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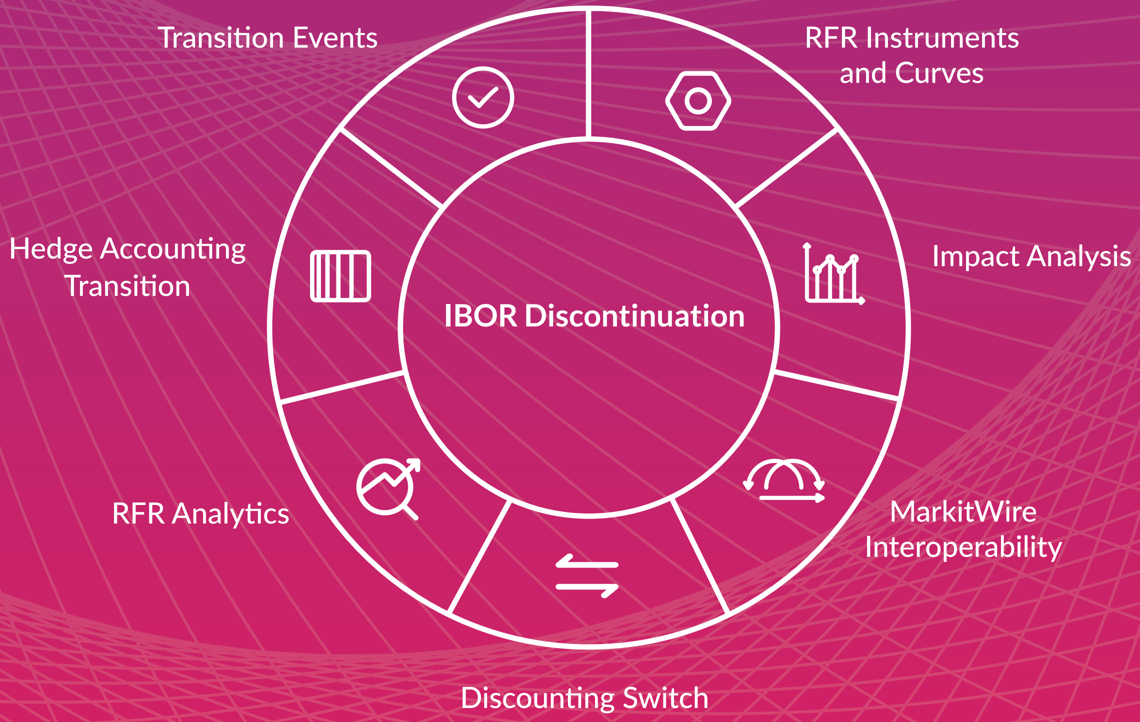

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Libor

Simply too big to kill off entirely

Detaching an estimated $350 trillion of financial contracts from Libor was always going to be an uphill struggle. For a rump of so-called "tough legacy" contracts it's a near impossible task. Now their future lies in the hands of legislators.

In a recent benchmark transition survey, six jurisdictions told the Financial Stability Board that legislation will be needed to shunt Libor's most stubbornly welded contracts over to risk-free rates (RFRs). At least two – the US and, more recently, the UK – have already started work drafting suitable language. Another two warn the necessary fixes cannot be guaranteed.

Legislative proposals currently being thrashed out in the US would provide a safe harbour from litigation for contracts that are difficult to amend, and could trigger disputes as they are flipped to alternatives such as the secured overnight financing rate. The UK's approach, announced on June 23, would grant the Financial Conduct Authority (FCA) – Libor's regulator – new powers to alter the methodology underpinning benchmarks deemed too flimsy.

Synthetic Libor by statute is a "neat fix" according to some industry lawyers – many of whom were disappointed when a long-awaited tough legacy report from a committee of the sterling RFR working group offered little concrete action on one of the biggest challenges of transition (see page 38).

Others see it as an admission that Libor is simply too big to kill off entirely. "Essentially, the government is forcing the FCA to take a step back. Before, the FCA was saying this is definitely going to die. Now they've had to take a bit of perspective and say 'yes, it's still dying but we're going to keep it alive'," says one London-based lawyer.


Helen Bartholomew

Altering Libor's methodology is fraught with complexity and territoriality concerns. The FCA has the power to alter all Libor rates under its governance, including sterling, US dollar, euro, Swiss franc and Japanese yen. Whether it has appropriate inputs available – likely a forward-looking term rate built from liquid RFR derivatives markets – is another question. What's more, limiting use of the rates could prove tricky beyond the UK financial firms directly under the FCA's surveillance.

UK legislators face a balancing act in crafting a lifeline for tough legacy contracts without encouraging widespread complacency. And there's little time to do it in. While Libor is not set to cease until after the end of 2021 at the earliest, the FCA is eyeing the end of 2020 for possible confirmation of the benchmark's demise (sse page 14). It's at this point the credit spread would be fixed for derivatives fallbacks.

Remember when participants were calling for transition delays in response to Covid-19 lockdowns?[1] That all seems like a very long time ago.

Helen Bartholomew,
Editor-at-large, *Risk.net*

[1] *H Bartholomew (March 2020),* Pandemic threatens Libor transition plans, *www.risk.net/7504636*

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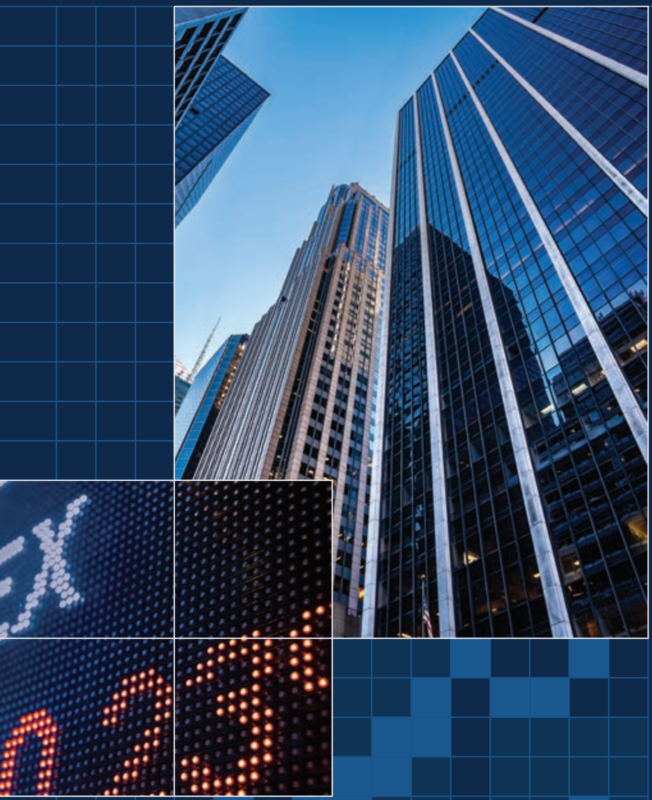

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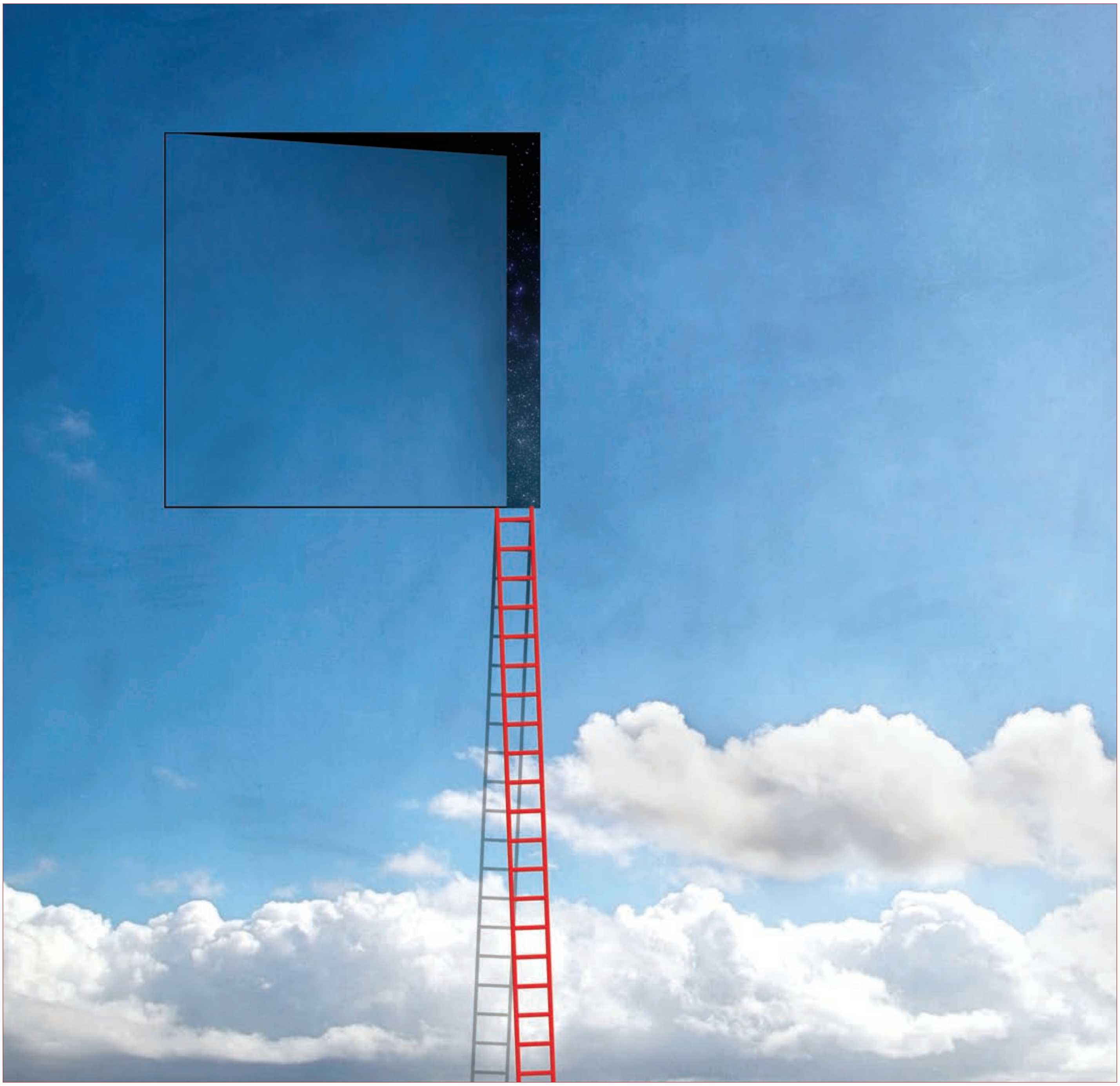
Shifting Libor fallback window jolts basis market

Fallback spreads widened more than 20% after the UK's Financial Conduct Authority said Libor's end could be announced this year.
By Ben St Clair



Short-term sterling and US dollar Libor spreads blew out this week on the surprise news that Libor's death could be confirmed a year earlier than expected.

On June 22, Edwin Schooling Latter, head of markets and wholesale policy at the UK Financial Conduct Authority (FCA) said an announcement could come as early as November this year.

The comments "caused an earthquake in the markets", according to a risk manager at one European bank – spreads between three- and six-month Libor spreads in sterling and US dollars widened by between 15% and 20%, as traders digested the new timeline.

Although the end of 2021 remains the earliest point at which publication of Libor could stop, an announcement of its certain demise would trigger the calculation of a spread that is designed to smooth the transition to a new benchmark. If the announcement is made at the end of this year, rather than the end of next year, then the spread adjustment would be calculated using a different five-year dataset – incorporating rates from 2015 – and markets began adjusting to this prospect after Schooling Latter's remarks.

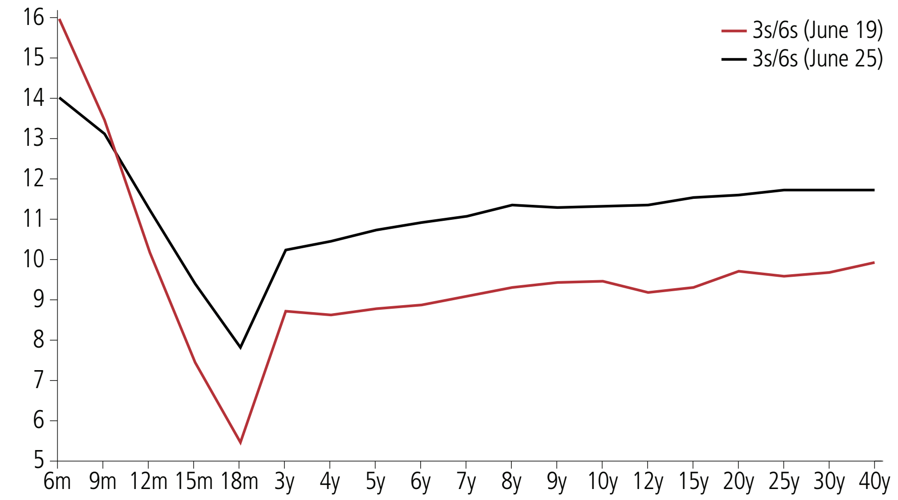
"It is not fully appreciated in the market that the fallback spread is determined at the time of the cessation announcement, not when the cessation is effective," says a fixed income trader at a large US bank. "I think it dawned on more people after the speech, and they may have adjusted their implied fallback spread estimates accordingly."

Those adjustments could be seen in the so-called 3s/6s basis, which is one of the ways traders bet on the expected spread between Libor and its replacement rate. The spread between three- and six-month sterling Libor has widened over 20% since June 23 – or roughly two basis points – across various tenors from levels at the start of week. US dollar spreads saw similar moves, with the difference between three- and six-month Libor swaps increasing over 1bp – or between 15% and 20% – at various points in the curve (see figure 1).

Schooling Latter was speaking at *Risk.net*'s Libor Virtual Week on June 22.[1]

The link between Schooling Latter's comments and the market's reaction can be found in planned changes to swaps contracts that will rehitch Libor derivatives to an alternative rate when publication of the old benchmark stops. The amendments will be inserted into legacy Libor contracts en masse via an International Swaps and Derivatives Association (Isda) protocol scheduled for publication in July this year, with an effective date of November.

1 3s/6s GBP Libor basis



Source: Bloomberg

The Isda protocol provides for the calculation of a fallback spread, to avoid a step-change in the reference rate. Unlike Libor, the risk-free rates that will take its place do not incorporate bank credit risk, so will typically be lower than the outgoing benchmark. The fallback spreads will be calculated by taking the five-year historical median of the basis between each Libor benchmark and its replacement rate – for instance, three month Libor and a three-month version of the US secured overnight financing rate.

The Isda protocol will also include so-called pre-cessation clauses, which will automatically trigger the calculation of the fallback spreads if regulators determine that Libor is no longer representative of underlying markets and will cease publication. The market was expecting such an announcement to be made closer to the end-2021 deadline for transitioning away from Libor.

"The FCA declaration this week means the date the fallback spreads are calculated has potentially been pulled forward to as early as sometime this year. So the date range over which the spread is calculated may have moved [though] it does not mean we necessarily stop using Libor on the date of the FCA's potential declaration," says a derivatives trader at a second buy-side firm.

In practical terms, this means the five-year period for calculating the fallback spread would include Libor fixings up to the end of 2020, instead of 2021 as previously assumed.

Traders say this explains the abrupt widening in sterling Libor spreads. "We were expecting the five-year period to include another year's worth of data at these low levels and a year less of the data at high levels – ie, the last four years of data plus next year," says an interest rates trader at one European dealer. "Now we might get the last five years of data. That moves the six-month Libor versus Sonia spread up, but doesn't move three-month Libor versus Sonia very much."

The 3s/6s basis is a widely traded proxy for the final sterling fallback spread. When the fallbacks are triggered, three-month Libor will be replaced by three-month compounded Sonia, plus a fixed spread. Six-month Libor will also be replaced by six-month compounded Sonia, plus a different fixed spread.

At that point, the 3s/6s basis will be dominated by the difference between the fixed fallback spreads for three- and six-month Libor, since the difference between three- and six-month Sonia has historically been fairly minor. That makes it highly sensitive to the observation dates for calculating the fallback spreads.

In a June 24 note, JP Morgan's fixed income strategists said earlier cessation assumption also implied wider fallback spreads in US markets, as the five-year calculation window could now include the temporary surge in US dollar Libor when US money market fund reforms came into force in 2016. ■

Previously published on Risk.net

[1] *Risk.net (June 2020)*, Schooling Latter on timing of 'death notice', *www.risk.net/7567721*

How Covid-19 is impacting transition preparations

A forum of industry leaders, including the sponsors of this report, discusses key industry concerns around the transition away from Libor, including how the discontinuation deadline will be impacted by the Covid-19 pandemic, the benefits and challenges of pre-cessation triggers, and how firms are preparing for 'big bang' discounting switches

TriOptima CME Group

Vikash Rughani
Business Manager
triReduce and triBalance
www.trioptima.com

Considering the impact of the Covid-19 pandemic, how realistic is the end-2021 deadline for Libor's discontinuation?

Vikash Rughani, TriOptima: I can't predict how the market will evolve, but our services provide solutions for any outcome. TriOptima has worked to build its compression service so it stands ready and in prime position to help market participants mitigate any uncertainty surrounding their over-the-counter (OTC) ICE Libor swap books.

Angus Graham, UBS: The major firms will be ready. They have the resources to adapt quickly as final market and product details unfold in the coming months. However, this isn't a 'first past the post' challenge – we need to see all financial market participants transition, and that remains extremely challenging. Covid-19 has taken precious time and resources away from the transition, so those market participants who were previously behind now have a mountain to climb.

The progress also varies by currency, with the US dollar having the largest remaining challenge ahead, given its sheer size and the number of products impacted. The market also needs a solution for the 'tough legacy' positions, with no current resolution path to transition and may, for example, need legislative support to be completed.

Benjamin Bullock, Bloomberg: The UK Financial Conduct Authority (FCA) and the Bank of England (BoE) have been clear that their central assumption that firms will not be able to rely on Libor being published after the end of 2021 remains.

Many firms were progressing well with their Libor transition plans prior to the pandemic, and we see evidence that some firms have accelerated their preparation over the past few weeks.

The relaxation of timelines around some of the intermediate steps by the FCA, BoE and the Alternative Reference Rates Committee (ARRC) is sensible and proportionate, and should allow firms more flexibility to focus near-term resources on management of Covid-19, while keeping the end-2021 deadline achievable.

Chris Dias, KPMG: Covid-19 is having a noticeable impact on the timing and release of financial regulation. Regulatory agencies worldwide have postponed a number of rules and regulations, recognising the added burden Covid-19 has placed on institutions.

The relief has been carefully measured, balancing the support of markets and the overall economy while continuing to maintain regulatory responsibilities. For example, the Basel Committee on Banking Supervision deferred the implementation of Basel III capital rules by a year, the European Securities and Markets Authority delayed phase one of the Securities Financing Transactions Regulation, and the US federal banking agencies – the Federal Reserve Board, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency – issued a joint statement allowing banking organisations to mitigate the effects of the credit loss standard in their regulatory capital for up to two years.

The same cannot be said for the Libor transition. Global regulators and risk-free rate (RFR) working groups have made it clear that the cessation of Libor by the end of 2021 is a global imperative. Although seemingly resolute on the Libor end-date, regulators seem willing to make some accommodation because of Covid-19. To that end, certain milestone dates may be deferred. A case in point is the recent Working Group on Sterling Risk-Free Reference Rates announcement to delay the stoppage of all new sterling Libor-linked loans to the end of the first quarter of 2021 due to pressures caused by Covid-19. In a related example of regulatory willingness to modify efforts to wean market participants off of the 'Libor drug', the Fed changed its Main Street Lending Program requirements from the secured overnight financing rate (SOFR) to Libor to ensure access to much-needed financial relief. It appears regulators will bend when rewired to help mitigate risks from Covid-19. It also appears the Libor transition will continue along a defined path with only minor detours along the way.

Robert de Roeck: At the highest level, the success of the Libor discontinuation project boils down to two key factors: market awareness of the requirements, and the available resource to address those requirements. It is clear the effects of a global lockdown have negatively impacted both elements. To the exclusion of almost all other demands, firms will now be centrally focused on surviving the economic effects of Covid-19, while simultaneously dealing with lower resource bandwidth because of lockdown. However, given the political imperative to implement these changes, I believe there will be little, if any, rhetoric indicating a softening stance. Despite the additional challenges posed by recent events, I do not think it prudent at this point to assume the current 2021 deadline will be relaxed.

Alexandre Bon, Murex: There is no obvious sign that the end-2021 deadline for Libor panel bank submission should be impacted by Covid-19. The official sector is vocally reaffirming that Libor may not exist past 2021, and the UK's FCA has reiterated it has no intention to revisit the deal struck with panel banks to compel contributions. However, major dealers might keep the benchmarks afloat through voluntary contributions for a while – especially if this is in their interest.

The Covid-19 situation has also negatively impacted some preparation work. Some interim milestones were pushed, such as the euro short-term rate (€STR) discounting switch or the deadline for issuing GBP Libor-denominated loans, adoption in the cash markets is now behind schedule – which is why national emergency loan programmes are still relying on Libor – and many banks' client outreach efforts have slowed down during the turmoil.

Certainly, the RFR working groups are closely monitoring the situation, and some relief may be granted if it appears the market cannot meet the deadline. This does not seem justified yet, so I would not expect any official statement to that effect before next year.

Finally, one possible scenario is that not all Libor publications cease on the same date – GBP Libor could be discontinued before USD Libor, for example – which could bring some relief but also new challenges. It is still too early to tell.

