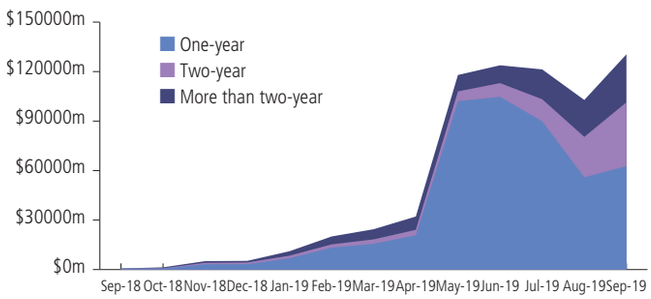
- September 2019 has been a stellar month for CME SOFR contracts, which now have $1.5 trillion notional of open interest, with significant increases from September 16 onwards. This was most likely linked to the jump in SOFR and Federal Reserve actions in the repo market, which have been widely commented on.
- Ice SOFR futures have open interest of $64 billion
- A total in September 2019 of $1.57 trillion open interest compared to $132 billion in September 2018 – massive growth indeed.

To put this into perspective, on September 27, 2019, CME Fed funds futures open interest was $10.6 trillion and CME Eurodollar was $12 trillion, which means that CME SOFR futures open interest is now 12.5% of CME Eurodollar open interest. That is a meaningful chunk and a significant achievement, it will be very interesting to see if the remaining months in 2019 live up to the massive increase seen in September.

SOFR swaps

Next let's look at progress in SOFR swaps trading.

2. SOFR swaps outstanding notional LCH SwapClear



Source: LCH

Figure 2 shows:

- Outstanding notional (single-sided) of SOFR swaps at LCH SwapClear over the past year, broken out by tenor.
- A big jump in May 2019, flat for two months, down in August and back up to a new high in September.
- At the end of September, total outstanding notional stood at $130 billion, so similar to SOFR futures open interest in September 2018, meaning SOFR swaps volume is lagging a year behind futures.

Also, September sees a much higher proportion of two-year and greater than two-year tenor SOFR swaps compared to under one year. Longer tenors, where Libor swaps dominate, are crucial to a wider use of SOFR swaps.

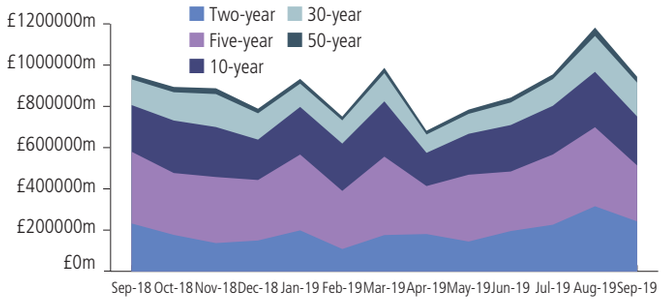
Sterling Libor and Sonia swaps

Let's turn next to sterling, where the existing Sonia rate (after reform) has

been selected as the RFR to replace Libor. The two questions we are most interested in are, first, is swaps volume in Sonia increasing and volume in Libor decreasing, and second, are longer tenors trading in Sonia.

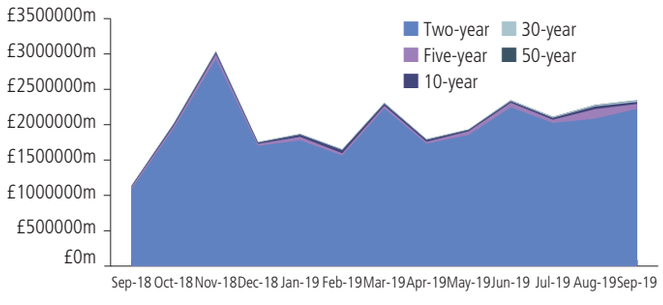
Using data from LCH SwapClear, we can attempt to answer these.