KPMG

Chris Long, Principal
Global Libor Solution Co-Lead
www.home.kpmg

The FCA has extended the deadline for participants to cease issuance of cash products linked to Libor to the end of Q1 2021 – what additional preparation is needed to ensure Libor cash products are no longer issued?

Chris Long, KPMG: The FCA's extension responded to Covid-19 by giving participants more time to stop issuing Libor cash products.. Whatever the rationale for the extension, it came as a relief to a number of institutions that may have been ill-prepared to meet the Q3 2020 deadline. While efforts to cease the issuance of Libor cash products should have been well under way, the extension provides an opportunity to revisit and possibly reformulate plans to fully transition from Libor to the sterling overnight index average. Firms should look at existing plans to ensure strategy, technology, customer outreach, operations, business process and communications have all been adjusted to reflect the upcoming change. Additionally, should customers continue to require Libor-linked loans, the respite should be used to ensure fallback language is appropriate.

Alexandre Bon: An official RFR forward-looking term rate publication will, once again, make it possible to offer products with an upfront fixing structure. This can ease RFR adoption by corporate small and medium-sized enterprises, so the earlier the better.

Second, we should stop looking at the transition in cash and derivatives markets as two distinct issues. Cash product issuances require liquid swap and derivatives markets to offer adequate hedging solutions. Both segments feed each other, so it is essential to encourage consistency and develop market conventions at a similar pace. So far, divergence between both markets has compounded complexity and created some confusion – one example is whether RFR term rates can be used in fallback language or in new product issuances. Banks cannot yet offer black-and-white answers to their customers, which slows adoption.

Benjamin Bullock: To become reality, end-users of these cash products need to shift their current thought process and show more willingness to invest and borrow in cash products referencing RFRs. For this to happen, consumers and issuers need to ensure their systems and risk management processes can support RFR-based cash products, and the differing conventions and methodologies versus legacy Libor alternatives. The US and the UK have seen good progress with the issuance of floating-rate notes, loans and revolving credit facilities linked to RFRs. However, other jurisdictions are lagging somewhat, likely due to liquidity concerns. Generally, more work is needed across all parties to encourage the use of RFRs.

Angus Graham: The move from Libor requires confidence and liquid markets in the alternative reference rates – which is less a concern for sterling but pertinent to the other currencies – as well as fully featured products.

The term-rate structure is one of the most important features of a cash product, so many market participants will delay transition decisions until clarity is available. This will likely stall the cash market transition or push it to the very end of the timeline.

Considering the discrepancies between the two benchmarks in March, what can we learn about the suitability of the SOFR as a viable fallback for US dollar Libor contracts?

Robert de Roeck: I think one can question the choice and suitability of RFRs on an outright basis – during times of market stress or otherwise. However, it is important to recognise that we are currently in a multiyear transition period, during which time there will exist simultaneously two 'primary' benchmark curves. This necessarily gives rise to a basis and, as with all bases, one can expect higher volatility during times of market stress, irrespective of the SOFR choice. During the transition, market participants' exposure to this basis may present significant economic risks and should factor centrally in the planning and timing of their transition to the new RFRs. Post-transition, the market will hopefully resume to a steady state of one primary curve.

Benjamin Bullock: A long-standing theme during this transition process has been the credit and liquidity spread component within Libor that the market has historically relied on. The International Swaps and Derivatives Association (Isda) fallback methodology, which includes a five-year lookback calibration of the historical spread between the compounded RFR and interbank offered rate (Ibor) fixing, helps minimise the value transfer impact on legacy derivatives/securities upon fallback trigger. Therefore, the widening of the historical spread during periods of market volatility will affect the five-year lookback historical spread calibration. Furthermore, market participants with exposure to credit and liquidity risk may seek to manage this risk with new products.

Alexandre Bon: Both SOFR and Libor behaved largely as expected, the spread widening was a rather logical outcome, and the jump far less pronounced than in the financial crisis that began in 2007–08. Not surprisingly, the SOFR proponents saw confirmation that Libor was a flawed index and SOFR a better alternative, while to some SOFR sceptics this highlighted what they perceived to be issues with the new rate. The debate around whether SOFR is the most adequate fallback option rages on, though – in practice – transition work is progressing on this assumption.

More interestingly, the sudden widening of the Libor-SOFR spread seems to have raised awareness about the inherent risk of value transfers within Isda's fallbacks. For instance, we have recently seen clients accelerate the work on alternative transition plans for portfolios they were initially thinking of managing through default fallbacks.

Angus Graham: Risk-free (such as SOFR) and credit-adjusted (such as Libor) benchmarks are fundamentally different, so their suitability will depend on application (what risk are you reflecting) and position (whether you're paying or receiving).

The Covid-19 pandemic has highlighted these inherent and fundamental differences as the two benchmarks separated due to economic uncertainty, increasing the credit risk premia at levels greater than central banks can offset by interest rate cuts.

For credit risk-free products, a risk-free benchmark is the natural and rational option. However, for products with embedded credit risk, referencing a risk-free benchmark with a static spread adjustment for the credit element passes the credit risk to the floating-rate receiver – which is going to drive very different pricing and countercyclical behaviour from lenders, who need to manage their own funding and liquidity during times of crisis.

The challenge for the market is therefore to build a new paradigm that delivers for clients in the short term, provides them with stability and confidence in the long term – good and bad times – and still treats all participants, including intermediaries, fairly.

Chris Dias: Regulators and the ARRC have made it clear that differences exist between SOFR and Libor. These differences are both structural and behavioural, leading to outcomes that may not align with certain expectations while also bringing about challenges to suitability. There is no doubt that these differences will impact both revenue and profitability, requiring institutions to rethink balance sheet management, credit risk management, interest rate risk and pricing strategies. While, on the surface, the choice of SOFR may not appear a suitable alternative to Libor, it can be made to be a more robust alternative by recognising the differences and making the necessary adjustments.

What role will alternative, credit-sensitive benchmarks, such as Ameribor and the ICE Bank Yield Index, play in transition, and will multiple versions prevail?

Benjamin Bullock: We have recently seen both the US Federal Reserve and the ARRC endorse the potential use of International Organization of Securities Commissions (Iosco)-compliant benchmarks other than SOFR. The post-Libor world will very likely include one of multiple Iosco-compliant benchmarks. A one-size-fits-all approach was unlikely to become a reality, but it is still possible the vast majority of cash and derivatives volumes will migrate to SOFR, which is a perfectly suitable reference index for a range of use cases.

MUREX™

Alexandre Bon, Group Co-head of Libor and Benchmark Reform, and Head of Marketing and Strategy, Asia-Pacific
www.murex.com

Alexandre Bon: Until now, most of the work has focused on SOFR. However, we have seen some interest in credit-sensitive benchmarks – Ameribor in the US domestic market, for example. Ultimately, the $350 trillion question is whether the market prefers to use several kinds of benchmarks depending on activities and market segments, or whether the benefits of using a single common rate outweighs the view of some that SOFR is less adapted to their needs. The jury is still out.

Angus Graham: Products with credit risk need mechanisms to reflect the risk in pricing – for example, asset-liability management and financial intermediation activity.

A static reflection of that risk – compared with the floating component in Libor – drives very different behaviours, particularly around pricing (to reflect the potential future funding and liquidity risks) and optionality (such as unilateral and bilateral recalls and drawdowns of funding).

It shouldn't be forgotten that the original market vision was for an evolution to a market design that saw Libor remaining, but in a more robust framework, and a new 'alternative' RFR being made available to reduce market dependency and reliance on Libor. The euro and yen market solutions have these features, but the dollar, sterling and Swiss franc do not.

Robert de Roeck: There will always be demand from the different industry demographics for sector- or instrument-specific benchmarks, and they will continue to evolve and play an important role into the future. However, almost without exception, market-makers that provide liquidity in these benchmarks will price and risk-manage them off a primary curve – historically, one of the Ibors.

Although the optics and nomenclature may change, the underlying pricing and risk management will continue to be performed off a primary curve into the future – one of the new RFRs. Benchmarks such as Ameribor will continue to serve an important role but, currently, I do not see them as alternatives or competitors to the new RFR.

Chris Dias: The emergence of credit-sensitive rates indicates the need of some market participants for a rate closer in construct to the current Libor. While these credit-sensitive rates offer some similarities, they are not identical to Libor or have similar issues that made Libor problematic. The need for credit-sensitive benchmarks is predicated on funding and lending costs generally either widening or remaining static in times of stress. The current perception is that, without the credit-sensitive component, banks could experience negative impacts to revenue and profitability from the narrowing between funding and lending, certainly an unwelcome outcome for banks but perhaps not for the real economy. Support for SOFR alternatives would need to address the operational inefficiencies, structural differences between a rate and Libor, and potential accounting problems – currently this is not the case. Additionally, for any UK or European Union-based financial institutions, any credit-sensitive benchmark would need to be compliant with the EU Benchmark Regulation before it can be used. Alternatively, banks could make adjustments to pricing strategies, increase fee-based lending or employ a more dynamic risk-based approach; in any case, market fragmentation is not the answer.

Industry opinion appears to be moving in favour of pre-cessation triggers – what are the challenges and benefits of this approach, particularly in light of current market uncertainty?

Alexandre Bon: A first unknown is the duration of the 'zombie Libor' period between the publication of a non-representative Libor and final cessation. It could be weeks or months. A fast phase-out minimises discrepancies between contracts transitioning at pre-cessation and cessation points, as well as the risks of manipulation. However, too short a period may not allow effective dealing with products that are difficult to transition, which seems to have been the FCA's initial concern.

Even with consensus in favour of pre-cessation triggers, we should expect a sizeable portion of the market to prefer cessation triggers – at least for some parts of their portfolios – which could jeopardise the wide adoption of the upcoming Isda protocol. If the sentiment is that permanent cessation might only occur months after the pre-cessation trigger, we may see even more institutions exploring alternative transition strategies and custom fallback arrangements.

Bloomberg

Benjamin Bullock
Interest Rate Derivatives Product Manager
www.bloomberg.com

Benjamin Bullock: The Financial Stability Board requested that Isda include pre-cessation triggers alongside the permanent cessation triggers in its fallbacks for Ibor derivatives. Following industry consultation, Isda preliminarily decided to incorporate these pre-cessation triggers.

In the event that an Ibor is determined to be non-representative by the FCA, the pre-cessation triggers would allow firms to fall back to the new robust benchmarks rather than remain on a non-representative Libor rate. Market participants have indicated they will not want to continue referencing Libor in existing or new derivatives contracts following a statement from the FCA that Libor is no longer representative. The pre-cessation triggers therefore eliminate the uncertainty surrounding the use of a non-representative index.

The use of pre-cessation triggers in uncleared contracts would align with the cleared market. LCH and CME – central clearing counterparties (CCPs) that clear interest rate swaps – have both stated publicly that they intend to adopt pre-cessation triggers.

Similarly, in the cash market, the ARRC included pre-cessation triggers for cash products referencing USD Libor.

Finally, incorporating pre-cessation triggers and permanent cessation triggers into one protocol would simplify the Libor transition process for many market participants and encourage uptake.

Robert de Roeck: One of the principal objectives of benchmark reform is to ensure the benchmark is produced in a reliable, robust and transparent way. No-one wants economic exposure to a benchmark that is no longer representative of the underlying market so, ostensibly, pre-cessation triggers are a good thing. However, the challenges arise when one drills down into how they might be implemented. The biggest risks arise if different markets, venues or geographies move asynchronously. Imagine a hedging programme where a large part of the derivatives book has been triggered (OTC), while the remainder has not (cleared). Compound that with funded instruments like floating rate notes – that may or may not be triggered – then cross-currency hedging that may have been triggered on one side but not the other. From this perspective, the challenges become clear.

Chris Long: The movement towards pre-cessation triggers is motivated by the market's need to address the problem created when the regulator deems a benchmark rate to be non-representative without an appropriate fallback in place. Without a pre-cessation trigger, market participants would need to immediately address the 'non-representativeness' determination and move their existing exposure to a new reference rate. The selection of a new rate would need to be amenable to all parties of the contract, and be compliant with benchmark standards or regulatory requirements for benchmark use. Having a pre-cessation trigger linked to fallback language certainly alleviates some of these issues. The inclusion of pre-cessation language in all contract types will also avoid the problem if linked contracts don't fall back in lock-step, introducing basis risk, hedge accounting issues and operational nightmares. The inclusion of pre-cessation language certainly has a number of advantages, but is not without its challenges. The determination of non-representativeness does not necessarily mean permanent cessation, which implies Libor can be published for a period of time following the 'non-representativeness' trigger. This will add confusion to market participants unprepared for the change.

Angus Graham: The overarching design principle is consistency across products – either all or none. The industry operates by hedging across markets, products, currencies, and so on, for economic reasons and accounting/regulatory drivers. A situation where fallback triggers create either a basis risk in economic hedging or dissolution of accounting netting sets would mean a negative profit-and-loss (P&L) impact and, fundamentally, a much less efficient market design.

What steps should firms take to prepare for Libor transition and how are firms coping with the operational challenges involved?

Benjamin Bullock: The majority of firms have already made great progress with their Libor transitions, and should continue moving forward with their already established road maps. The end-2021 deadline remains, and the interim milestones have been clearly detailed by the FCA, BoE and ARRC. For firms that have not yet focused resources on Libor transition, establishing a road map should be a priority. There is a wealth of information available from the official and private sectors to help firms start engaging with vendors, customers and counterparties to create clear road maps to transitioning away from Libor.

Angus Graham: Libor transition represents a truly seismic shift in market structure, which requires top-of-house commitment that should not be underestimated.

Some of the new features – such as compounding in arrears (replacing forward-term structures) – are major process and IT redesign tasks. In addition, the forensic understanding of contracts, which is essential to ensure a complete and successful outcome, requires a heavy change effort and programme governance structure.

Vikash Rughani: Preparation comes in three steps:

1. Determining your exposure to ICE Libor in terms of trade count, risk, mark-to-market and counterparty risk
2. Ensuring you are engaged with industry initiatives to continue contractual performance in the event of ICE Libor discontinuation, determine their appropriateness for your trades and act accordingly. This may start by looking at industry-derived fallback language and the associated protocol
3. Considering whether the fallbacks or amended contract language satisfies your needs, or how you might proactively manage your exposure as soon as possible so you have greater certainty now, regardless of any potential transition.

Central to determining this exposure is understanding all the various nuances that determine the true exposure to ICE Libor across jurisdictions, counterparties, index periods and across cash and derivatives transactions. Also, you should take account of how actively ICE Libor is traded across the organisation today. Another key part of understanding ICE Libor exposure is the hedge accounting and tax treatment of various trades in a portfolio. A great deal has been made of the vast amount of notional tied to the ICE Libor benchmark but, in practice, much of that notional is sticky, with other implications inhibiting one's ability to simply remove or convert trades in isolation.

Furthermore, fallbacks will be a vital seatbelt for market participants, but they will not solve all the challenges of uncertainty and risk. Holders of ICE Libor exposure will still be subject to interim market moves and taking snapshots at arbitrary points in time without any control.

If market participants choose to convert some of their ICE Libor swaps portfolio now, they can do so through a combination of termination and risk replacement into the alternative RFR. This can take place through bilateral execution in the market or through services such as triReduce, which allows bulk compression and conversion of ICE Libor exposure at each participant's own mid-market valuations. By taking this approach, market participants can compress gross notional down to the core net risk position while ICE Libor trading continues, and convert trades to reference the alternative RFR within risk-based limits defined by each firm and based on a common toolkit available to all market participants.

The value comes from not having to cross bid/offer when converting interest rate swaps exposure into the alternative RFR, and doing so in a controlled iterative manner rather than exposing one's full position to the market. Those firms that can bulk terminate, amend and book replacement trades, or leverage CCP messaging for such transactions without operational constraints, will find themselves best placed for the orderly conversion that will deliver greater certainty for their interest rate swap books.

Alexandre Bon: The first step is reaching out to business partners to understand their views and needs for the transition. Will they sign the Isda protocol? Do they plan to repaper their credit support annexes (CSAs) and negotiate compensation for the discounting switch impact? Do they intend to transition their derivatives books early? Only then would you get a clear picture of all the variations, options, complexities and new business opportunities you should prepare for.

Finally, transition events, such as the discounting switch or transaction fallbacks, bring huge operational complexity and significant challenges for infrastructure and back offices. For example, trades undergoing a fallback will use different fixing conventions than new trades on the corresponding RFR. Firms need to automate the corresponding contracts' transformation – including specific adjustments for broken periods, treatment of foreign exchange-implied indexes or the application of custom fallback arrangements – and efficiently streamline the corresponding impacts across all business processes: settlements, P&L, hedge accounting, value at risk, confirmation messages, connectivity to market platforms and initial margin/value margin (VM) reconciliation. The impact on systems and processes should not be underestimated and will need to be tested well in advance.

Robert de Roeck: By now, firms should, at the very least, have assessed their economic exposure to Libor across their books of business, as well as where Libor may appear in their corporate documentation. Given that different geographies and different instruments are moving on different timescales, I would expect most executive boards to have been briefed and have in place a high-level plan specifying where resources should be prioritised to address specific exposures as the faster-moving markets evolve. Recognising the nascent state of many of the new RFR markets, compounded with issues around the Covid-19 lockdown, the board should be making conscious and informed decisions around acceptable levels of risk the firm is able to weather in a resource-constrained environment. I might also suggest that now, more than ever, is a time to feed back through industry bodies to the relevant RFR working groups to highlight the need for clarity and support as the market evolves.

KPMG
Chris Dias, Principal
Global Libor Solution Co-Lead
www.home.kpmg

Chris Dias: A number of operational factors must be considered as organisations prepare to transition away from Libor. Continued uncertainties in the market coupled with the breadth of the impact require firms to be agile and plan effectively to be operationally ready for new RFRs. Firms should consider changes and updates required to processes, systems and models to be operationally ready to book new products in the RFRs in alignment with market and industry timelines. The steps firms should consider include:

- Establishing a new product strategy and implementation working group to drive operational planning and implementation efforts
- Defining business strategies and timelines for reducing reliance on Libor for new product issuance, including the selection of RFR alternatives and offerings
- Ensuring each business line – and core functions such as finance, treasury, inventory technology, operations and modelling tools – understands specifically where they are using Libor

- Defining requirements and implementing capabilities to build SOFR/other new-rate financial products that will replace Libor products
- Co-ordinating change management for internal systems, models and vendor software releases, changed data interfaces and system replacements for those unable to support the Libor transition
- Building testing plans for new product capabilities, models, model validation and the operationalisation of fallback processing
- Undertaking conduct-readiness assessments for systems changes, data management, operational procedures, final communications, product releases and transition go-live.

Angus Graham
Libor Migration Lead
UBS Group
www.ubs.com

How are firms preparing for 'big bang' discounting switches, which CCPs plan to run in July and October?

Angus Graham: The big bang itself is operationally manageable and is one of the benefits of having exposures consolidated in the CCPs. The second-order effects are where more effort is needed – for example, the knock-on work required to align bilateral OTC documentation and contracts.

Vikash Rughani: The challenges related to the €STR discounting switch in July and the US dollar SOFR discounting switch in October vary greatly. In the switch between the euro overnight index average and €STR, there is a known fixed spread – 8.5 basis points. For SOFR, the spread between Federal Reserve funds and SOFR is variable, albeit at vastly lower levels based on historical data.

Some ways firms are preparing for this change are by mitigating the impact of the change and preparing for life after the change. The discounting switch is seen in both jurisdictions as a method of increasing adoption – through new hedging and trading activity – of the €STR and SOFR alternative RFRs.

To mitigate the impact of the change, firms are looking at the potential of recouping their existing trades, driving down VM and risk sensitivity to the discounting curve. This may not be an option available to all market participants, depending on their goals – the intention being to reduce the VM and risk change of a switch from one discounting curve to another.

We are speaking with our customers about ways in which we can help reduce the impact of the discounting switch, but the weeks before the discounting switch will be the time any such mitigating actions will need to be taken, either bilaterally or multilaterally.

Following the discounting transitions, each new euro or US dollar interest rate trade – and non-deliverable currencies in the case of LCH – cleared will be subject to discounting at the new curve. So, inherently, firms used to hedging their risk to discounting will look to hedge that exposure on a periodic basis – in turn adding trading activity to the alternative benchmarks, which will then feed greater efficiency into those markets.

From a triReduce perspective, we compress both €STR and SOFR swaps and see any additional liquidity as new opportunities to compress and deliver greater capital efficiencies for our customers. As a second-order effect, the added liquidity will also help any steps to convert into these alternative RFRs, since the more liquidity there is, the greater ease the market will have in performing the conversion.

The other way firms are preparing is by planning for renegotiating their bilateral CSAs to remove this consequential source of basis risk between cleared and non-cleared exposures. The market has worked at length to implement mechanisms to handle the impact of swaptions exercising and the mandate to clear, but the question of discounting comes up every time bilateral counterparties consider backloading a trade into clearing.

Alexandre Bon: The priority is on anticipating the valuation impacts – P&L, sensitivities, valuation adjustments (collectively known as XVA) – and rebalancing hedges. A good proportion of Murex's clients have relied on our Libor impact analysis features and its tool for emulating the CCPs' swap-compensation mechanisms, and I believe most institutions seem well on track on this front. More advanced firms are now working on the thornier issues of the swaptions impacted by the discounting switch and the renegotiation of CSAs to realign collateral rates with the CCPs' standards.

Dr Robert de Roeck
Independent consultant

Robert de Roeck: By now, firms should understand the potential economic impact of the switch and be well advanced on operational readiness to handle the new valuation basis. The former should be performed within a robust risk framework, and choices to retain, minimise or remove exposure should be considered as active risk/reward investment decisions. In particular, attention should be focused on those positions that have the largest discount delta – exposure to the discount curve – as mark-to-market valuation changes here are likely to be observed.

Benjamin Bullock: The major CCPs have communicated their approaches to handling the upcoming discounting changes. Firms need to make sure they have engaged with their CCPs or clearing brokers to fully understand the risk and valuation implications, and importantly their options for dealing with risk transfer as a result of the discounting changes. There may also be short- and long-term discrepancies or lack of harmonisation between conventions of cleared and bilateral derivatives. In addition, dealing with the €STR and SOFR-based risk will be new to some firms, and they should make sure they have access to the relevant market data and analytics to deal with these new RFRs. Where firms are struggling to assess impacts themselves, they can depend on technology vendors such as Bloomberg to help provide data, risk analytics and independent valuation impacts. ■

>> The panellists' responses to our questionnaire are in a personal capacity, and the views expressed herein do not necessarily reflect or represent the views of their employing institutions


Lost in transition?
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Libor death notice could be served this year

An announcement on the details of Libor's discontinuation may come soon after the International Swaps and Derivatives Association's fallback protocol takes effect in November. By Kris Devasabai

A formal announcement about the timing and manner of Libor's discontinuation could be made later this year, according to a senior regulator at the UK's Financial Conduct Authority (FCA).

"We know that Libor will continue until end-2021, but announcements about the discontinuation from the end of 2021 of Libor settings could come as early as November or December this year," said Edwin Schooling Latter, head of markets policy at the FCA. "Market participants need to be ready for that."

Schooling Latter was speaking at *Risk.net*'s Libor Virtual Week on June 22.[1]

Edwin Schooling Latter, FCA

Libor is expected to cease publishing at some point after the end of 2021, when panel banks will no longer be compelled to support the discredited benchmark with quotes. As contributing banks drop out, Libor's administrator and regulators must determine whether the rate is still representative of underlying funding markets.

A negative verdict would see Libor lose authorisation under the European Union's Benchmarks Regulation, barring its use in new contracts. It would also trigger fallback clauses that will automatically shift bonds, loans, swaps and other financial contracts to alternative rates.

"We see such a scenario as an irreversible step towards the end of Libor," Schooling Latter said.

The FCA already expects some banks to depart from Libor panels at the end of 2021. As others make up their minds, Libor's fate could be sealed well before then. "It is therefore entirely plausible that you could see announcements about discontinuation in the final week of this year to give markets a whole year of notice to prepare for that," Schooling Latter said.

The announcement could be made by the FCA or Libor's administrator, ICE Benchmark Administration, he added.

Schooling Latter also acknowledged the possibility of Libor limping on after the end of 2021 with enough banks to continue producing a representative rate. "Today, I am not making an announcement that Libor is ceasing at the end of 2021, for the avoidance of doubt," he said.

Any future announcement would provide clarity on Libor's fate, he added, rather than pre-empt it.

"It is theoretically possible of course that there will be enough panel banks to continue a representative rate for a period. It is equally possible – and I am not attaching probabilities to these two outcomes – that there will not be enough panel banks to continue a particular rate," Schooling Latter said. "The market therefore needs to be prepared in particular for that second outcome, and once it becomes clear that is the case, then it is helpful for markets to be told that is the situation and the end is coming."

Notice of discontinuation may follow the roll-out of the International Swaps and Derivatives Association's (Isda's) fallback protocol for swaps. "Once the Isda protocol is out there and has been signed up, and market participants have therefore had plenty of chance to prepare for announcements on the future, there is quite a good case for making those announcements earlier rather than later," Schooling Latter said.

Isda's swaps fallbacks will automatically rehitch outstanding Libor-linked contacts to successor rates, such as the sterling overnight index average, or Sonia. The clauses will be inserted into legacy Libor contracts en masse via a voluntary protocol scheduled for publication in July this year, with an effective date of November.

Development of the protocol has been complicated by regulators' insistence on the inclusion of so-called pre-cessation triggers in the fallbacks, which would automatically flip contracts to alternative risk-free rates if Libor is deemed unrepresentative.

Schooling Latter urged derivatives users to quickly adopt the Isda protocol when it is released. "The alternative to signing the Isda protocol, if you do have derivatives that are subject to Isda documentation, [is that] you simply don't know what will happen to that book of derivatives when Libor ceases or becomes unrepresentative," he said. "The current fallbacks, people don't think they're going to work."

"Those who sign the Isda protocol will be able to navigate the end-2020 to end-2021 period with certainty on what will happen to their Isda contracts as such announcements are made," he added.

Under the Isda protocol, an announcement on Libor's discontinuation would also trigger the calculation of the fallback spreads. These spreads measure the five-year median of the basis between each Libor currency and its related compounded risk-free rate at various tenors. The spreads are added on top of the relevant risk-free rate to minimise the value transfer when the fallbacks are triggered.

"Hence the importance of having the Isda protocol out there and signed up before the end of this year," said Schooling Latter.

A poll of attendees at the Libor Virtual Week event revealed broad support for the protocol, with 56.5% of respondents indicating that they planned to sign it. Another 23.9% said they would assess the protocol once it was finalised, while 6.5% indicated they did not intend to sign, and 13.1% said they were unfamiliar with the protocol. ■

Previously published on Risk.net

[1] *Risk.net (June 2020),* Schooling Latter on timing of 'death notice', *www.risk.net/7567721*

Conduct risks stalk banks in Libor transition

As replacement rate concerns become more pressing, firms fear Libor lawsuits and regulatory wrath. By James Ryder

Need to know

- Of the many challenges Libor transition presents to large financial institutions, operational, legal and conduct risks are some of the most alarming.
- Regulators require big banks to conduct client outreach and educate smaller, less sophisticated clients, to the same extent as their larger, savvier ones, regardless of their economic significance.
- Firms must clearly explain contract changes and the potential for increased complexity – such as the need to introduce floors into some legacy contracts – to reflect the difference in credit-sensitivity of replacement rates.
- They must highlight the potential for value transfer in their favour – or risk legal repercussions.
- And banks should not demur from providing relevant guidance and information for fear of flouting rules about advice, says the FCA, but should inform clients of all their options.
- Failure in these duties of care risks not only regulatory ire, but could incur serious legal risk from disgruntled counterparties.

Lions and tigers and bears, oh my. A terrible triumvirate of operational, legal and conduct risks could be lying in wait for unsuspecting banks on the Libor transition road. Financial institutions should prepare themselves for these half-hidden hazards, say op risk experts – or face brutal consequences.

Among the challenges of educating clients of varying size and sophistication, experts anticipate the potential for claims of mis-selling, of negligent advice – or of inadvertently providing unauthorised advice rather than guidance. Also, there is the risk of adapting transactions to replacement rates in ways that could disadvantage or become unsuitable for clients. In its look at the operational pitfalls of Libor transition, more than a dozen bankers, lawyers, advisers and buy-side firms who spoke to *Risk.net* anticipated such risks arising.

And the clock is running down on the opportunity to pre-empt them.

"The largest banks are likely going to have to make business decisions about which customers to prioritise, and there are going to be some that don't get the same level of information," says Chris Bender, a director at advisory firm Chatham Financial. "There's litigation risk – if the Libor transition results in a value transfer to a bank and a borrower isn't provided with what it considers to be enough information, there's a chance they'll sue that bank."

He says some attorneys who anticipate such scenarios have already begun work on lawsuits.

To arm themselves against these possibilities, financial firms must narrow the awareness gap between frequent and non-frequent issuers and clearly communicate to clients any increased complexity in the products they provide – such as a plain vanilla loan that becomes an exotic by the introduction of a floor.

Some say a significant element of this arsenal could lie in persuading borrowers to adhere to the forthcoming fallback protocol from the International Swaps and Derivatives Association (Isda)– a cross-market multilateral sign-up mechanism that covers over-the-counter products.

Sharon Freeman, formerly Libor transition programme manager at Standard Chartered and now managing director of regulatory consultancy Antevorta, says banks should try to form specialist teams for Libor outreach efforts, arguing that training thousands of front-office staff in recherché Libor topics – many of which are specific to particular transactions or relationships – will be a significant challenge.

She also emphasises that banks shouldn't simply push counterparties into signing up for the protocol – if they do so without a clear explanation of what the protocol language means for their clients' transactions, they could run into conduct risk there too.

"The protocol is not a panacea [for legacy trades]," she says. "If you have lawyers advising, 'Get the protocol signed', and you haven't done the analysis to explain all the impacts to that client and neither have they, you could be heading towards litigation."

In many cases, clients are well aware of how much work remains for firms to undertake, says one financial adviser. They fear unfair treatment if banks focus all their attention on high-volume clients and fail to provide smaller counterparties with sufficiently detailed information, which could have dire consequences for the banks themselves.

A senior op risk professional, who oversees the compliance aspects of a bank's transition programme, confirms the potential for transition-linked litigation is worrying lenders across the market.

"If a client feels they've had a bad outcome, a legal case is one of the remedies they would seek. So that risk is certainly something firms are very conscious of – and it's a real concern for lots of organisations," says the source, "But it's a driver of focus that is being made – and needs to be made – on client communication."

In fact, banks are sufficiently worried by the potential for significant transition-related op risk exposure to have sounded out regulators on the prospect of capital relief from losses. In its most recent Q&A on the prudential regulatory framework, the Basel Committee on Banking Supervision has made clear to supervisors that Libor op risk losses should not be exempt from capital calculations.[1]

Basel warns that losses may be incurred over an extended period of time, should banks fail to identify and remediate legacy contracts prior to discontinuation of a rate, and states: "Operational risk losses relating to the reform of benchmark reference rates do not fulfil the criteria for exclusion from the calculation of operational risk capital requirements laid out in [Basel III] (ie, characterised as one-off, no longer relevant, no residual exposure)."

It also notes, however, that run-of-the-mill transition cost should not be treated as op risk losses, which would accrue capital, such as legal fees to alter contracts or costs related to adjustments to IT systems.

Fearful asymmetry

Some observers think the central issue for banks is information asymmetry between clients. Required by regulation to educate clients on what the Libor transition could mean for their transactions, a bank must explain to a borrower how the replacement of a rate could affect that borrower's finances. So, given their relative lack of sophistication, it might seem logical for a bank to coach its smaller clients as a matter of priority.

But this is not what's happening in practice, say insiders.

"These large banks are going to prioritise their biggest and most important clients," says Chatham's Bender. "They do the most work with them, they make the most money from them, and they're going to dedicate their resources to making sure [they] are happy."

This could prove to be a false economy if small firms with greater need of information resources find they have not been adequately supported. While transactions with these clients may be smaller in total notional terms, there are more of them in sheer number. Which creates the potential for many lawsuits if clients feel they have been disadvantaged.

Besides such legal risk, banks will also attract the attention of supervisors if they are delinquent in keeping smaller customers up to speed. The UK Financial Conduct Authority (FCA), which supervises Libor transition, says all banks must treat customers fairly.[2] They have the same duty of care to all clients – large and small – to ensure they understand the risks associated with the end of Libor and that the transition is not used as a rationale for introducing "inferior terms".

"The underlying need across all [customers] is that communications are fair, clear and not misleading. The evidence reaching us is that everyone is at great pains to ensure customers are treated fairly and feel that they are treated fairly," says FCA's director of markets and wholesale policy Edwin Schooling Latter.

UBS is one firm currently wrestling with this dilemma, according to Libor migration lead Angus Graham. He says the work involved in managing the transactions of larger clients is often straightforward – they are, he explains, professional and easy to pin down.

"The challenge we've got is the long tail problem," says Graham. "If you look at the profile of every firm, you're going to have a few very large counterparties with many transactions and very active relationships. Those, clearly, we'll be able to handle." But, Graham adds: "You get into a tail of small clients, going right out into the distance, some of which won't be active anymore. We have to treat every client equally, so we've got to manage that entire tail."

Dangerous territory

Complicating this duty of care is the fact that banks are prohibited by regulation from providing financial advice to clients. This could prove a problem – some banks say the line between "educating" clients on Libor transition and "advising" them has not been made totally clear, and that supervisors have not given enough clarity on the point.

"The concern is fairly widespread," says Andrew Eddy, a design architect for Libor transition at UBS. "The issue is the fact that, depending on what information the client requires, there is still uncertainty about what the solution is. Their natural question is, 'So, what are my options?' The moment the conversation goes down that route, it becomes potential advice."

The FCA says any firm can provide 'guidance', which the supervisor characterises as general information about financial products, among other things; but activity constituting 'advice' to clients – which the FCA says can include recommendations and opinions – must be authorised separately. Banks' fear of treading too close to the advice line, Eddy continues, is another threat to outreach efforts.

"It is actually slowing down communication. There's a lot of information out there, and there are challenges in communicating that – particularly to less sophisticated audiences who want to jump from the 'Help me understand' to the 'Tell me what my options are' conversations a lot quicker," says Eddy. "That creates reticence. Even when you're trying to do the right thing, you can be penalised for having done it in a way that, subsequently, proves to be incorrect."

According to the FCA's live webpage on Libor transition conduct risk, firms should avoid worrying too much about breaking the no advice rule. Indeed, the FCA says it will "challenge" firms on the basis of fair customer treatment if they display "unfounded fear" about "presenting" or "discussing" alternative products with clients. Firms, the FCA says, should be capable of providing an "objective overview of the benefits, costs and risks of a range of alternatives to a client's existing Libor-linked exposure, without inferring a recommendation".

Schooling Latter also says banks should stick to facts, remaining balanced and objective. That's the best way to avoid straying over the line, he says, and argues that, in a situation where the switchover will result in fiscal harm to a given client, it's fine for a bank to inform the client of that fact. It will not constitute advice, he says, so long as the bank's warning comes as part of a description of a realistic range of potential consequences.

"If a particular move in interest rates would have a particular mathematical impact on the customer's position, and you're being balanced in your description of the range of possible moves in interest rates, then I think it remains possible to give information to your clients that is factual rather than crossing the advice boundary," he says.

In the long grass

While sources agree that providing tailored information to large, sophisticated customers is probably easier than giving smaller firms a crash course, the education for each must be specific to the trades between them.

For large clients, the challenge is in the volume of Libor-pegged material, all of which has to be addressed in sufficient detail; for small clients, it's in ensuring that the information delivered is at once coherent, timely and actionable.

Banks are doing their best to navigate this "sophistication spectrum" in a vigorous fashion, says Deepak Sitlani, a derivatives specialist at Linklaters. Some – such as UBS – have been using approaches including the "information bomb" technique, where emails and letters containing fundamental information are sent out to clients en masse. The objective of this approach is to ensure each client has a reliable package of data they can consult when necessary.

But it's no substitute for a bespoke approach, argues Sitlani. The way information is expressed is key, he argues – and the language has to be suitable for the customer in question.

"If you give a sophisticated client information that is too basic, you're teaching grandma to suck eggs. And if you give an unsophisticated client information that is too complex, it may be too hard to understand," he says. "The aim is for banks to give out information which is in substance largely the same to the breadth of its client base, but also tailor it to deal with differing levels of sophistication."

Linklaters is currently working with "a few" banks on that specific task, he adds.

The issue is compounded because some of the less sophisticated firms banks deal with may not fully understand the financial instruments they sign off on, says Sitlani, adding that the issue is reasonably widespread.

"There is a large subset of clients out there that enter into derivatives … where the lender requires them to enter an interest rate cap, for example. But they have little experience in derivatives – they're doing it because they're told they have to," he adds.

Currently, interest rate caps are considered vanilla products. However, the methodology underlying them could become more complicated after Libor transition, as firms will need to begin averaging the daily rates over the given period if no term structure develops.

Differing dynamics

Differing rate dynamics between interbank and overnight rates add a further layer of complexity, even for vanilla products such as loans. François Jarrosson, director in hedging and derivatives at Rothschild & Co, uses the difference between Libor-linked and Sonia-linked loans as an example. When a client borrows from a bank today, the bank will expect the client to pay a coupon of Libor + x; if that Libor turns negative, its value is deemed to be zero.

The bank would likely seek to add a zero-rate floor to a Sonia loan, he adds – because Libor is inherently a direct gauge of interbank creditworthiness, it invariably fixes higher than Sonia – meaning a loan made at Sonia is much more likely to hit the floor.

Banks know this well – lenders have been fretting for some time about the lack of a credit-sensitive component in most overnight rates – but many clients don't, says Jarrosson. This puts the onus on lenders to explain the inherent transfer of value entailed in switching loans to new rates, and potential accusations of mis-selling if they don't.

"[On Sonia], a 0% floor is struck much more quickly," Jarrosson says. "That means there is a transfer of value for the client, and they should be made aware. It's probably going to be a tricky issue for everyone. The 0% floor on Libor and the 0% floor on Sonia result in different economics."

Jarrosson says less sophisticated issuers vastly outnumber advanced firms, and that those knowledgeable clients are largely the top half of the FTSE 100. Everybody else, he says – the bottom half and below – are less frequent issuers and are unlikely to be aware of the floor issue.

Herding cats?

Some banks see the solution for swaps products in the yet-to-be-published Isda fallback protocol; legislative fixes are also being mooted for so-called tough legacy contracts. If every client would sign up to the protocol and adhere, they say, a lot of those issues would simply recede.

"There's focus on the Isda protocol because it will address 95% of our exposures, essentially, in one fell swoop" says UBS's Graham. The bank will aim to ensure that adoption is as widespread as possible among clients, he continues; if counterparties don't sign up in sufficient numbers, new problems could arise. If only half of the Libor market accepts the protocol, Graham explains, UBS's risk becomes a lot more difficult to handle – the bank's netting sets are divided, and basis risks increase.

"Our challenge, once the wording is agreed, is to maximise market adoption," Graham adds. "You see the regulators encouraging people. It's in the market's interest for as many people as possible to adopt and accept it."

Robert Pickel, ex-Isda chief executive and now chair of the Prime Finance initiative, argues that acceptance of the protocol is the market's best option. He cites the success of other Isda protocols over the years, noting that even protocols that don't attract 100% adherence are still an effective mechanism – and quips that they provide a type of "herd immunity" for markets.

Pickel points out, however, that the scale of the Libor transition is greater than any market shift Isda has previously managed. Protocols have largely applied to credit default swap markets, which, he adds are "dwarfed" by the scale of interest rate markets. And while 80% or 90% adherence would constitute a strong showing for most protocols, Libor-linked markets are sizeable enough that an outstanding 10% or 20% would constitute a great many firms.

Authorities have welcomed consensus mechanisms such as the Isda protocols. The FCA's Schooling Latter argues that if firms use this mechanism – and most are trying to do so – they are likely to be considered compliant.

But while a reassuring regulatory voice may assuage some fears, there is still a large amount of anxiety in the market. ■

Previously published on Risk.net

[1] *The Basel Committee (June 2020),* Basel Framework frequently asked questions, *https://bit.ly/2CS3aD2*
[2] *FCA (November 2019),* Conduct risk during Libor transition, *https://bit.ly/2YLKCwN*

LCH The Markets' Partner

Key steps in the transition to SOFR

Phil Whitehurst, head of service development, rates, SwapClear at LCH, offers his insight into when a term structure for the secured overnight financing rate (SOFR) is likely to be established, what will be required for this to become a reality and what is needed in the US dollar market to successfully transition away from Federal Reserve funds price alignment interest and discounting to SOFR

Given the volatility seen in March, what can we learn about the suitability of the secured overnight financing rate (SOFR) as a viable fallback for US dollar Libor contracts?

Phil Whitehurst: SOFR was chosen by the market as the recommended alternative to US dollar Libor. While most market participants are supportive of the transition, there have also been dissenting voices. It's interesting to see both sides claiming that developments in March in the spot markets that underpin the daily benchmark resets supported their position.

For a clearing house such as LCH, it's more important to look at the swap rate variability during periods of volatility. And the behaviour observed in March was exactly as expected. The projected forward-looking basis between SOFR, and Federal Reserve funds on the one hand and Libor on the other, was largely stable – despite some spot market spread volatility. This means LCH's models performed well, and we are comfortable moving forward with our plans, which include the adoption of SOFR for price alignment interest (PAI) and discounting this October.

When are we likely to see a term structure for SOFR? What is needed to make that happen?

Phil Whitehurst: We already have a term structure in the form of projected SOFR via the swap markets and, in our role as central counterparty (CCP), we value and margin SOFR swap risk every day. We have good reason to expect further uptick in volumes and liquidity growth driven by adoption of the International Swaps and Derivatives Association's (Isda's) more robust fallbacks in or around November. This will be a significant milestone in the development of the USD Libor/SOFR relationship.

Related to this, the Alternative Reference Rates Committee (ARRC) recently added a path towards a term SOFR to its list of objectives for 2020, centred on the production of a daily fixing of a SOFR-based benchmark that relates to forward-looking periods longer than overnight. This has been a sensitive area, with some participants arguing that the dearth of trade data could lead to the conclusion that a term SOFR must inevitably suffer the structural weaknesses associated with a deposit market benchmark. LCH is more optimistic. Deposit markets are asymmetric, credit-specific and balance-sheet heavy; the markets on which a term SOFR can be based are symmetric, credit-agnostic and light on the balance sheet. So, while ARRC is some way from endorsing a rate, the fact it has made it onto the road map is a positive step.

What are the key steps market participants should be taking in preparation for Libor-to-SOFR transition?