3. Sterling Libor swaps



Source: LCH

4. Sterling Sonia swaps



Source: LCH

Figure 3 & 4 show:

- Monthly gross notional cleared at LCH SwapClear over the past year, split out by the major tenor buckets for Libor and Sonia swaps.
- For Libor swaps we can see that volumes have continued to increase, with a high of £1.2 trillion cleared in August 2019 and September 2019 with £950 billion.
- In addition, there is no material change in the portion of Swaps trading in longer tenors.
- So nothing in the data here suggests firms are stopping or reducing their trading of Libor swaps with maturities beyond January 2022.
- For Sonia swaps, the monthly gross notional traded is much larger, at least double, with August 2019 showing £2.3 trillion, and there does seem to be a growth trend; however, volume is dominated by tenors below two years.

Let's now chart Sonia swaps volume and exclude two-year and below tenors.

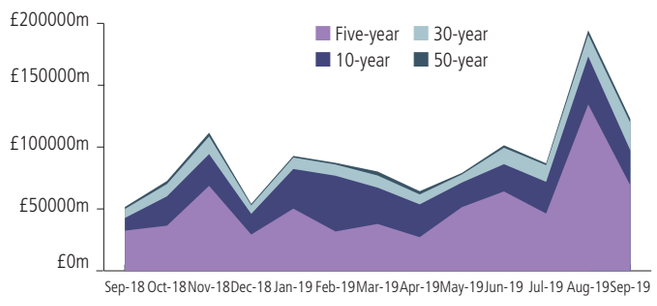
Figure 5 shows:

- A significant jump in August 2019 for the five-year tenor with £69 billion cleared and also for the 30-year with £28 billion cleared in September 2019.

So, encouraging signs at the longer end, but a long way to go to approach the Libor Swaps five-year volumes of £380 billion and 30-year of £184 billion in August 2019

Amir Khwaja is chief executive of Clarus Financial Technology

5. Sterling Sonia swaps excluding two-year

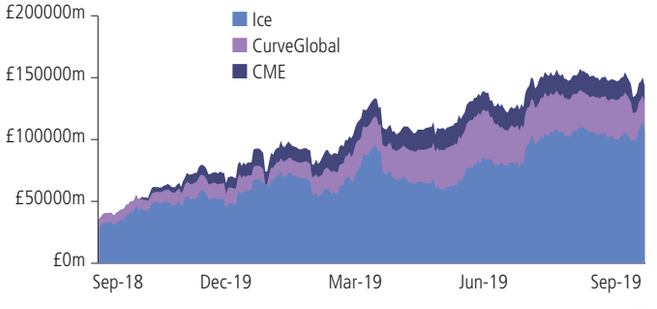


Source: LCH

Sonia futures

Finally, Sonia futures, where we see a genuine competition between three exchanges – Ice, CME and CurveGlobal.

6. Open interest in Sonia futures, September 2018–19



Source: ClarusFT

Figure 6 shows:

- Open interest growth in the past year, with a positive trend.
- Ice has the largest share – £107 billion open interest on September 27, 2019.
- CurveGlobal with £22 billion and CME with £14 billion.
- Aggregated for all three, there is £144 billion of open interest.

To put this into perspective, on September 27, 2019, Ice short sterling futures had £2 trillion of open interest, meaning Sonia futures now represent 7% of this figure. This is less than the 12.5% that SOFR futures represent compared to CME Eurodollar, so some way to go for Sonia futures.

As 2019 ends and we move into 2020, we expect to see much higher volumes in SOFR futures and SOFR swaps, with the upcoming Q3 move by clearing houses from Fed funds to SOFR discounting. While Sonia has no such trigger, as sterling swaps are already discounted with Sonia, continued exhortations from regulators should result in data showing higher Sonia and lower Libor volumes. ■

Risk.net | Follow Topics

Build your own email alerts

Follow our coverage on individual organisations like the ECB or the Federal Reserve. Or pick specific topics such as CCPs, FRTB or Mifid II. Plus many more. Select your topics and you'll receive everything you are interested in, all in one email.

Visit risk.net/follow

CLEARING

is

SMOOTH SAILING

with the

RIGHT PARTNER.

LCH The Markets' Partner