Phil Whitehurst: LCH has already taken a number of the key steps in this process, but there are still many more to come. I will walk through the steps required in derivatives markets, since this is our core competence, but the process for cash products is just as involved, if not more so. We can take a cue from ARRC and the steps it has identified, which we summarise as:

1. Supporting SOFR usage and liquidity, which for LCH means focusing on the PAI and discounting transition for cleared swaps, but also relates to conventions in the swaptions market – both in terms of pay-off functions and underlying
2. Ensuring external service providers and internal systems are 'SOFR-savvy'
3. Finalising and adopting more robust contractual fallbacks, work on which is very advanced for derivatives and is being led through to delivery in November by Isda. The extensive education and familiarisation work needed before then is now gathering pace.

Why does the USD market need to transition from Fed funds PAI and discounting to SOFR?

Phil Whitehurst: LCH is solving the challenges associated with USD Libor, and we don't use USD Libor for PAI or discounting of USD trades. So why transition the discounting at all? One way to look at this is to work backwards. SOFR has been recommended as the alternative to USD Libor, and the great majority of USD swap trades reference USD Libor. If, in the future, all those trades are conducted with reference to SOFR, there is a huge opportunity to simplify market structure by also using SOFR for PAI, and discounting. This would restore a simpler mono-curve environment for projection and discounting – reminiscent of the early days of the swap market, but built on a much more solid foundation.

There is another reason the central counterparty (CCP) discounting transition is spoken of as the key step in moving the market towards this SOFR-based paradigm. The discounting risk on a derivatives portfolio is dynamic; it changes in response to moves in market levels. This creates both supply and demand for SOFR risk in the derivatives market. Our hope is that this 'primes the pump', creating more liquidity and enabling other SOFR-based hedging activities to proceed more confidently in the wider market.

When is that planned to happen?
Phil Whitehurst: In line with other derivatives CCPs, we are targeting the weekend starting Friday, October 16 for the transition. There is broad consensus on the date and growing momentum towards delivery.

What are the central features of the transition process?
Phil Whitehurst: When LCH first consulted the market approximately two years ago, we were asked to think about two central effects of a discounting transition. First, a transition would be likely to create a point-in-time change in valuation for margining purposes. Second, it would eliminate a forward-looking sensitivity to the Fed funds' yield curve and replace it with an equivalent exposure to the SOFR yield curve. A solution that neutralised these effects to the greatest extent possible was needed, and we believe we've found one.

The change in net present value can be compensated with a cash payment. If a portfolio experiences a drop in value upon transition, LCH pays the difference (and vice versa). For the sensitivity change, we had to be more inventive and are solving this by providing 'compensating swaps', which restore the original portfolio risk sensitivities. This additional compensation layer mitigates the impact of the transition more completely, although we are aware that certain clients are not active hedgers of discounting risk and prefer not to take their allocation of compensating swaps.

How are you dealing with clients who don't want risk compensation?
Phil Whitehurst: While we require our members to take up their allocation of swaps, we will enable clients to elect a cash alternative to the discounting risk swaps. To keep the risks balanced across the service, we need to find a new home for these unwanted allocations. So we're running a cash settlement process that aims to concentrate liquidity for the benefit of these clients. We will require the dealers most active in USD swaps to make prices to LCH, to take up the net risk of clients opting for cash settlement.

We will run this process on Friday, October 16 after determining the allocations for everyone in the service, including clients opting into the cash settlement process at close of business on Wednesday, October 14. It is worth adding that clients will be required to make their election a number of weeks ahead of the transition event. Clients are also free to dispose of their allocation of swaps outside the cash settlement process arranged by LCH at their convenience in the open market.

Phil Whitehurst

Are there any protections against an auction with limited bids?
Phil Whitehurst: Yes, we have made auction participation a requirement for the largest US primary dealer banks, ensuring there will be a good base level of support. We are also implementing an auction proceeds cap, which ensures weak bids will not be carried through to the final portfolio allocations, giving clients a quantifiable maximum cost associated with the auction process.

How would you deal with insufficient bid interest in the auction?
Phil Whitehurst: CCPs spend a lot of time planning to deal with low-probability events. We have invested heavily in designing a cash settlement process that will attract the necessary volume of bids and offer to cover net client disposals, so we think this can be considered a low probability. However, we felt it important to plan for this unlikely event and ensure clients were aware of all possible outcomes. As a fallback, we will therefore deliver any residual allocations to the relevant client accounts, and they will need to dispose of them individually – for example, with the help of their clearing brokers and their wider dealer relationships.

Our planning covers all scenarios, including insufficient interest in individual compensating swap tenors – of which there are six – and also the possibility of partial fills. Our approach is to handle as much of the risk as possible, and to be able to provide an unconditional result to participants bidding in each tenor in turn.

Are there any other focus areas for LCH right now?
Phil Whitehurst: As well as addressing a shortage of liquidity, we are putting a lot of effort into a mitigation strategy and fallback planning in case of an operational scenario that prevents us from running the process. Beyond this, our priority is education. It is extremely important that all cleared swap users understand the operational aspects of this transition. This is a highly complex exercise, and we intend to minimise the number of surprises. To support this aim, we are holding regular webinar sessions for members and clients, and have created a dedicated risk-free reference rate section on our website with links to all the key resources relating to the transition.

Risk-free rates may fail liquidity test for hedge accounting

Experts fear trades referencing the secured overnight financing rate and the euro short-term rate will not be eligible for hedging relief.
By Natasha Rega-Jones

Benchmarks that are in line to replace Libor are in danger of not achieving the required liquidity to meet new hedge accounting standards, bankers warn.

Under International Financial Reporting Standards (IFRS) 9, which came into effect at the start of 2019, hedging activity must have a risk component that is "separately identifiable and reliably measurable" to qualify for hedge accounting status.

For benchmarks, this means the rate must be liquid enough to have an easily observable market within 24 months from the date it is designated as a risk component. Failure to meet the requirement could result in the breakdown of hedge accounting relationships.

"Some of these new benchmarks – such as the secured overnight financing rate (SOFR) and euro short-term rate (€STR) – are still in their infancy and so although there are developing markets, some may argue they are not currently deep or liquid enough to potentially qualify for this 'separately identifiable and reliably measurable' definition for use in hedge accounting," says Bradley Anderson, head of accounting solutions at BNP Paribas.

Industry groups are preparing to switch trillions of dollars worth of Libor-linked instruments to alternative reference rates in advance of Libor's likely discontinuation at the end of 2021.

In some countries, the replacement rates are new and untested: SOFR in the US and €STR in the eurozone. The UK's replacement rate Sonia has been used in financial markets since 1997, which makes it less likely to fall foul of the new accounting rules.

Bankers say the 24-month deadline is even more of a concern given the wider financial disruption wreaked by the coronavirus pandemic since the start of the year.

"While these benchmarks still have 24 months to meet the requirement, in light of lockdown and the impact that it's had on financial markets, 24 months is just too short," says Anderson.

"Although six months ago risk-free rates were developing quickly and that timeline looked achievable, now the world has changed significantly and 24 months is an aggressive timetable for markets to meet," he adds.

However Andrew Spooner, lead partner on IFRS 9 financial instruments at Deloitte, says that 24 months isn't an unreasonable deadline for benchmarks to meet the requirement. He argues that if a benchmark fails to become liquid in that time, then it calls into question the very rationale for using that benchmark for a financial instrument in the first place.

"I don't think it's unreasonable to put a marker down for when these markets have to develop. It's up to auditors to look at the depth of the market over this period and see whether they think it's sufficiently deep in order to regard a benchmark as separately identifiable. We'll just have to wait and see," he says.

A similar problem exists in the Fundamental Review of the Trading Book, as products linked to risk-free rates that lack sufficient liquidity could be considered non-modellable and attract a capital add-on.

The global body responsible for IFRS 9, the International Accounting Standards Board (IASB), based in London's Canary Wharf, released a draft paper in April to address industry concerns over the effect of Libor transition on hedge accounting.[1] The exposure draft was discussed at a meeting of the IASB on June 23–25.

EY's Clifford believes that ambiguities in the language of the exposure draft may have dangerous ramifications for SOFR in particular, potentially undermining what the IASB intends.

He says one reading of the draft implies that there needs to be a zero coupon bond market based on SOFR for the benchmark to qualify as separately identifiable – something which he believes is unlikely to happen.

"There's a concern that SOFR may never form the basis for the bond market in the US and that it only remains as a benchmark for derivatives, while the cash and the bond market are priced on something different," he says.

"I'm hoping this issue is due to the fact that a lot of the exposure draft is written very concisely and succinctly and so is therefore capable of being misread. The draft could therefore benefit from a bit more written guidance and clearer language, as in fact you could read it to mean that SOFR would never be eligible for hedge accounting purposes – regardless of the 24 months issue – which I don't think is what the IASB intends," he continues.

An IASB staff paper on the issue released ahead of the meeting noted this feedback but stuck to the 24-month timeline, saying that "the board is of the view that a clearly defined end point is necessary given the temporary nature of the proposed amendment".

It did, though, note feedback that a requirement for the 24-month period to apply on a hedge-by-hedge basis would be operationally difficult, given it would mean new time periods to monitor for each new trade. The paper clarified that the 24-month period would instead apply once, from the first time that the new benchmark is designated as a hedged risk.

The paper's proposals were approved by the IASB at the June meeting.

Profit-and-loss volatility

The meeting also addressed industry worries about a Libor transition mismatch creating unwelcome earnings volatility on balance sheets.

Under plans to switch financial products to new risk-free rates, users will include a fixed spread to take into account the credit risk element of Libor. The spread is designed to minimise valuation changes arising from the switch.

Under the IASB's April proposals, banks were concerned that a hedged item that was revalued to reflect the benchmark change would only consider the new risk-free rate directly, ignoring the fixed spread. The hedge on the other hand would include the spread.

The valuation difference between the two would then have to be fed through to the profit-and-loss (P&L) statement, causing unnecessary earnings volatility, which the proposals were seemingly designed to minimise.

Speaking before the IASB meeting, Anderson said: "Essentially, you may be in a situation where you'd have less profit-and-loss volatility and a better accounting outcome if you ignore the relief provided by the IASB altogether," he said.

However, the IASB clarified in the June meeting that the valuation change will take into account risk-free rates as well as the fixed spread, allaying bank fears.

But a further concern remains unaddressed. The rule changes may set broader unwanted precedents for what counts as a modification to contracts, accountants say.

The new rules state that a financial asset or liability can be considered to have been modified if the basis for determining its cashflow has changed – even if the contract itself hasn't been amended. If this is the case, firms must change the hedged item's carrying value to reference the new rate, but the cashflows are to be discounted at the old rate.

So for example, if a bank was transitioning from Eonia to €STR – a difference of 8.5 basis points – it would have to change its balance sheet's carrying value to €STR, yet discount those new cashflows using Eonia. This would result in a change in carrying value, which would have to be recognised in P&L.

The new rules provide an exemption for such modifications if they're done for Libor transition purposes, allowing firms to simply change the effective interest rate without changing the carrying value on the balance sheet, avoiding P&L impact. But accountants are concerned that the rule has wider ramifications for the definition of 'modification' outside of benchmark reform circumstances.

"The IASB may be setting a precedent that any time an asset's cashflow changes, it counts as a modification and therefore may create an immediate P&L impact in the future – which I don't think was their intention," says BNP Paribas's Anderson.

Similarly, EY's Clifford says that now is not the time for the IASB to be opening up a debate about what counts as a modification to contracts or not, as it simply creates an additional confusing step when it comes to banks trying to account for Libor transition.

"Why try to give guidance over what counts as a modification within the context of Libor transition when the practical expedient solves the problem anyway? Does the IASB really need to go there at this stage?" he says.

The IASB staff paper acknowledges these concerns, but the rule changes were approved in their current form at the June meeting.

The amendments now need to be endorsed by the European Union for eurozone banks to be able to use them.

As long as the rules are endorsed by the EU in time for banks' annual accounting reports, they will be able to benefit from the accounting relief.

"The IASB has got a really quick turnaround here but I'm sure they'll achieve that timeline as the overall support for the exposure draft has been strong," says Deloitte's Spooner. "I think it's reasonable to expect that the industry will be able to apply these rules by the end of this year." ■

Previously published on Risk.net

[1] *IASB (April 2020),* Interest Rate Benchmark Reform—Phase *2, https://bit.ly/3201YYJ*

Lagging futures market holding back swaptions RFR transition

The "elephant in the room" – limited development in the futures market – is hindering non-linear growth and swap market liquidity, say rates traders. By Ben St Clair

The futures market's dawdling on Libor transition is impeding adoption of risk-free rates (RFRs) in the swaptions market and creating barriers to the development of swap markets linked to the new benchmarks, according to senior interest rate traders.

Tom Prickett, co-head of rates trading for Europe, the Middle East and Africa at JP Morgan, called the limited development in the futures market the "elephant in the room" when it comes to transitioning from Libor, noting that eurodollar and short-sterling futures volumes far eclipse their replacement RFR alternatives, such as the sterling overnight index average (Sonia) and the US secured overnight financing rate (SOFR).

"Until those markets move across, it's very hard to see the option market successfully moving across, because the two are quite hand in hand. A lot of the hedging of swaption contracts is done through exchange-traded products. There needs to be a bit more focus on the futures market and how we can try to encourage that market to transition," said Prickett, speaking on a webinar on June 23 as part of *Risk.net*'s Libor Virtual Week.

Prickett said futures based on the alternative rates will have to reach a threshold level of liquidity to encourage high-frequency market-makers to transition as well.

"Perhaps you start to incentivise some market-making schemes in the new RFR futures so that liquidity is built up a bit more rapidly," he said, adding that he was aware of discussions taking place on the issue.

Curve Global, CME and ICE were unable to comment before publication.

Goldman Sachs and JP Morgan have recorded SOFR swaption trades and a handful of dealers are offering Sonia swaptions, but relatively few swaptions have been printed against RFRs so far.

Risk.net found that only three swaptions trades referencing Sonia or SOFR have been reported to the Depository Trust & Clearing Corporation's swap data repository since 2017. The DTCC data captures trades involving at least one US-regulated counterparty.

Speaking on a separate webinar on the same day, buy-side executives said Sonia swaptions were not a huge attraction at the moment.

"It's still a little bit of a nascent market. The issue there is not so much to do with the product design, but the fact that structurally, with interest rates being as low and curves as flat as they are at the moment, our clients have just less structural need for swaptions. As a result, we've probably been spending less time focusing on those aspects of the reform," said Nabil Owadally, a liability-driven investment (LDI) portfolio manager at BMO Global Asset Management.

"Nonetheless, steps in the right direction are being taken with the consultation on the ICE swap rate for Sonia and the expansion of the dataset to include Tradeweb prices, which should help to reduce the incidence of no publications," he added.

Barry Hadingham, head of derivatives and counterparty risk at Aviva Investors, said on the same webinar that Aviva is interested in Sonia swaptions, but agreed it was a fledgling market.

"Clearly, I can think of cases across our business, and not necessarily just on the LDI side, where we would look to use them, but there is no real market at the moment," he said.

> "Until those markets move across, it's very hard to see the option market successfully moving"
> Tom Prickett, JP Morgan

Feedback loop

Ivan Jossang, a managing director in the fixed income division at Morgan Stanley, said the lack of RFR swaptions activity is holding back the development of the related swaps market. That's because traders prefer to hedge Libor-based swaptions with Libor swaps, resulting in a "chicken and egg" scenario where each market could use the other market's move as a catalyst.

"There was a hope and an expectation that increasing liquidity in the Sonia [swaps] market would naturally pull the swaption market with it. But what we've seen is that the continued hedging requirement for these Libor swaption positions has actually maintained a certain high level of Libor swap trading," said Jossang, speaking on the same Risk.net webinar.

Jossang added that increased adoption of RFRs in the interest rate option market also depends on developments in the loan market.

For instance, borrowers often have to buy an interest rate option called a cap to hedge interest rate risk. If the interest rate exceeds the strike on the cap, the borrower receives payments to offset its costs. Ideally, the hedge would reference the same rate as the loan, but with loans being slow to migrate off Libor, so have caps.

The situation creates another feedback loop where loan standards and interest rate option liquidity hinder each other from moving forward in the transition.

"You could well anticipate that when the loan market manages to transition to overnight rates in more meaningful scale, we will also see a quite meaningful uptick in activity in caps linked to risk-free reference rates," said Jossang.

Crucial six months

Market participants see the next six months as key to the Libor transition, with clearing houses due to shift discounting rates for euro and US dollar interest rate swaps to reference their respective RFRs, and final fallback protocols set to be published and signed.

But beyond the market's lead movers in the LDI space, Jossang said many buy-side firms have to yet to actively transition their books off Libor.

"I still think there's an enormous amount of additional inventory that could be transitioned ahead of time relative to what's actually been done to date. I'd be very surprised if it [the Libor inventory] has come down over the last year. If anything, I imagine it's probably increased quite substantially," he said.

Speaking on the same webinar, Tradeweb's head of European interest rate derivatives, Bhas Nalabothula, said there is a clear difference between those leading firms and the rest of the buy side.

"When you look down the broad list of sterling derivatives users, the majority haven't taken advantage of transitioning their portfolios, whether it be electronically on venues such as Tradeweb or voice," he said. ■

Previously published on Risk.net

TriOptima CME Group

Delivering certainty in uncertain times

TriOptima explains how it combines the reduction of gross notional exposure and the conversion of net risk exposure to deliver outsized results, partnering its portfolio compression network with core net ICE Libor over-the-counter swap portfolios

triReduce's benchmark conversion service offers users an iterative approach to mitigating uncertainty about the future of ICE Libor swaps. Swap market participants can proactively reduce both their gross and net exposure to the ICE Libor benchmark at the same time as increasing their adoption of the alternative reference rate for each respective currency. This service will be provided for trades cleared in all major central counterparties (CCPs) as well as for ICE Libor-referencing trades held in non-cleared portfolios. A single process, in which participants retain control of the transition within their portfolios, is key to managing the change in your own mid-market valuations. By ensuring all compression and conversion takes place iteratively and at each firm's own valuations, the service brings clarity to discussions about how to adopt alternative risk-free rates (RFRs) in swap portfolios.

Reviewing the data requirements

To better understand what is required, figure 1 illustrates triReduce's benchmark conversion service. As they do today, participants will submit their existing swap portfolios, where it is likely they will have existing ICE Libor- and non-ICE Libor-referencing trades, including alternative RFRs. This enables the service to compress where possible and convert into the alternative RFR where compression is not possible.

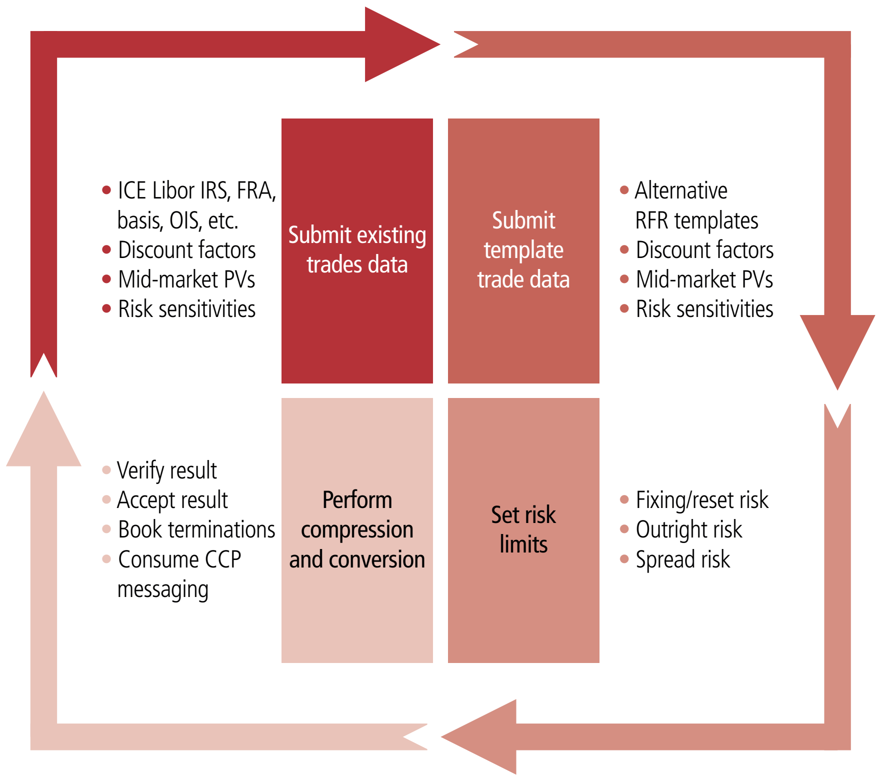
Participants will provide discount factors and their own mid-market valuations, as well as any measures of risk they would like to control through the process for their existing trades and for additional template trades. These template trades are a standard representation of alternative RFR trades that will be used to establish additional liquidity at specific maturities to facilitate the conversion.

With this information and the corresponding risk-based limits that participants define, triReduce's benchmark conversion service will return a proposal of fully terminated, amended and replacement trades that reduce exposure to ICE Libor transition in a controlled manner. Once accepted by each participant within a finite window of time, the proposal is passed on to the CCP for processing in the case of cleared trades.

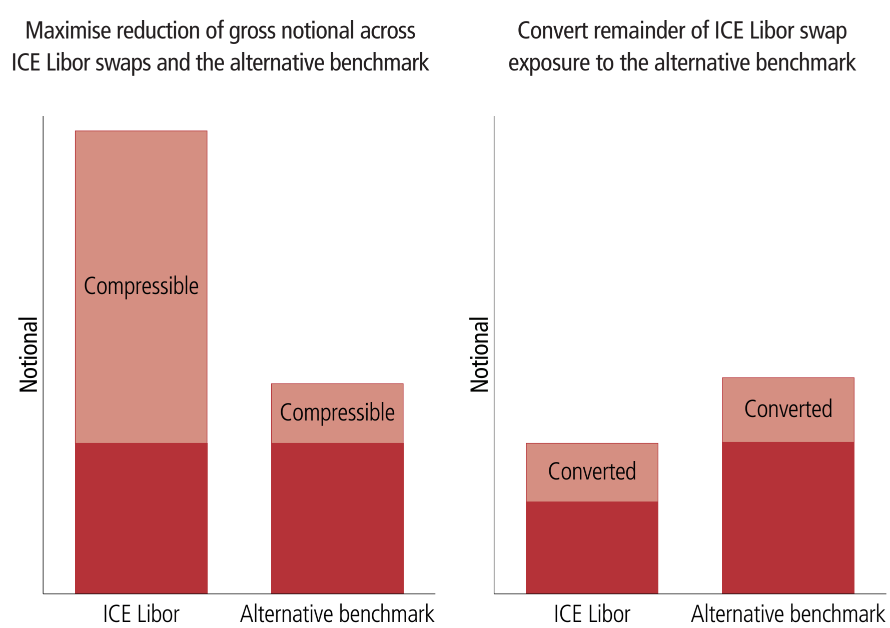
Reduced ICE Libor over-the-counter swap exposure

The result is a reduction in ICE Libor swap exposure achieved through a simultaneous reduction of gross notional exposure and conversion of net risk exposure. TriOptima combines these two objectives and delivers outsized results by bringing together its world-leading portfolio compression network and new participants with core net ICE Libor over-the-counter swap portfolios (see figure 2).

1 triReduce's benchmark conversion service



2 Reduction of gross notional exposure and conversion of net risk exposure



Ensure your readiness to take control of the ICE Libor transition for your over-the-counter swap portfolio by contacting your local TriOptima office or emailing *benchmarkconversion@trioptima.com* to discuss benchmark conversion

Sonia term rate nears 'beta' release, while SOFR struggles

Tom Wipf, chair of the Alternative Reference Rates Committee, says the current liquidity in secured overnight financing rate derivatives is insufficient to create a term rate. By Kris Devasabai and Robert Mackenzie Smith

A forward-looking term version of Sonia will be available shortly in beta form, according to a senior UK regulator, while efforts to create an equivalent rate in the US are being held back by weaker-than-expected volumes in derivatives linked to US dollar Libor's successor.

"We feel pretty close to the first forward-looking term Sonia rate being published," said Edwin Schooling Latter, director of markets and wholesale policy at the UK Financial Conduct Authority (FCA).

The beta version of term Sonia is being released "so that market participants can begin to track its behaviour" and is "not for active use", he added.

Four index providers are vying to produce a term version of Sonia – the sterling overnight index average – that will ultimately become the standard in the industry. FTSE Russell, ICE Benchmark Administration and Refinitiv are using Sonia overnight index swap (OIS) quotes to construct their term rates. IHS Markit is producing a rate based on actual transactions in the Sonia OIS and futures markets.

Schooling Latter noted the "great progress by administrators, platforms [and] liquidity providers" involved in the effort to produce term Sonia rates, though he did not specify which vendor – or vendors – would be first out of the gate.

An effort to create a term version of the secured overnight financing rate (SOFR) is much further behind.[1] The initial transition plan released by the Alternative Reference Rates Committee in 2017 envisioned a term rate being available by the end of 2021. That timeline was conditional on there being enough liquidity in SOFR-linked derivatives to construct a term rate.

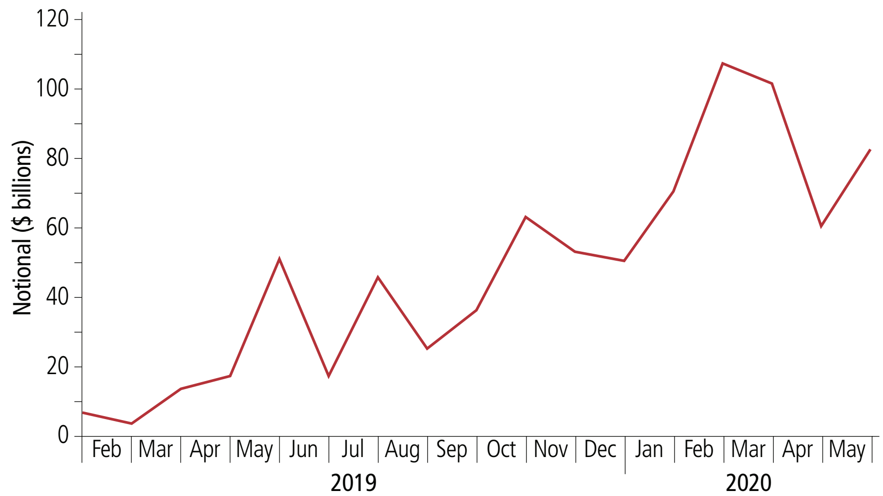
"When we put that [transition plan] in place, a few years back, there were certain assumptions that the derivatives market would have moved significantly away from Libor by this point," said Tom Wipf, chair of the ARRC.

Even so, in its work plan for this year, the committee said it would set up a request-for-proposal process to select an administrator of a forward-looking term SOFR rate by the end of September, with the aim of publishing it in the first half of 2021 – six months ahead of schedule.[2]

Wipf said volumes in SOFR derivatives would need to pick up to make that happen. "If we don't have supporting transactions in the derivatives market, it is going to be challenging, near impossible to get that done," he said.

Schooling Latter and Wipf were speaking at *Risk.net*'s Libor Virtual Week event on June 22.

1 SOFR swaps volume



Source: DTCC

Data from the Depository Trust & Clearing Corporation (DTCC) shows roughly $80 billion notional of SOFR-linked interest rate swaps were traded in May, down from a peak of $107 billion in February (see figure 1). Trading is still concentrated shorter tenors, with little liquidity further down the curve.

According to data from the International Swaps and Derivatives Association, more than $60 trillion worth of US dollar Libor swaps have traded year-to-date. SOFR swaps have yet to register half a trillion dollars.

Average daily volume in SOFR futures traded at CME saw a huge surge at the height of the Covid-19 pandemic but was cut in half in April and May, though month-end open interest remains steady.[3]

In contrast, the UK market has seen steady growth in Sonia volumes, with more Sonia swaps notional traded year-to-date than sterling Libor equivalents, according to DTCC data.

The slow build-up of liquidity in SOFR derivatives has not altered the market's expectations of when a term version of the rate will be available. "Without a healthy SOFR derivatives market, it becomes difficult to construct a robust term SOFR benchmark," says Amrut Nashikkar, a fixed income strategist at Barclays. "However, investors are quite optimistic that a robust term SOFR benchmark will be available before end 2021."

Most are pinning their hopes on an uptick in volumes following the switch to SOFR discounting for cleared US dollar swaps, scheduled to take place over the weekend of October 17 and 18. But some are doubtful this will make much of a difference.

"There is some hope that the CCP discounting shift later this year will create more trading in SOFR swaps, but I'm sceptical that it will be enough to get forward-looking term rates," says Priya Misra, global head of rates strategy at TD Securities.

The ARRC has recommended that market participants should use SOFR averages or compounded-in-arrears wherever possible, rather than waiting for a forward-looking term version. "We want to see vast majorities of the market resting on SOFR compounded," said Wipf. "People certainly shouldn't wait [for term SOFR] and should be working with the tools that are available today."

The FCA estimates only around 10% of the UK loan market will use the term version of Sonia when it is available. Schooling Latter urged the rest of the market to stick with a compounded-in-arrears version of the rate.

"What we have warned right from the outset is that these [term] rates may be somewhat more volatile than the overnight rate compounded-in-arrears because they are compiled from smaller markets than the overnight rate itself," he said. "They will be more prone to varying liquidity conditions, and indeed that's what we saw in March in the midst of the coronavirus impacts." ■

Previously published on Risk.net

[1] *ARRC (October 2017),* Minutes for the October 31, 2017 Meeting via conference call, *https://nyfed.org/3ihLWPL*
[2] *ARRC (April 2020),* 2020 Objectives, *https://nyfed.org/2CQ2r5h*
[3] *CME Group (May 2020),* SOFR Futures, *https://bit.ly/2NLZkxv*

Bruised, not broken

Libor switch on track despite Covid-19

A compressed timeline for the Libor transition may leave smaller firms struggling to meet the end-2021 deadline. By Rebekah Tunstead

The financial industry may soon have an answer to an age-old paradox, as the irresistible force of the coronavirus pandemic smashes into the immovable object of the timeline to abandon the Libor interest rate benchmarks.

Some firms paused elements of their switch to alternative risk-free rates amid the turmoil that has engulfed markets since March. Broadly, many believe the work can still be completed by end-2021 – the earliest point at which publication of Libor could cease – but the picture varies by firm, by instrument and by geography.

"I don't think our focus has ever come away from the Libor transition. The problem is that the dislocation in the market that we saw, particularly in March, meant it wasn't sensible to continue with the transition until the market calmed down a bit," says a head of derivatives at a UK asset manager.

Need to know

- Dealers and buy-side firms are weighing up the impact of the coronavirus on their plans to transition away from Libor.
- Some put projects on hold during the volatility seen in March; others say the impact has been limited.
- Communication and client education on the transition has proved particularly difficult with meetings moving online.
- In loan markets, users are worried that delays to interim deadlines will stunt the volume of products referencing alternative rates.
- Regulators are reinforcing the end-2021 deadline, but accept Libor could also limp on beyond that date.

To accommodate those delays, industry working groups are pushing back their transition milestones, compressing the time available to get it all done. Smaller firms in particular may struggle to muster the resources.

Liquidity has been building in financial instruments pegged to replacement rates such as the secured overnight financing rate (SOFR) in the US, and the sterling overnight index average (Sonia) in the UK. But many users are stubbornly clinging on to Libor. The swaps market is awaiting a new fallback protocol that would automatically re-hitch Libor contracts to new risk-free rates, due in July. Loans are not predicted to adopt new rates in meaningful numbers until next year.

"The date of 2021 is very challenging if you consider we are 18 months out from the deadline and we haven't yet observed a massive change in contracts to something other than Libor," says the head of Libor transition at a European bank. "Time is running out."

Regulators are keeping up the pressure. The UK's Financial Conduct Authority, which oversees Libor, revealed during a *Risk.net* event this week that notice of Libor's cessation could arrive as soon as the end of this year. That would give the market certainty. It would also yank away a comfort blanket – the common belief that Libor will be allowed to limp on for months or years after the end of 2021 if transition efforts ultimately fall short.

Lost in transition

Coronavirus has interrupted the switch from Libor in a number of ways. With legions of staff exiled from offices, individuals have had to adapt to new methods of working. The move has proved a distraction for many.

The extreme volatility in March also prevented dealers from getting in touch with clients to discuss plans for the benchmark switch. The head of Libor transition at the European bank says the only client calls on the changeover have been negotiations around credit support annexes ahead of the shift of discount curve at European central counterparties in July. Wider Libor education is on hold.

Patchy communication was one reason cited for the delay of an important report on so-called tough legacy contracts – instruments that can't shift to an alternative rate and also lack a fallback. The report by the Working Group on Sterling Risk-Free Reference Rates was expected to be published at the end of March but finally arrived on May 29. Its content was criticised by observers for a lack of substance.

James Grand, partner at law firm Simmons & Simmons and member of the working group, says: "It's very difficult to have that kind of technically detailed conversation remotely. And I think people are rightly concerned that conducting these discussions over the internet does create the problem that you might end up with a leak that could potentially wrong-foot the market."

Phil Lloyd, head of market structure at NatWest Markets and co-chair of the risk-free rates communications group, says the delay in publishing the paper was due more to the volatility in March, and the industry trying to "find its new normal".

Delays are occurring elsewhere. Third-party vendors have struggled to complete software projects designed to support the transition, sources say. Systems upgrades are seen as a crucial part of the benchmark change.

"The vendors have a lot of work to do,

especially for cash products. A lot of end-users rely on the vendors to be prepared," says a credit valuation adjustment head at a US bank. "If more vendors have a problem staying on track with timelines, that might slow down everything else."

Another sticking point has been uncertainty over whether electronic signatures are legal. Some believe only certain documents can be signed electronically, and others must be physically signed with witnesses present, depending on the jurisdiction.

Grand at Simmons & Simmons says English law is clear on this: e-signatures are effective and can be used for the remediation process.

All aboard?

Although many of the large market participants may be on track, there are concerns their clients and counterparties aren't.

Speaking in May, Jason Granet, head of firm-wide Libor transition at Goldman Sachs, described the cost and effort that some small institutions are facing during the transition. When visiting a small bank, Granet said the staff showed him a cupboard full of documents yet to be uploaded to electronic databases.

Many in the industry had expected to begin remediation processes and transitioning clients in the second half of this year, but that has now slipped to the beginning of next year.

Condensing the timetable to move clients across brings its own challenges and could reveal technological and operational gaps in the process, says a head of Libor at a US bank.

A split may be emerging in preparations for derivatives and for cash products. Swaps users are quietly optimistic that a forthcoming change in the discounting rate at European central counterparties will kick-start more issuance of swaps fixed to new risk-free rates.

On July 27, clearers will switch from Eonia to the euro short-term rate (€STR) to discount the value of future cashflows and calculate interest payments on collateral, known as price alignment interest, for interest rate swaps. US central counterparties will move from the federal funds rate to SOFR in mid-October.

The European deadline was delayed by five weeks from its original June date; the US deadline has remained unchanged.

Another imminent milestone may ease the transition for derivatives. In July, the International Swaps and Derivatives Association will publish a revised protocol for Libor-linked swaps to reference alternative risk-free rates en masse. Many dealers are waiting for the new protocol before starting the process of changing legacy Libor instruments and working out compensation payments for clients. The protocol will take effect from November.

> "The vendors have a lot of work to do, especially for cash products. A lot of end-users rely on the vendors to be prepared"
> Credit valuation adjustment head at a US bank

"I think the derivatives market will be fine," says the head of derivatives at the UK asset manager, adding ominously: "For cash markets, I think the challenges are much greater than they already were."

Moans, groans and loans

The cash market was always going to be the toughest nut to crack for Libor transition. Loan users have long insisted that a replacement for Libor should have a forward-looking element – a principal factor behind the painstaking development of term versions of overnight rates.

On April 29, the Financial Conduct Authority announced a hefty six-month delay of the deadline for new loans expiring after end-2021 to cease referencing sterling Libor. The new deadline is March 2021.

"Pushing the date for new loans to switch to Sonia in the first quarter of next year really doesn't give much time to deal with all of the stuff that's going to be building up, or has already built up and continues to build up until that point," says the head of derivatives at the UK asset manager.

The market's lack of preparedness for Sonia was evident in the emergency loans announced by the UK government in April to assist businesses affected by Covid-19. The loans are linked to Libor or central bank base rates, rather than Sonia. In a parallel move, the Federal Reserve pegged its emergency loans to Libor after vocal opposition from the industry to using SOFR.

"The Federal Reserve loan facility does not use SOFR, it uses Libor. You can infer something from that in terms of operational readiness," says the credit valuation adjustment head at the US bank.

Over the next couple of months, the sterling risk-free rates communications subgroup will be stepping up efforts to educate end-users about Libor transition, says Lloyd at Natwest Markets. The group plans to launch five-minute webinars focusing on core topics such as the difference between Sonia and Libor, and then later there will be short videos on specific parts of the transition.

But the group will have to shout to make itself heard above the hubbub of Covid disruption. Many corporate clients are still preoccupied with repairing damaged business models and shoring up finances, rather than focusing on Libor transition, says the head of derivatives at the UK asset manager.

"They will issue in whatever form is the most convenient for them, not thinking necessarily, 'I must do it in Sonia or SOFR'," says the head.

A senior markets source says Covid-19 disruption means clients will probably look to transition later than previously planned. Although Sonia issuance was happening, particularly in the shorter maturities, uptake of the new reference rate hasn't been significant. He says only a handful of corporate clients have begun asking about Sonia hedges for loans they are expecting to take out in the future.

The head of Libor transition at the US bank says that regulators may need to reconsider if end-2021 is an appropriate time for Libor to cease for legacy products. Allowing Libor to be published for legacy products after the end of 2021 for a short time may reduce operational and legal costs which will be hard felt by the market, particularly after the impact of Covid-19, the head suggests.

Lloyd at Natwest Markets points out that although regulators will not force panel banks to submit quotes beyond 2021, this doesn't necessarily mean Libor has to end at that point. "The actual end of Libor could be somewhere between 2022 or 2023," he says.

The official steering group responsible for benchmark transition in the US remains committed to the final deadline, though.

"It remains clear that the financial system should continue to move to transition by the end of 2021," said a spokesperson for the Alternative Reference Rates Committee via email.

Most firms that spoke to *Risk.net* for this article said they are pressing ahead with plans to transition away from Libor before the end of next year. The schedule may be more ambitious but the end goal remains the same. It appears that the irresistible force may cede to the immovable object. ■

Previously published on Risk.net

SOFR and credit spread
Not as simple as it seems

Chris Dias, principal and global Libor solution co-lead at KPMG, explores how the market will adjust as liquidity grows and why firms must resist the temptation to default to existing processes for determining credit spread and rethink the traditional approach

The adoption of the secured overnight financing rate (SOFR) is forcing firms to think about credit spreads and how to apply them to new and old transactions While some firms may default to existing processes to determine credit spread, the structural and behavioural differences between Libor and SOFR are compelling others to rethink the traditional approach. Any reformulation of a firm's credit spread methodology will also require a reassessment of pricing strategies and conduct risk implications, in addition to operational impacts

Historically, Libor has adjusted – albeit artificially through expert judgement – either up or down depending on perceptions related to the economy, perceived stress, liquidity and market demand. The fact Libor is an unsecured rate with an implied credit component allowed its contributors to factor in adjustments warranted by prevailing conditions. Banks could take solace in knowing that, if their cost of funds rose in times of stress, a compensating rise in lending rates would also occur protecting interest margin.

Replacing Libor with SOFR could jeopardise this long-standing paradigm. Very simply, SOFR is an average rate – calculated by the US Federal Reserve – built on secured repo transactions. Because the underlying transactions used to derive SOFR are collateralised, SOFR tends to decline in times of market stress and dislocation, which contrasts with how Libor responds in similar market conditions. Recent stressed market conditions have only served to emphasise the potential for divergence between the two benchmarks, so it is clear that the underlying difference between the rates means there will need to be careful thought regarding whether to include a credit component for this difference and and, if so, how?

This flight-to-quality phenomenon coupled with the market-driven nature of SOFR introduces the possibility that SOFR rates may go below zero – a circumstance that has never happened with Libor. Although the published rate has yet to register a negative rate, there have been several underlying secured repo transactions – general collateral, not specials – which have yielded a negative return. The potential for this outcome has banks scrambling to understand where and how a floor can be implemented or if one can be implemented at all.

Given the diverging behaviour between rates, many banks are exploring the spread component to best mitigate the 'rate differences' risk. Some banks have started looking at alternatives to SOFR, preferring to explore a rate much closer in construct to Libor to solve the credit spread differences. Several rates are being considered because they have an implied credit component that, much like Libor, will be affected by general bank credit quality. While these alternatives seem to have some interesting features, they are not without issues. Given they are not identical to Libor, some adjustments will need to be made to the underlying rate; the underlying volume will need to be International Organization of Securities Commissions-compliant, and the question of a benchmark-quality term structure will need to be solved.

Other benchmarks might be plausible, but not probable. Banks will need to consider other alternatives to compensate for differences between Libor and SOFR. The Alternative Reference Rates Committee (ARRC) working group and industry bodies have explored the differences between the two rates deciding that, at least for legacy trades, an adjustment was required to recognise the credit component in Libor. The ARRC has published a spread adjustment methodology based on a five-year historical median between Libor and compounded SOFR. The static adjustment could be applied to all legacy transactions in an attempt to offset the structural difference between the two rates. While this addresses a specific concern, it does not help with the behavioural issues that banks are grappling with. The same can be said for any static spread applied to SOFR, whether for legacy transactions or new transactions.

Banks are also now trying to explore other ideas such as premium spread add-ons, dynamic spreads and fee levies. All have some merit but do not perfectly address every concern. The drive to create a robust market-driven benchmark is not without growing pains, the market will adjust as liquidity grows and the market matures.

The author

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Chris Dias is a principal in KPMG's modelling and valuation group, serving financial services companies as a risk practitioner and strategic adviser. He is an accomplished professional with over 30 years of international experience in financial markets and now serves as a global Libor solution co-lead at KPMG

Regional focus: Asia

The Libor clock is ticking faster for market participants in Asia. Slower off the starting blocks in many jurisdictions due to delayed guidance from local regulators, the complexities of transition are compounded by the potpourri of domestic rates on offer alongside US dollar Libor. While certain landmarks have been reached in preparing the derivatives market for the switch to new risk-free rates, the cash market has further to go, with consensus still to be reached over fallback rates and language for legacy products. As elsewhere, the Covid-19 pandemic has thrown transition plans into disarray, adding operational complexity to a host of other challenges for firms in the region

Bloomberg

Why Asian firms expect a major systems and data overhaul

In this feature, Bing Li, head of Asia-Pacific, and Steffan Tsilimos, global head of interest rate derivatives products at Bloomberg, explore the implications of the Libor transition on the Asia markets and the broader market impact of the transition

The wide-ranging impact of the move away from the use of Libor to risk-free rates (RFRs) on financial institutions and corporates is a well-known fact. It involves a fundamental change in the underlying interest rates used in all kinds of instrument and asset classes, which affects how financial institutions and corporations operate. As such, firms will need to overhaul their systems and data management to calculate new profit and loss (P&L), manage risks and get pricing, among other considerations.

The state of readiness among financial institutions and corporations in the Asia-Pacific region (APAC) for this fundamental change varies. "Some Asian jurisdictions are more advanced than others, while market participants in the derivatives and cash markets vary in their state of preparedness. Many of our sell-side clients, for example, began planning for the Libor transition much earlier than corporates, given their market exposure," says Bing Li, head of Asia-Pacific at Bloomberg.

However, an increasing number of corporations are starting to examine how they can be better prepared for the transition, driven largely by regulatory imperatives. The Australian Securities and Investments Commission sent a "Dear CEO" letter to companies in May 2019, urging them to begin preparing for the transition, and the Bank of Japan and the Japanese Financial Services Agency have also made similar requests.

The derivatives market in Asia is generally better prepared for the adoption of RFRs because of support from the International Swaps and Derivatives Association (Isda), which has provided frameworks, guidelines and protocols to facilitate the transition. For example, Singapore is making significant progress in preparing for the transition from the Singapore dollar swap offer rate (SOR) to the Singapore overnight rate average (SORA). According to the Association of Banks in Singapore, the majority of banks in the SOR-SORA Steering Group are ready to trade SORA derivatives, while making good progress in other asset classes. Even so, much remains to be done – regionally and globally.

"The rapid implementation of relevant technology will be key. Bloomberg has developed a range of hosted solutions across data, risk and trade execution to help market participants prepare for the end of Libor in 2021"
Bing Li

"For bilateral uncleared portfolios, clients can 'repaper' or negotiate revisions to existing Isda agreements and credit support annex (CSA) portfolio netting sets. For cleared trades, the central counterparty clearing house (CCP) may conduct multilateral auctions and other protocols to move existing legacy Libor swaps/legs to RFRs. For either bilateral or cleared trades, a 'close-out' of existing Libor trades, coupled with a new trade that references the RFR index, may be initiated. Alternatively, a basis trade where the Libor legs offset may be initiated," says Steffan Tsilimos, global head of interest rate derivatives products at Bloomberg.

Cash markets face more challenges

Tsilimos also noted that participants in the cash market face a different set of challenges. One of the biggest of these is the fallback language for legacy issuance, which did not exist in many cases or is vague and disparate across issuers. Converting existing securities from Libor to RFRs is another challenge. Market participants are dependent on issuers or custodians to initiate such a move, which requires consent from investors holding the securities. While investors may want to sell out of positions where the fallback language is vague or missing, markets for these securities may be less liquid than those with well-defined fallbacks.

Consensus on fallback rates for cash products is also difficult to obtain as these securities are also traded in the retail market, which can comprise more than two parties, unlike interest rate swaps, according to Tsilimos. For example, a typical mortgage product involves the mortgagee, mortgagor, custodian, issuer and investor.

Assessing the fallback language in the original documentation for cash securities is a key consideration, but such language is sometimes absent, or not applicable in a situation when Libor ceases to be in use.

"Bloomberg's derivatives analytics solution, coupled with execution and order management platforms, enables users to assess valuation and risk ramifications, as well as seamless execution for Libor transition portfolio changes"
Steffan Tsilimos

"Given the nature of each security having its own unique legal documentation, assessing the fallback language for every security in a portfolio can be a formidable task. A consent solicitation can be difficult or may even fail, in part due to the potential value transfer," he added.

Assessing fallback ramifications

Bloomberg offers tools to identify fallback language for cash securities, which enable asset managers and other institutional investors to assess fallback ramifications.

"Bloomberg has mined cash security documentation across a range of cash securities, including floating-rate notes, municipal securities, securitisations, preferred securities and syndicated loans, to locate fallback language where available. This fallback language is available through a set of new fields that can be viewed in accordance with the [Bloomberg] Terminal licence or downloaded for enterprise use via a data licence," Tsilimos says.

Currently, Libor fallback language is disparate across counterparty pairs. The upcoming fallback methodology will allow for a smooth transition for counterparties that opt in to the upcoming Isda protocol. Bloomberg Index Services was selected by Isda to calculate and publish adjustments related to fallbacks based on the exact methodology and parameters determined through industry consultations.

The calculations of fallback data and fallback language will be integrated within the Bloomberg analytics and portfolio solutions to support Libor transition globally.

"Bloomberg's derivatives analytics solution, coupled with execution and order management platforms, enables users to assess valuation and risk ramifications, as well as seamless execution for Libor transition portfolio changes," Tsilimos says.

The Bloomberg Terminal can support the pricing of derivatives, referencing RFRs. To execute RFR-based derivatives that are being traded electronically, financial institutions and corporations can leverage Bloomberg's Swap Execution Facility (BSEF) and its UK and Netherlands Multilateral Trading Facilities (BMTF and BTFE).

Assessing dependencies on Libor

Financial institutions and corporations will also need to take a closer look at their Libor dependencies and actively consider effective approaches that will match their needs, Tsilimos noted.

"They must begin testing portfolios and analysing risk to help ensure the transition goes smoothly. The process can include impact analysis on changes to Isda agreements, preparing for price alignment changes at the CCPS, and running what-if analysis on risk and valuation changes associated with migration of derivatives over to RFRs," he says.

Performing what-if analysis

As RFRs gain momentum, financial institutions and corporations need to understand the impact on valuation and risk for their cleared and bilateral portfolios, Tsilimos says. The Bloomberg Multi-Asset Risk System (MARS) application programming interface (API) enables institutions and corporates to perform what-if analysis to understand the P&L implications and risk impacts on portfolios under different scenarios such as changes in price alignment interest at CCPs, repapering CSAs to include new RFRs or analysis of an early migration to RFRs.

The MARS API is also optimised to reflect real-time market observations, resulting from a single data snapshot, which ensures full transparency and confidence when restructuring existing contracts to mitigate risks from the transition.

Addressing operational challenges

In addition, Bloomberg Terminal functions address a number of operational challenges posed by uncertainty after 2021. For example, the Terminal supports RFRs when looking for information on new securities, yield curve analysis or electronic trading.

"Clients are able to conduct various functions and access tailored solutions based on individual portfolio needs, such as monitoring growth in cash securities and RFR-based derivatives, as well as derivatives pricing and risk analysis," Li says.

The Bloomberg Terminal also supports compounded interest rate calculations for the loans market. In discussing how Bloomberg continues to support clients in APAC, Li notes: "A common problem for banks in the region is how to fix and calculate the interest rate for floating rate cashflows.

"We worked with a Japanese bank to create workflows involving the input of trade data using several channels and new calculation methods to help them tackle this issue. We can replicate such workflows for banks in the region due to our ability to collect and harness various types of data and help our clients make sense of it, for pricing and risk calculations," he added.

"The transition is no doubt complex as systems and data management have to be overhauled to perform fundamental tasks such as calculating P&L and managing risk. The rapid implementation of relevant technology will be key. Bloomberg has developed a range of hosted solutions across data, risk and trade execution to help market participants prepare for the end of Libor in 2021," Li concludes.

First dollar/yuan cross-currency swap using SOFR trades

Crédit Agricole and Bank of China's $10 million trade marks a new milestone for the secured overnight financing rate. By Chris Davis

Crédit Agricole and Bank of China have transacted the first onshore Chinese renminbi versus US dollar cross-currency swap using the secured overnight financing rate (SOFR), breaking new ground in the acceptance of alternative reference rates in Asia.

The $10 million, one-year swap, struck on April 21, sees Bank of China receive compounded SOFR on the floating US dollar leg and pay a fixed rate of 0.48% on the CNY leg.

The trade was confirmed on the China Foreign Exchange Trade System platform.

Lilian Darbon, head of Asia trading at Crédit Agricole Corporate and Investment Bank in Hong Kong, says there is growing interest among Chinese banks in using SOFR as a benchmark for US dollar borrowing, which means more SOFR swaps with onshore Chinese counterparties are likely to follow this year.

"In China, the regulator is very keen on seeing the development of the SOFR market, so we believe it will become popular to use as a reference rate in the coming months," says Darbon.

The trade is the latest milestone in the uptake of SOFR by Chinese banks. In September 2019, the Hong Kong subsidiary of Bank of China completed a US dollar trade finance loan for a corporate client and issued two-month dollar-denominated commercial paper, both of which were linked to SOFR. Two months later, the bank sold $350 million in three-year floating rate notes linked to the new benchmark.

The transaction is the first cross-currency swap between US dollar and CNY to reference SOFR. In late December last year, Westpac and Citi entered into the first SOFR-linked cross-currency swap involving an Asia-Pacific currency, the Australian dollar.

As has been the case for the other recently traded SOFR cross-currency swaps, Crédit Agricole and Bank of China had to use Libor as a base to price the US dollar leg of the swap. The implied fixed swap rate for USD/CNY was 0.95% versus US dollar Libor, from which they subtracted the basis between that benchmark and SOFR – 47 basis points – arriving at the rate of 0.48% for the fixed CNY leg.

Liquidity lacking in Asia hours

Darbon says the reason for using the Libor-SOFR basis market is the lack of liquidity in the SOFR swap market at longer tenors, something that is a particular issue during Asia hours.

"Of course you have to use an existing market to quote your first new RFR swap. But in the future, we hope this new market will be quoted with more liquidity and that the risk-free curve will appear. The reality of this market is that it is not very liquid outside of New York trading hours," he says.

Libor rates across five currencies, including the US dollar, could cease publication after 2021 once banks are no longer compelled to participate in the rate-setting panel. In the US dollar market, SOFR has been selected as the alternative risk-free rate that will replace the Libor benchmark.

Although Darbon concedes that the Covid-19 pandemic has disrupted benchmark transition projects, he expects SOFR liquidity to improve after clearing houses start using the rate for calculating price alignment interest and the present value of future swap cash flows later this year. Use of SOFR will then continue to accelerate up to the end-2021 deadline.

"This is going to be the first of a series [of onshore SOFR swaps]," he says. "I cannot deny it has been a bit slow in terms of how SOFR is traded – including in the US – but clearly it will accelerate because that is what the regulator is wishing to see." ■

Previously published on Risk.net

LCH introduces central clearing for Sora derivatives

Central counterparty LCH expects to see a surge in volumes after clearing its first trade linked to Singapore's risk-free rate, the Singapore overnight rate average. By Chris Davis

LCH cleared the first over-the-counter interest rate swaps linked to Singapore's new overnight rate on May 18, the UK clearing house has revealed.

The first cleared swap linked to the Singapore overnight rate average, or Sora, was struck between Standard Chartered and Singapore's second largest bank by assets, OCBC. More Sora swaps were cleared in the hours that followed, says the central counterparty.

Kate Birchall, head of Asia-Pacific at LCH in Sydney, says she expects the introduction of central clearing for Sora derivatives to accelerate adoption of the benchmark in the local swap market. Initially LCH will clear Sora swaps with maturities of up to five and a half years, but she says there are plans to extend the maturities as the market develops.

"[Sora] has been very heavily backed by the regulator. There has been a significant push in Singapore by financial institutions to make the transition," says Birchall.

LCH was unable to confirm the size or maturity of the first trade, but it was the first of three trades executed yesterday for a combined notional of S$250 million ($173 million).

"We have seen serious volume coming through the clearing house today and expect volumes to increase quite significantly over the next few months," says Birchall.

The first cleared trades are the latest in a succession of milestones for the benchmark named as Singapore's alternative reference rate last year. In November 2019, the same two counterparties completed the first non-cleared Sora-based trade, a one-year interest rate swap. Earlier this month DBS priced the first floating rate note linked to the benchmark.

Sora was named as Singapore's alternative reference rate last year, and will replace the swap offer rate, the market's prevailing benchmark for interest rate derivatives. The swap offer rate is a synthetic benchmark that reflects the cost of borrowing in US dollars and swapping back to Singapore dollars. As US dollar Libor is embedded in it, the rate cannot be calculated should publication of Libor cease after 2021, though workarounds have been considered.

The steering committee formed by the Monetary Authority of Singapore (MAS) to oversee the transition to Sora highlighted the launch of central clearing for derivatives this year in a transition roadmap published in March. In feedback from an industry consultation published on the same date, market participants highlighted the importance of a quick transition to central clearing for Sora derivatives, given the higher margining requirements for non-cleared derivatives.

Timing discounting

A switch to Sora to calculate price alignment interest (PAI) – the rate of interest paid on posted variation margin – and for the discounting of Singapore dollar swaps was also highlighted as a key development in responses.

LCH plans to further support the transition by switching to Sora for PAI and discounting, but has yet to reveal the date of the move. Currently Singapore dollar swaps are discounted using an overnight version of the swap offer rate.

The MAS-led steering committee lists the switch to Sora for PAI and discounting as a key priority for the second quarter of this year. Birchall says LCH needs to give its members sufficient time to prepare for the move to a new discount rate and the readiness of market participants would be the key factor in deciding when to make the switch.

Central counterparties are scheduled to switch the discount curve for US dollar swaps to the secured overnight financing rate in mid-October, while the date for the switch to using the euro short-term rate, or €STR, for discounting was recently pushed back one month to July 27, due to disruption caused by the Covid-19 pandemic. ■

Previously published on Risk.net

Singapore debuts floater linked to risk-free rate

DBS to issue one-year note with compounded Singapore overnight rate average coupon. By Chris Davis

DBS is expected to issue the first floating rate note linked to the Singapore overnight rate average, Sora, this week. The issuance of the S$20 million ($14 million) one-year note is seen as an early step in building a term structure for Singapore's chosen risk-free rate.

"This is part of the effort to build a new benchmark for the market; we are just chipping in to help," says Andrew Ng, who heads the treasury team at DBS in Singapore. "It is only a one-year Sora [Singapore overnight rate average] note, but what we would like to see going forward is more firms coming out with two-year or three-year notes so we can get that term structure."

The Singapore dollar rates market is switching to Sora from the swap offer rate (SOR) – the fixing currently used for most swaps and some cash products. SOR is a synthetic benchmark implied from the cost of borrowing in US dollars and swapping back to Singapore dollars. As the rate relies partly on US dollar Libor, SOR cannot be calculated should publication of Libor cease after 2021.

Sora was announced as the replacement rate for SOR in August 2019. Last November, the first Sora-based interest rate swap traded between OCBC and Standard Chartered. The Monetary Authority of Singapore's Sora steering committee has said it expects to see the pricing of more floating rate notes and other interest rate products using the benchmark later this year.

William Shek, head of Asia-Pacific rates and credit at HSBC in Hong Kong, says the debut floating rate note could help kick-start the release of Sora products by other issuers. That, in turn, would aid the development of the Sora derivatives market, he says, and make a forward-looking term structure based on the overnight fixing more feasible.

"In the case of Singapore, there is an initiative to issue new bonds based on the risk-free rate," says Shek. "They are driving the derivative changes from the primary issuance – by changing the funding rate to Sora. When you issue a primary bond based on Sora, only the banks that have a Sora capability will be able to do a swap for them."

The notes pay a coupon derived from daily compounded Sora plus 65 basis points. The coupon uses the same conventions for floating rate note issuances established in other rates markets such as sterling, by applying the backward-looking, daily compounded rate calculated with a five-day lag.

The note is part of DBS's $30 billion global medium-term note programme, and the bank says the proceeds will be used for general business purposes.

Industry groups in a host of other markets transitioning away from their Libor benchmarks or equivalent rates are tendering for vendors to produce term versions of their chosen risk-free rates.

In Asia-Pacific, Quick Corp was recently selected to build a forward-looking term version of Japan's Tokyo overnight average rate.

Meanwhile, in Australia, IHS Markit has already begun work on a term version of Australia's overnight interbank rate, Aonia.

The Sora steering committee said in March that it will look at the viability of developing and publishing a forward-looking term Sora benchmark by the end of 2020. Other jurisdictions' approaches to developing term risk-free rates would be considered, the committee stated.

Ng from DBS believes it is possible there will be sufficient liquidity in Sora derivatives to build a term version of the benchmark by the end of 2020 – even though Singapore's transition to a new risk-free rate started much later than in most major rates markets.

Already there are some signs of life in the Sora derivatives market, he says.

"It is not straightforward, but at the same time this is a small country so if you want to push it, it is maybe a bit easier to do that compared with other countries," he says. "If you look at broker screens, a few banks are showing Sora prices. You are talking about 25 to 30 basis points on bid/ask spreads, but people are at least trying to start the market now." ■

Previously published on Risk.net

US benchmark switch splits swaptions market

Some users ignore new guidance to nominate the secured overnight financing rate for swap discounting. By Rebekah Tunstead

US dollar swaptions users are divided over new guidance designed to avoid a valuation change when clearing houses switch swap discounting curves later this year.

Investors are now able to specify a discounting rate for new swaptions, and an industry group has urged participants to opt for the secured overnight financing rate (SOFR) for many new trades. But some parties have not done so, with dealers citing operational challenges, the impact of Covid-19 and old-fashioned stubbornness.

"We've seen some instances of trades fall down because one side wants to do Fed funds and the other wants to do SOFR," says a swaptions head at one large dealer. "Some people were adamant that they wanted to trade Fed funds because they had traded Fed funds all their lives."

Other dealers, though, say they are following the new guidance wherever possible. "Removing ambiguity is to the benefit of both parties," says a swaptions head at a second US dealer.

US clearing houses are set to change their swap discount rates from federal funds to SOFR in October this year, which will affect the value of cleared swaps. The move will also cause a revaluation of existing swaptions, since the instruments deliver into cleared swaps.

To minimise the disruption from a valuation change, the International Swaps and Derivatives Association (Isda) amended the swaptions rule book on March 30 to allow counterparties to nominate a discount rate for new trades. Under previous guidance, swaptions were valued with the discount rate used by a mutually agreed clearing house.

Specifying the discount rate for swaptions requires changes to valuation and risk management systems to include the new field.

A head of rates structuring at a third US bank says many market participants, including dealers, weren't operationally prepared for the announcement in March, and some may still not be ready. This was partly due to the announcement being at the first quarter-end, when dealers tend to hold off making any technical changes, and also because of the volatility brought by Covid-19.

A swaps trader at a European bank agrees: "Some may not have been able to specify a discount rate and have it recorded as a trade fact because the systems aren't set up yet. Most banks will have had to make that change to address both how the trade database is populated and how that then is picked up by your risk management system to value the trade."

The swaptions head at the large dealer says the US swaptions market became "dysfunctional" for the first two weeks of April, suggesting the US market might have been caught off guard by Isda's new guidance.

"[Isda] just came out with it a bit too abruptly. I'm not sure why they needed to make it live so quickly – there wasn't much time between finalisation of the language and going live," he says.

However, a senior market source argues that banks had ample time to prepare for the new guidance: "I don't think anyone should have been surprised unless they had been living under a rock and not realised what was happening with the discounting transition at the clearing houses."

Isda first issued a memo on the rule change last November, with a draft circulated the following month, a spokesperson at the association confirms.

The spokesperson adds that the changes were made in co-ordination with the official industry bodies in the US and Europe responsible for developing new risk-free rates to replace Libor. The association also consulted technology providers to ensure the new confirmation field was included on relevant platforms.

"It's important to add that there is no obligation for parties to populate the new field," the Isda spokesperson adds.

Two dealers say that nearly all new swaption trades made since March 30 with expiries after the October discounting switch date have moved to explicitly specify SOFR as the discounting rate.

Watching brief

Firms that have not yet committed to specifying SOFR may be waiting to see how the euro swaptions market fares with the move from Eonia to euro short-term rate (€STR) discounting. Clearing houses in Europe originally intended to make the switch in June, but the spread of the coronavirus pandemic prompted a five-week delay until July 27. Observers suggest US dollar swaptions users are waiting to see if a similar delay occurs in the US.

"I'm fairly confident that if we hadn't had this market disruption, there would have been more take-up of [SOFR discounted swaptions], because the timelines would have been more certain," says the swaps trader at the European bank.

Another reason for the reluctance to specify SOFR is that many market participants hedge against swaption price changes using swaps linked to the same benchmark. A lack of liquidity in SOFR-linked swaps could affect investors' ability to manage the discount risk. In particular, SOFR swaps tend to be more liquid at shorter tenors, inside five years, whereas the risk that comes from swaptions tends to be longer dated.

However, the swaptions head at the large dealer says the move to SOFR at the clearing houses in October should boost swaps liquidity and alleviate these fears. He adds that he is urging clients to specify a discount rate so there's some assurance in case the course of Libor transition does not run as planned.

"We think specifying SOFR makes a lot of sense for the simple reason that it's nice to have an explicit discounting specified in case in five years' time LCH decides to migrate again, in which case, there will be more headaches," he says. "So, at least if you're locked into a certain discount curve, you know what you've got."

The swaptions head at the second US dealer agrees, but notes that this has been harder to achieve when novating certain legacy trades in the interdealer market, as it would require banks to agree on the value of the compensation element – a difficult task given the uncertainties. ■

Previously published on Risk.net

Twin-track solution for 'tough legacy' Libor falls flat

Critics deplore a lack of detail in the Working Group on Sterling Risk-Free Reference Rates' call for parallel legal fix and synthetic rate.
By Helen Bartholomew

A sketchy report on one of the big challenges in Libor transition has disappointed observers who were hoping for more detail.

The report recommends a belt-and-braces approach to rescuing derivatives, bonds and loans that will be left without a viable reference rate when Libor stops being published. Panel banks will be free to walk away from the benchmark from the end of 2021.

"There's literally nothing in here that hasn't been talked about and isn't already on people's minds," says a partner at one London-based law firm. "Given the stage we're at, it's pretty disappointing. It feels like no-one is really looking at this."

The task force's twin solutions – a legislative fix and a short-lived synthetic version of Libor – are intended to resolve so-called tough legacy positions. These are Libor-referencing instruments that cannot be moved to a new rate prior to the benchmark's demise and also lack a viable contractual fallback.

Both solutions have been on the table since the middle of last year, but there is little sign of progress in the task force's eight-page document, other than a statement of the group's official position: the UK government should consider legislation, it states, with synthetic Libor "pursued in parallel".

The twin options are wrapped in caveats, and no next steps are proposed. The document was published on May 29 by the tough legacy subcommittee of the Bank of England-convened Working Group on Sterling Risk-Free Reference Rates.[1]

In contrast, its US counterpart published a 20-page report in March that included eight pages of proposed legislative text.

Similar legislation for English-law contracts would help international consistency, the UK task force notes, but given the time constraints, it would not be possible to wait on the outcome in the US. The market has 18 months until the earliest point at which Libor can die.

> "If you go for something quite narrow and specific, you can potentially get something through quicker and then take that problem off the table"
> Guy Usher, Fieldfisher

"[The UK task force] hasn't really made a choice of which way they want to go and I don't think they thought very deeply about the legislation," says a second London-based lawyer. "It all points to them thinking it will be helpful if the UK was similar to the US – and that legislation would be helpful if we can't get all of this done in time – but these tough legacy measures don't really seem to be so important to them."

Others see the report's lack of detail as a deliberate attempt to ensure market participants do not throw themselves into the tough legacy safety net. In its paper, the task force calls for the market to continue trying to escape Libor-linked contracts prior to the benchmark's death, noting "this is the only way for parties to have certainty over their contracts."

"A bit fiddly"

Lawyers have reservations about both of the paths suggested by the task force.

Critics warn it may be difficult to define the scope of any legislation, including which contracts it applies to and whether the law would override existing fallback language or transition negotiations. It is also unclear whether compounded-in-arrears the sterling overnight index average (Sonia) – the replacement for sterling Libor – would be the only available substitute, whether a legislative fix could be extended to other interbank offered rates (Ibors), and whether it could be applied to English-law contracts outside the UK.

"I think legislation is desirable, but most people would probably only rely on it for contracts where they can't get any engagement with other parties. It's not so much that those contracts are difficult to fix, because the difficult ones don't really lend themselves to a legislative solution," says Guy Usher, co-head of financial markets and products at Fieldfisher.

He adds: "You might be able to use legislation as part of your toolkit for components of the most complex contracts. But it's not necessarily going to solve masses of the tough legacy problem because by definition that's a bit fiddly."

A common example of tough legacy positions are bonds and securitisations that would use the last available Libor fix in perpetuity once publication of the benchmark ceased, turning a floating-rate bond into a fixed-rate one. This can be averted via consent solicitation – essentially, asking investors to agree to a different reference rate – but for widely held instruments, gaining approval from the bulk of investors is time-consuming and costly.

Other examples given by the task force include derivatives that are hedging an underlying, non-negotiable Libor exposure, Libor-linked mortgages that have no fallback, and loans that require bilateral negotiation to transition. In some cases, the number of negotiations required is what lands these instruments with the tough legacy badge.

"There's literally nothing in here that hasn't been talked about and isn't already on people's minds"
Partner at one London-based law firm

"When you look at what is classed as tough legacy, it's not always structural issues within the deal or the instrument – some of it is just volume," says Claude Brown, a partner at Reed Smith.

While legislation could ease transition for vanilla contracts such as floating-rate notes and syndicated loans – where time is the greatest obstacle, given the volume of transactions involved – it is unlikely to be a cure-all for the most complex transactions such as contracts containing multiple Libor exposures or inter-creditor agreements, lawyers say.

More than £7 billion ($8.9 billion) of sterling Libor floating-rate notes have already been flipped to Sonia via consent solicitations. While achievable for narrowly held instruments such as benchmark covered bonds and master trust securitisation programmes, the need to obtain approval from 75% of the noteholders means it will be costly and time-consuming to alter the remaining £50 billion or so of notes set to mature after 2021.

"Bonds and securitisations are tricky because consent solicitation is difficult and expensive, but we're doing a lot of them. We're running several Libor transition projects at the moment and have found that the tough legacy and fallback problems fall into a finite number of categories," says Brown.

Rather than complex, catch-all laws that may struggle to be effective for true tough legacy exposures, addressing specific issues such as consent solicitation in bonds may help speed the legislative process, adds Fieldfisher's Usher.

"If you go for something quite narrow and specific, you can potentially get something through quicker and then take that problem off the table. But it doesn't necessarily feel like emergency legislation if you consider everything else that's going on in the world right now," he says.

Going beyond sterling

The task force requests consideration for legislation to extend to other Ibor rates – a move that adds political complexity to any legislative process. Working groups on Libor transition were set up by central banks in each jurisdiction, recognising the systemic nature of benchmark interest rates. What's more, successor rates are at varying stages of development – most of them lagging behind Sonia in the UK.

"It's not difficult to draft the law to apply to other Ibors and currencies but you have to work out how to treat the alternative approach being developed by other working groups and that depends what they are proposing and whether that rate even exists," says Diego Ballon Ossio, senior associate at Clifford Chance.

He adds there's no guarantee legislative changes would be enforceable if overseas counterparties suffer losses as a result of the switch. To avoid lengthy litigation, a conflict of laws analysis must typically be carried out to see which laws eclipse others in each jurisdiction.

"If you're not resident you need to be able to show that the law you've chosen under your contract is actually the law that should apply. It depends on the legal system, but ultimately you can see how you can build an argument to say it shouldn't apply if it puts you in a worse position," says Ballon Ossio.

In a nod to the extreme uncertainty around the legislative route, the task force also proposes creating a synthetic Libor. This would see the defunct rate continuing to be published under some kind of simple formula – likely a fixed spread over compounded Sonia. It's also far from a bulletproof solution, requiring the approval of Libor's guardian, ICE Benchmark Administration, or intervention from the rate's regulator, the UK's Financial Conduct Authority (FCA).

Under the European Union's Benchmarks Regulation (BMR), a benchmark regulator does not have the authority to force wholesale methodology changes in a critical rate. Even if those powers were granted as part of proposed BMR amendments, lawyers worry the rate would be no more robust than Libor itself.

"It could help if you can construct something that would just slot into contracts, but you're just replacing one problem with another. If Libor is a bad benchmark, a synthetic version could be as bad or worse depending on how you constructed it. You'd be buying yourself more time but perhaps in an equally unsatisfactory way," says Usher at Fieldfisher.

It's also not clear how the FCA would prevent the use of a synthetic Libor in new transactions, or how long it would need to be kept alive to protect legacy contracts. For example, some securitisations requiring a tough legacy fix are 20 years or more from legal maturity, Usher notes – and synthetic Libor is only described by the task force as a way to "stabilise" Libor during a "wind-down period".

"If you can't fix it in the next year and a half, how are you then going to fix it in the next three years that synthetic Libor might run for after that?" he asks. ■

Previously published on Risk.net

[1] *The Working Group on Sterling Risk-Free Reference Rates (May 2020)*, Paper on the identification of tough legacy issues, *https://bit.ly/3dt341c*

Structured products are lost in translation post-Libor

Shifting to a compounded risk-free rate would "fundamentally transform" popular rates structures, users fear. By Natasha Rega-Jones

Mistranslations can be costly. When HSBC rolled out its "Assume nothing" branding campaign globally in 2009, the motto awkwardly translated as "Do nothing" in a number of territories. The doomed tagline was soon scrapped in a fresh $10 million marketing blitz.

Similarly, a change of benchmark is threatening to transform a string of popular structured products into different investments. The switch from Libor to risk-free rates (RFRs) may even cause some structures to break down entirely.

"Libor transition essentially creates two problem categories of structured products: those where the product is still operationally viable but where there will be a fundamental transformation in the nature of the product and how it works, or those that stop working altogether," says Sebastien Girard, rates structurer at BNP Paribas.

Need to know

- As financial markets scramble to replace Libor with new risk-free rates before the end of 2021, the $250 billion structured products market is showing few signs of weaning itself off the dying benchmark.
- Switching to a compounded risk-free rate (RFR) turns vanilla structured products into more complicated exotic ones, with painful implications for pricing and hedging.
- More concerning, though, is the fact that some structures stop working altogether – as their forward-looking design is incompatible with backward-looking term rates.
- While traders believe forward-looking term versions of RFRs could solve the problem, the industry has yet to formally develop such rates, let alone agree on their use for structured products.

Libor is set to end after 2021 and dealers are issuing swaps, bonds and loans referencing alternative rates. But the $250 billion structured products market is stubbornly clinging to the ill-fated rate. Users are reluctant to embrace the rate change as it will make the structures harder to value and less effective as hedging tools, sources suggest.

"It's fair to say that the structured product market hasn't transitioned from Libor at all," says Vladimir Piterbarg, head of quantitative analytics at NatWest Markets. "People are still issuing notes linked to Libor that go beyond the transition deadline thinking that they'll just sort them out when the time comes."

The products in question are caps, floors and range accruals. The structures require a forward-looking rate, typically Libor. However, the overnight rates set to replace Libor are only available in backward-looking compounded versions. Linking caps and floors to a rate that is compounded in arrears converts the product into something more complex. Payout is now based on an average of a series of spot values, rather than a single spot rate at a future point.

Range accruals rely on knowing in advance what the forward rate is. A backward-looking compounded rate renders the product unusable. Term versions of the new replacement rates are in development but are not due for release until later this year – and maybe longer due to delays caused by the coronavirus pandemic. Creating term RFRs requires liquid swap markets, which are not yet mature enough in some countries.

"While term rates make sense conceptually, in practice it might take a while for that solution to be considered viable by both market participants and regulators," Girard says.

Floored design

Caps and floors protect investors against unwanted interest rate moves. In a typical cap, the investor receives payment when the underlying rate exceeds the strike price. Floors work the opposite way: payment is made when the underlying rate falls below the strike. In practice, a single cap is made up of a series of separate options known as caplets; likewise floors and floorlets.

Pricing models are built to work with a forward-looking rate such as Libor, which is available over set terms including one month, three months and six months. To price a structure, investors simply use the single Libor rate that corresponds to the required period of the option.

The rates earmarked to replace Libor are overnight fixings: the sterling overnight index average (Sonia) in the UK, the secured overnight financing rate (SOFR) in the US, and others. Three-month Sonia is calculated by averaging the daily compounded spot rates over the previous three months. The rate is backward-looking, which makes it ill-suited for products like caps and floors.

The new benchmark turns what was originally a vanilla European option into something closer to an exotic 'Asian' option – where the payout is based on an average of the daily spot values of the underlying rate over a set period of time, rather than the spot at a given point in time.

"You're fundamentally transforming the nature of the option," says BNP's Girard.

NatWest's Piterbarg says this change would require banks to update their pricing and calculation models, to allow options desks to handle the new exotic structures.

"Caps and floors are a vanilla option product priced using a flavour of Black-Scholes, but as soon as you introduce any sort of rate averaging it moves into exotic territory, which will often be dealt with by a different desk in the bank. So if European caps become Asian options, the vanilla options desks will need a new model in order to handle them," he says.

"Creating that new model involves a lot of work as the very nature of the product has changed," he adds.

The change in the nature of the product means it contains different risks as before, and therefore can't work as a hedge in the same way. For example, products that could previously be used to hedge European options – such as Eurodollar options – could no longer do so. Eurodollar options are based on Libor, which means a hedging mismatch with the new caps and floors.

"So, under Libor transition you can no longer simply buy a Eurodollar option and sell a caplet at zero cost and be fully hedged, because after transition those products become very different and stop being equivalent," says Piterbarg.

Similarly, products are likely to change in value as a result of the switch to RFRs, which could leave some investors and dealers out of pocket. The industry has yet to come up with a way to square up the winners and losers of the change, says a rates head at a European bank.

"How do you compensate for this value transfer? It's an almost intractable problem and one I haven't heard any guidance on from regulators so far," he says.

Valuation change is one thing. Wholesale failure of the structure is another. And that's the likely fate for range accruals after Libor transition.

Range accruals pay an enhanced coupon if the reference rate – in this case Libor – stays between an upper and lower level over a set time. The product relies on a forward-looking fixing to project the lending rate over a future period. Using a backward-looking rate like Sonia or SOFR would mean issuers are unable to calculate the coupon on the scheduled payment date.

"Some products are based on the very idea of having a rate which is fixed in advance and so literally don't make any sense if the underlying observation is a rate which fixes in arrears. You'd need to completely redesign those products or create entirely new products instead," says Adam Kurpiel, head of rates strategy at Societe Generale.

One suggested fix is to repaper the contracts to allow the coupon payment to be made three months later rather than upfront. Computationally, this would be a straightforward operation. In practice, though, wholesale renegotiation of contracts would be a long and tortuous process, as derivatives users found in the lead-up to the variation margin regime for non-cleared trades four years ago. Any value transfer from the benchmark switch would only complicate matters, experts say.

Term time

In the absence of any formal guidance from regulators, traders are calling for the use of forward-looking term versions of the new RFRs to ensure Libor-linked structured products continue to work.

"A forward-looking term rate would make everything easy because the fixing would be in advance like Libor, which would then make transition simple as it wouldn't require any major changes in terms of modelling or calculation," says SG's Kurpiel.

Regulators accept that forward-looking term versions of RFRs may be required for some cash products, in response to industry calls for the certainty of a rate that is known in advance. But the UK regulator has stressed that the use of such rates should be limited only to markets that cannot function with a backward-looking rate. In the UK, four data vendors are working on forward-looking term rates for Sonia. A workable version is due to be ready in the final quarter of this year.

In the US, regulators have released a backward-looking term SOFR, but a forward-looking version is not expected until 2021 – perilously close to the likely death of Libor at the end of the year.

"Hopefully once the scale of the problems with structured products becomes clear in people's minds then there'll be a realisation that term rates are the least bad solution to these problems, as if we can switch structured products to a term rate then a lot of these technical issues can be avoided," says NatWest's Piterbarg.

However, BNP's Girard points out that the use of term rates "isn't a no-brainer" as their availability ultimately relies on the existence of a significantly liquid underlying swaps market based on RFRs. Such a market is still a work in progress.

"Term RFRs make sense as a solution to these problems but the viability of that solution rests on a very liquid underlying RFR swap market, which is yet to be fully the case for certain RFRs," he says.

SG's Kurpiel agrees that the swaps market has yet to become fully liquid – highlighting that open interest in Sonia futures is still only around 2% compared to sterling Libor, while interest for SOFR is below 1% compared to dollar Libor. He adds that liquidity is still only concentrated at the front end of the curve.

Impetus for change

Dealers can afford to wait as long as client demand for Libor-linked structured products remains strong. Some instruments have a maturity of less than 12 months, such as Libor-linked reverse convertible notes – which pay a high coupon if the underlying equity does not significantly decline. Banks are content to continue issuing these short-tenor notes since the perception is that the product will have rolled off before Libor transition comes around.

For longer-dated products, issuers use disclaimers to explain that Libor transition may require a change of benchmark in future.

"[The contract] tells the clients that they're being sold a Libor-linked note and that Libor is expected to cease – at which point we'll have to go through a migration exercise on to alternative rates," says Hans-Peter Schoech, head of structured rates trading at Nomura.

Structured product clients are not pushing for benchmark change, dealers say. Without such pressure, issuers are likely to continue offering the same kinds of products as before.

"Thus far, we've only had one client come to us proactively and ask us what our thoughts are on the transition issues that exist for the structured product market, and how we intend to address it," says the global head of market structuring at the European bank. "So I think it's safe to say that we don't see much demand or pressure from clients to move to replacement benchmark rates as they're happy with the status quo."

Dealers are keen to head off any criticism over their perceived inactivity in hastening the switch by arguing that they are simply responding to well-informed client demand.

"When a client asks for a structure that is Libor-linked ... we're very careful to make sure we highlight what non-Libor alternatives are available and the reasons for them," says Joe Squires, regional deputy head of G10 rates at BNP Paribas. "At the end of the day, the significant majority of our clients are professional investors and so it's their choice as to what they want to trade. So as long as we've guided them to possibilities and risks associated with transition, we feel we've met our obligations." ■

Previously published on Risk.net

Libor trap lurks in 2021 US stress tests

Using the secured overnight financing rate, borrowing could boom and revenues collapse. By Robert Mackenzie Smith

As Libor's likely demise approaches, banks are fretting over how to model the adoption of replacement risk-free rates in next year's round of US regulatory stress tests.

During March's coronavirus-related economic shock, the spread between US dollar Libor and the secured overnight financing rate, SOFR, blew out. If a similar dislocation was applied in the 2021 stress test, banks would suffer a sudden drain in liquidity as borrowers tap into credit lines at rock-bottom rates. Meanwhile, an accompanying slump in lending revenue could force banks to hold more capital under the Comprehensive Capital Analysis and Review (CCAR).

"You could have less income and therefore have to hold more capital, but similarly your commercial lines could become a company's cheapest source of funding, increasing draws under times of stress," says David Lindenauer, treasurer at Citizens Bank.

CCAR is the Federal Reserve's annual appraisal of the capital adequacy of 34 bank holding companies with consolidated assets of more than $50 billion. Its companion for smaller lenders is DFAST, the Dodd-Frank Act Stress Test. Each consists of a regulator-set exam and an internal bank-run test.

CCAR examines banks over nine quarters, and the period for next year's test runs to March 31, 2023. Libor is predicted to die at the end of 2021, when regulators will no longer compel banks to submit rates to the benchmark-setting panel. This means next year's stress test will factor in five quarters during which US dollar Libor may no longer exist and SOFR is fully embedded into bank books.

Large banks, which on average have 25% of their balance sheet tied to Libor, are concerned about the effect on their net interest income from movements in underlying rates during a period of economic stress.

> "Banks don't know yet how bad this is going to be ... They are providing management overlays in their final outcomes as a result of the Libor transition, which are a rough first-order estimate of what the costs are going to be"
>
> A source at a risk management advisory firm

"Banks are starting to assess the impact of the transition risk on CCAR scenarios and infrastructure," says John Boyle, a senior manager at consultancy EY. "Banks are running scenarios based on assumptions of alternative reference rates and Libor exposures."

They have a lot of work to do. Most did not model the effects of benchmark transition in this year's stress test, which encompassed a single quarter of post-Libor activity. The tests were completed in April.

Some, though, included the effect of moving to SOFR in so-called 'management overlays'. These back-of-the-envelope scenarios had technology, accounting and legal costs linked to the transition running into the tens of millions. A source at a risk management advisory firm says he is aware of at least three banks using management overlay scenarios to account for Libor transition costs.

"It's an admission that banks don't know yet how bad this is going to be," he says. "They are providing management overlays in their final outcomes as a result of the Libor transition, which are a rough first-order estimate of what the costs are going to be."

On a different track

SOFR is based on overnight repo transactions backed by US government debt securities. In March, the Federal Reserve responded to the growing coronavirus crisis by pumping billions of extra liquidity into the market and slashing interest rates, causing SOFR to plummet. Libor also fell, but not as precipitously.

A bank using SOFR as the benchmark for a loan would have seen a 154 basis point decline in the rate between March 3 and 18. But the same loan fixed to one-month Libor would have decreased by only 60bp.

Banks won't issue loans linked to overnight SOFR, rather a term version of the rate. The rate dislocation was still evident, though. At the start of March, one-month SOFR was 23bp higher than one-month Libor, but the relationship inverted as one-month SOFR subsided to near zero (see figure 1).

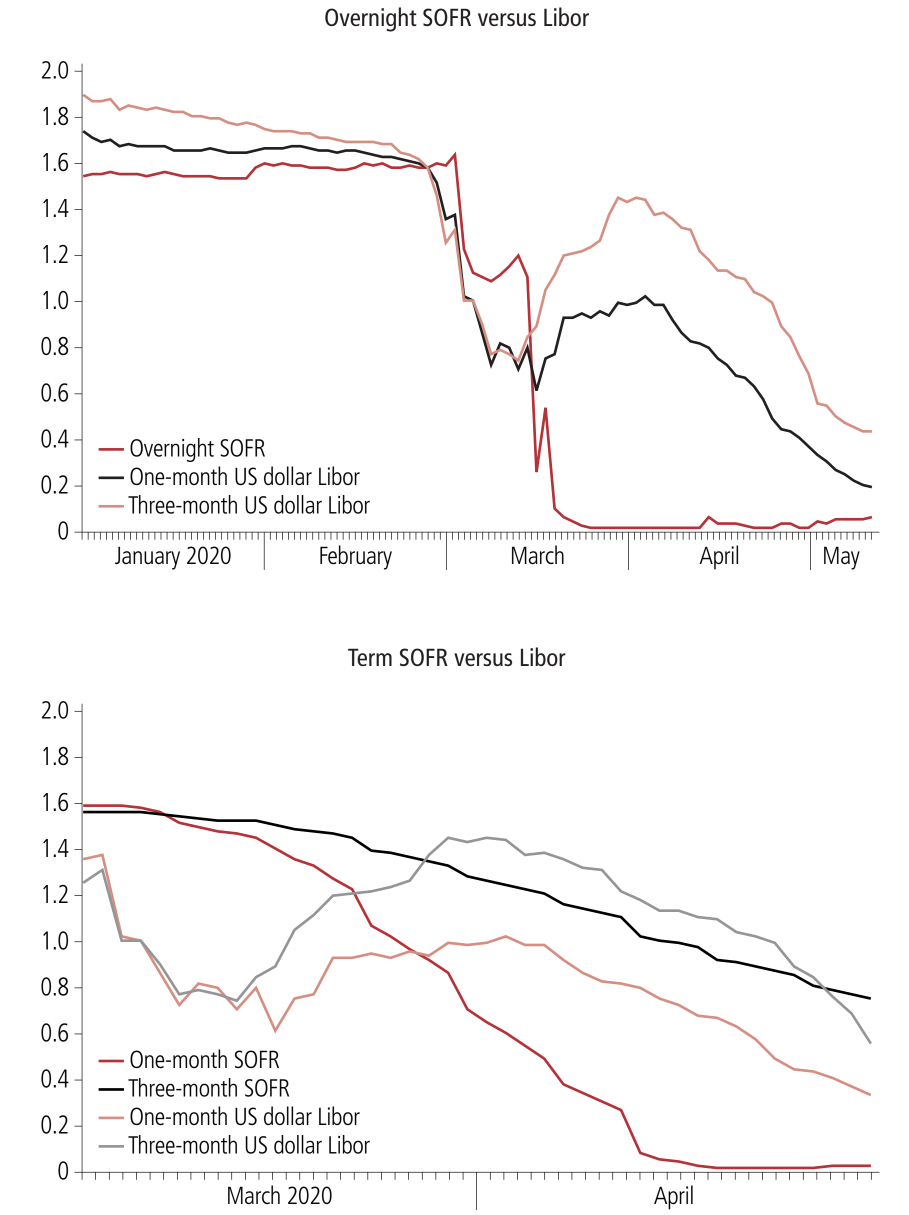
"Clearly SOFR changed far more than Libor in a short period," says Adam Schneider, a partner at Oliver Wyman's digital and banking practices in the Americas.

When liquidity dries up, as it did in March, companies turn to bank credit lines for cash. These loans are typically benchmarked to Libor, which tends to widen in such circumstances, but are due to move to SOFR once the former ceases to exist. Banks could end up lending more in a crisis, at smaller profits, or even a loss.

Data from Refinitiv shows $238 billion has been withdrawn globally from revolving credit facilities since the onset of Covid-19, compared to roughly $38 billion in 2008 and 2009, during the global financial crisis.

Initially, banks were worried such a scenario would factor into the Fed's own score it places on individual banks through CCAR. But in a speech last year, vice-chair for supervision Randal Quarles clarified that projections for net interest income use the yields on 10-year

1 SOFR versus Libor



Sources: Ice, New York Fed

Treasury bonds, three-month Treasury bills and the 10-year triple-B corporate bond as a benchmark, not US dollar Libor or SOFR.

"Given these mechanics, choosing to lend at SOFR rather than Libor will not result in lower projections of net interest income under stress in the stress-test calculations of the Federal Reserve," Quarles said at the time.

However, banks model the effect of fluctuations in the reference rate in their internal assessments. This means the difference between how Libor and SOFR react in a period of economic stress is a key metric in banks' tests.

"The relationship between the bank's CCAR model and the regulatory model in this case is unusual," says Schneider. "The banks understand how loans are priced, so in an adverse scenario when Libor is seen as going up, expected income will go up. At the same time, it seems clear the Fed uses a different mechanism to estimate bank earnings, and does not use Libor per se."

Regulators provide banks with standard sets of economic shocks to factor into their CCAR stress tests. In parallel, banks devise their own customised shocks to apply to future earnings for each business unit.

The customised shock scenarios are a particular cause of concern for some lenders. Switching to SOFR could hit pre-provision net revenue, or PPNR, which measures income from asset-liability spreads and non-trading fees.

"I've seen a couple of banks estimate they would have to assume higher draws on their unfunded revolving credit lines if they're linked to SOFR," says one benchmark expert. "In turn, they would assume less income and that would negatively impact their PPNR and hurt them within the context of their stress-testing. The only way they can mitigate their risk is by increasing their spreads and putting restrictions on unfunded lines."

Draw your revolver

Lindenauer says the draws on lines of credit during the peak of the crisis could have been worse if SOFR was used as the benchmark rate instead of US dollar Libor, since borrowers would have been more inclined to tap a line of credit with a lower interest rate.

"We saw unprecedented draws on commercial lines in the pandemic. In a couple of weeks, we saw draws that took nine months in the financial crisis to build. It could have been worse if the rate was SOFR," he says.

Representatives from a group of 10 regional banks, including Lindenauer at Citizens, sent a letter to US regulators last September outlining their concerns about linking credit lines to SOFR. Given its near risk-free nature, the new rate was likely to decline during periods of stress, when banks' cost of funding tends to rise, they pointed out. Lenders would see their earnings squeezed if customers tapped credit lines for liquidity in such a scenario.

Following a meeting with the 10 regional banks in February, US regulators agreed to establish a credit sensitivity group to look into ways of making SOFR more palatable for lenders – notably by adding a credit element to the benchmark. The new group is separate from the Alternative Reference Rates Committee, the main US steering group for benchmark reform.

Roy Choudury, partner at Boston Consulting Group, says adding an element of credit sensitivity to SOFR could help address funding and liquidity concerns.

"If you have a credit-sensitive index that is highly correlated with Libor, then that problem is kind of solved, which is why you have a number of regional banks that have been pushing for a credit sensitive index. That could be a solution to that problem," he says. ■

Previously published on Risk.net

IHS Markit plans SOFR credit spread add-on using CDS data

IHS Markit taps into vast pool of credit market data to create new benchmark "not dissimilar" to Libor. By Helen Bartholomew

Another benchmark provider is vying to put its own spin on the secured overnight financing rate (SOFR), the Federal Reserve's preferred US dollar Libor replacement.

IHS Markit is developing a dynamic credit spread that can be bolted on to SOFR for dollar loans, *Risk.net* has learned – adding a third player to a field that already includes Ameribor and the ICE Bank Yield Index.

According to four sources, Markit's new benchmark will be constructed using its huge pool of proprietary credit reference data, including credit default swap (CDS) and bond prices. Adding this dynamic credit spread to SOFR will produce a reference rate for loans that is "not dissimilar from Libor", says a source with knowledge of the project.

"They're the biggest provider of credit benchmarks, so it's natural for them to be involved," says a second source familiar with Markit's plans. "It's probably going to be a different methodology to others we've seen because they have that CDS data."

A spokesperson for IHS Markit confirmed the company is "assessing the market need for this type of index" but declined to comment further.

Markit's move comes amid growing concerns about the suitability of SOFR as a benchmark for loans. In a 2019 letter to regulators, a group of 10 US regional banks warned the new rate's lack of credit sensitivity "will adversely affect credit availability" in periods of stress.

Interest paid on SOFR-linked loans could decline during such times, the banks argued, while the cost of funding will increase.

In February, regulators including the Federal Reserve convened a new Credit Sensitivity Group to address those concerns.[1] After an initial meeting on February 25, the group's work was put on hold due to the coronavirus lockdowns, a Fed spokesperson confirmed.

The banks' worst fears played out in March, when the spread between three-month Libor and SOFR instruments surged to 130 basis points, up from just 12.5bp a month earlier. At the same time, large corporates including Boeing, Ford and United Airlines tapped revolving credit facilities for billions of dollars. If these lines had been pegged to SOFR, returns on the loans would have fallen below the cost of funding.

"There's a good level of demand for an additional credit component to add on top of SOFR," says the first source with knowledge of Markit's project. "Clearly the basis between US dollar Libor and SOFR is huge at the moment, so it's going to be interesting to see how that credit component discussion evolves."

Three's a crowd?

Markit is understood to be leaning heavily on its deep reservoir of CDS pricing data to construct its dynamic credit spread for SOFR loans. The firm collects over three million daily price quotes on more than 3,800 single-name CDS contracts for its CDX and iTraxx indexes.

Experts say Markit's financials sub-index could be used as a proxy for bank funding costs, with corporate CDS sectors potentially layered over SOFR to more accurately match loan rates to the implied credit risk of the borrower.

First, the firm must convince regulators and regional lenders that a CDS-based methodology is appropriate for a Main Street lending benchmark.

"If you look at who's driving the motivation for a supplemental spread, it's the US regional banks who are primarily servicing Main Street. A typical Main Street individual probably isn't too familiar with a CDS product, so communicating how such a rate is produced, in a way that's fair, consistent and reasonable, I think would be important," says Marcus Burnett, director of SOFR Academy, an education and training firm.

Ameribor and the ICE Bank Yield Index (BYI) are constructed from wholesale bank funding data. The BYI closely resembles Libor, particularly in shorter tenors. Published by the same firm responsible for Libor, ICE Benchmark Administration, it is built on much of the same data as the outgoing benchmark, including term deposits, commercial paper and certificates of deposit. However, the addition of secondary bond yields means the rate can spike higher than Libor in tenors from six months, as happened in March, according to a recent report from IBA.[2] The BYI can be used as an add-on to SOFR or as standalone rate.

Ameribor, or the American interbank overnight rate, tracks overnight rates at Cboe's American Financial Exchange, where 150 smaller regional US banks lend to each other.

Markit's entry makes it more likely multiple benchmarks and credit spread add-ons will be used alongside SOFR in the US loan market.

"Clients are viewing the multi-rate environment as a certainty and setting up systems with the option to add a spread," says Navin Rauniar, partner for Libor transition at consultancy TCS. "Because SOFR falls in a stress period, the marginal gains fall as well so need to cover your cost of capital and can only do that via a spread. What smaller players are looking for is simplicity in offering a rate to a client, so they are looking at additional rates such as Ameribor and BYI, while the bigger players push for SOFR as it's more familiar to them."

Ameribor's key selling point is that it is already compliant with the benchmark standards of the International Organization of Securities Commissions (Iosco). The rate is also understood to be under consideration by the Financial Accounting Standards Board for benchmark status – a crucial requirement for hedge accounting.

To be Iosco-compliant, benchmarks must be based on real transactions rather than "expert judgement" – the ultimate thorn in Libor's side.

The overnight loans used to calculate Ameribor see around $2 billion in daily volume.

With around $50 billion in contracts referencing the CDX investment grade index traded daily, according to data from the Depository Trust & Clearing Corporation, Markit's benchmark should easily clear this bar.

However, single-name CDS contracts can be illiquid when markets are stressed, and some worry the concentration of activity at a few large banks means a single player could unduly influence pricing.

"When you're looking at benchmark quality, you're first looking at the underlying volume of transactions and ensuring there's a sufficient amount of transactions going through. You're also ensuring that it's free from subjective judgement. With CDS, we know there are some big players out there, mainly large global investment banks, who may be able to influence pricing because they've got very big CDS books," says Burnett.

IBA has set a minimum volume target of $15 billion for the BYI, calculated on a rolling five-day basis. IBA says this was easily surpassed during the recent market turbulence. Over that period, Libor was based almost exclusively on expert judgement, according to the Bank of England's May Financial Stability Report.[3]

IBA aims to launch its benchmark officially in the second half of 2020, conditional on a sufficient number of banks providing primary market funding data to calculate the rate. Ameribor, which already lists weekly and quarterly futures on Cboe, plans to launch a one-month contract in June, from which the provider plans to build a forward-looking term structure. ■

Previously published on Risk.net

[1] *Federal Reserve Bank of New York (June 2020),* Transition from Libor – Credit sensitivity group workshops, *https://nyfed.org/2DDFEKx*
[2] *IBA (May 2020),* US dollar ICE bank yield index update, *https://bit.ly/2Zpo6dn*
[3] *BoE (May 2020), Interim financial stability report, https://bit.ly/2Oi3M7B*

RFRs hit Main Street as Swiss banks launch Saron mortgages

Negative rates ease path for compounded Saron home loans without lags or lookbacks. By Helen Bartholomew

Swiss retail is getting its first taste of alternative risk-free rates (RFRs) as banks begin offering mortgages tied to Saron – Libor's successor for Swiss franc markets. Raiffeisen Group, the country's largest retail mortgage lender, began offering its first home loans tied to the RFR on April 16, while small regional lender Glarner Kantonalbank introduced Saron 'rollover' mortgages in February.

It marks a significant step in scrubbing Libor exposure from lenders' balance sheets by the end of 2021, when the discredited rate will be left to die. Yet successful take-up in Switzerland, where base rates are negative and there is no requirement for interest changes to be flagged to borrowers in advance, may be tough to replicate in other jurisdictions such as the US, where regulators are eager to see adjustable-rate mortgages pegged to the secured overnight financing rate (SOFR).

Alongside the launch of mortgages linked to compounded averages of Switzerland's repo-based Libor replacement, Raiffeisen simultaneously ceased the sale of new Libor-linked retail mortgage products.

"We prioritised mortgages for Libor transition because that's the biggest item in the balance sheet and the exposure needs time to roll off. It's in parallel with a strategy to reduce net exposures from derivatives and other contracts before the end of 2021," says Fernando Fasciati, head of money markets at Raiffeisen's treasury and markets division in Zurich.

Floating rate products represent 20% of the Sfr1.01 trillion ($1.03 trillion) in outstanding Swiss mortgages, according to data from the Swiss National Bank, suggesting up to Sfr200 billion of the products are currently pegged to Swiss Libor.

Raiffeisen has a tight grip on the market with a 17.6% share and Sfr179.6 billion of mortgage loans on the group's balance sheet as of year-end 2018. Glarner Kantonalbank holds around Sfr5 billion of home loan assets.

Lenders face a variety of challenges when trying to entice retail clients into alternative overnight rates. Users are familiar with forward-looking Libor, where payment amounts are set at the start of each interest period. Compounded-in-arrears versions of overnight rates see the interest amount set at the end of the period, meaning a loss of visibility on payments. In other words, the borrower has less time in which they know the next interest payment, which is not permitted in some jurisdictions.

With no such prohibition under Swiss law, Raiffeisen opted for a pure, compounded Saron rate with no lag between the observation and interest periods. This is known as the "base-case scenario" under the Financial Stability Board's recommendations for RFR use in cash products.

In part, the structure reflects Switzerland's negative rate environment. The interest rate element in Swiss mortgages is floored at zero, meaning borrowers currently pay only the margin. Nevertheless, Glarner Kantonalbank's loans still include a five-day lookback to create some visibility.

Raiffeisen's Fasciati says that for a typical Saron mortgage the difference in interest amounts between a plain and a lag structure is "cents rather than francs" for a borrower, though a basis between lagged loans and their swap hedges can quickly add up for a large mortgage lender.

"We feel the pure rate is what clients want. We don't want to build in a mechanism that could require higher margin. When you're a bank with a lot of mortgages on the book, having consistency with the swap market is important and you want to avoid even a small basis of five days as it adds up," he says.

Given both Swiss franc Libor and Saron are negative, the zero floor applies to both. This means the bank offers the Saron loans with identical margin to Libor versions despite the RFR's absence of a funding spread, which is inherent in the legacy benchmark. If rates were to turn positive, this should see Saron borrowers pay lower rates compared to the comparable Libor product, as the RFR typically trades 8 to 9 basis points lower.

In such a scenario, however, the bank has not ruled out raising the margin on some new Saron loans to cover the increased funding cost.

"Even in a positive rate environment, we don't see margin changes for the existing client base. However, for new business the difference between Libor and Saron may play a role," says Fasciati.

Saron's same-day publication schedule makes the rate a more natural fit with the "base-case" option compared to other RFRs, which are typically published on a next-day basis. While compounding without lags typically means payment amounts are only known on the day they become due, Saron payments are known the day before.

UBS, which will begin offering Saron mortgages during the first half of this year, plans a similar structure, which it piloted via a Sfr25 million commercial real estate loan last November.

US conundrum

Mechanisms such as lags, lookbacks and lockouts, which start the observation period a number of days before the interest period or repeat a rate towards the end of the period for a set number of days, may not be appropriate in jurisdictions where longer notice periods are required – either by law or convention.

US retail loans require 45 days' notice for interest rate changes. An estimated 6.5% of the country's mortgages, representing $1 trillion, are currently tied to Libor.

To create visibility, the Alternative Reference Rates Committee, the Federal Reserve-backed group steering transition from US dollar Libor, recommends "in advance" rather than "in arrears" compounding for planned adjustable-rate mortgages linked to SOFR.

Compounding in advance would set the rate at the beginning of a six-month period by compounding the previous six months of data. Although rate inputs would be out of date, likely requiring shorter terms and additional rate caps, the method was described as the "only practicable mechanism" to offer the payment visibility for mortgages linked to SOFR.

Such a methodology clashes with in-arrears compounding used in the SOFR derivatives market, causing a particular headache for commercial mortgage borrowers, which may need to hedge their rate exposures with SOFR swaps.

"If derivatives head in a different direction from what the mortgage market needs from an operational standpoint, it's a major challenge," says Malcolm Montgomery, partner and head of the real estate practice at law firm Shearman & Sterling in New York.

"What the mortgage market can offer is inextricably tied to what derivatives can offer those same parties for their swap transactions. Even if you come up with a known-in-advance or forward-looking Libor-like replacement rate, if the derivatives market isn't there, you can't use it," he adds.

Although no US lenders are yet offering SOFR-linked retail loans, US Federal home loan banks have pledged that by the end of June they will stop entering into Libor-based transactions with maturities beyond December 31, 2021. Fannie Mae and Freddie Mac intend to stop accepting Libor-linked instruments altogether after 2020. ■

Previously published on Risk.net

[1] *FSB (June 2019)*, Overnight risk-free rates – A user's guide, *https://bit.ly/3ft4pqW*
[2] *ARRC (July 2019)*, Options for using SOFR in adjustable rate mortgages, *https://nyfed.org/3ekjucQ*

Lloyds and Riverside rehitch revolving loan to Sonia

£100 million Sonia facility overcame late operational hurdles to be among the first undertaken since the onset of the Covid-19 pandemic. By Rebekah Tunstead

UK bank Lloyds has switched a corporate client to Sonia-linked revolving credit facilities, overcoming interest rate volatility and remote working challenges to complete one of the first post-coronavirus deals of its kind.

While the virus slowed progress of the deal at the later stages, bankers say the trade offers little indication of whether the sterling loan market can shift to the overnight rate before a regulator-set deadline later this year.

The new £100 million ($125 million) five-year facility for UK social housing provider Riverside is linked to a backward-looking compounded Sonia rate. The facility, signed last week, was a renewal of a previous Libor-linked bilateral credit line.

Talks began in December, but the onset of the pandemic, which has forced many financial industry staff to work from home or at disaster recovery sites, slowed discussions as the deal neared completion.

"Most of us nowadays have remote capabilities and are well placed to work from home. It's physical things like getting signatures for documents that have become more of a challenge but ones that we are able to resolve," says Richard Meddelton, corporate and institutional coverage lead for Lloyds Banking Group's Ibor programme.

The deal took place amid wider market turmoil and changes in the spread between Sonia and sterling Libor. Three-month Libor was at 0.76% on February 3 before the crisis took hold, and three-month backward-looking compounded Sonia was at 0.71%, according to NatWest Markets' realised rate tool, a difference of just five basis points.

But with the Bank of England cutting rates to 0.1% on March 19, three-month Libor slipped to 0.66% on April 7, whereas three-month realised Sonia fell to 0.53% – a difference of 13bp.

The widening basis echoed concerns in the US about pegging revolving credit facilities to the secured overnight financing rate (SOFR), which is linked to US Treasuries. Lenders feared that a flight to quality in a stress scenario would push the rate down at a time when bank borrowing costs in the unsecured market have risen.

"If you look at the history, there's times when there has been an oscillation of rates. However, the client saw stability through Sonia, and it brought less volatility than we've seen elsewhere, especially in the last two months," says Meddelton.

Last November, the UK Financial Conduct Authority (FCA) said it was expecting new sterling loans to cease referencing Libor by the third quarter of 2020. That target remains in place.

And at the end of March, the Bank of England, the FCA and the industry Working Group on Sterling Risk-Free Rates reiterated that markets should not expect Libor to be published after 2021 despite the disruption brought about by Covid-19.

Riverside builds and manages social housing in the UK

Meddelton says it's unclear whether the ongoing situation will affect banks' ability to hit that target date.

"I think we need to take stock after Covid-19 and see what the impact has been. In a project of this size, the pandemic doesn't change things immediately, but we'll need to understand where all our customers are after Covid-19 which will drive our next steps as well as that of central authorities," he says.

Meddelton says clients are increasingly aware of the deadline and the need to explore Sonia as an option, noting that this week the bank has already received two new requests for Sonia-based facilities. But he admits some firms looking to renew their revolving facilities might take the easy route and stick with Libor, given the shift in priorities due to the virus.

"It's a case of balancing short-term versus long-term need," Meddelton says. "It's likely that the Libor transition will be back on the agenda when current uncertainty has been at least somewhat addressed. For example, many of the businesses we work with plan five-year funding cycles in which the old Libor linkage will no longer apply."

March also saw British American Tobacco sign a new £6 billion multi-currency revolving credit facility linked to Sonia and SOFR with 21 banks. Meddelton says there are other deals in the pipeline, with interest coming from large corporates.

"The trend we're seeing is that large corporates are already paying greater attention to Sonia. It's something that will build momentum over time, particularly once current emergency measures have been reduced. As you might expect, some conversations have had to be put on hold as companies look to get additional liquidity in place as quickly as possible," he says. ■

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