

Libor Transition

No please I insist, you go first



THINK Economic and Financial Analysis

25 February 2021



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Libor Transition

No please I insist, you go first

It's not easy taking a dive into the unknown. But like parachuters lined up for the jump, go we must. But when? There is no big bang moment here. A series of mini bangs maybe. The 25th Jan 2021, in effect, was one. Since then all new lbor-referenced derivatives glide towards fallback rates, with no going back.

The next key step will be fixing the spreads to help transition from existing lbors to fallbacks. We don't know when exactly, but it's due. Then those fixed spreads could be used to transition loans.

The sterling market is ahead of the pace. By the end of 2021 fallbacks will be live. It's complicated in the US, but there is an extension to mid-2023 for legacy product. Fewer issues in the eurozone, but it's all linked anyhow, as most players have multicurrency exposures.

We also pan well beyond the big traditional lbors. After all, this lbor reform process is a global thing.

Libor: It's not you, it's SOFR

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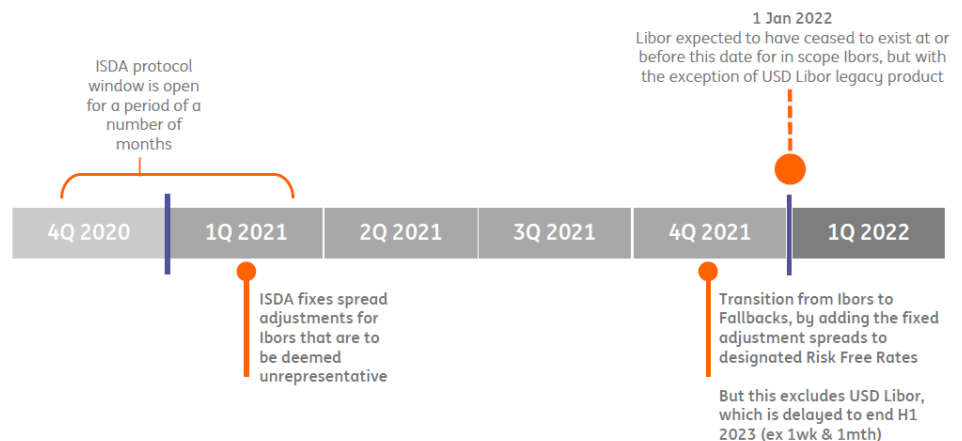
It's complicated in the US. SOFR is tried but not fully tested, as we enter what we consider to be a crucial second quarter during which volumes need to build. We see the focus on derivatives in 2Q and then on loans in 3Q. Either way, by 4Q we need to be at a place where new business is routinely being done referencing SOFR, or it could get messy. There's no looking back



New York's financial district

The fast track to fallback rates is here and now - all new derivatives business falls back to risk free rates in arrears (plus the - to be decided - fixed spread)

Timeline for Derivatives through 2021



Source: ISDA, FCA, ING estimates

25 Jan

Key date
All new libor derivatives morph to fallbacks

Since 25 January 2021, all new derivative contracts that reference libors will transition to ISDA fallback rates, once/if those libors cease to exist. At the same time, the ISDA protocol window remains open, so that derivative trades referencing libors set before this

date (all legacy contracts) can receive the same treatment. For corporate liability managers looking for an efficient route from pre-libors to post-libors, this presents a clear solution.

“new derivative contracts that reference libors will transition to ISDA fallback rates, once those libors cease to exist”

There are two key nuances to be aware of though:

The fallback rates themselves are set in arrears, as they are calculated as the risk-free rate plus a fixed spread (the 5yr median of it). The spread by definition is fixed, so the arrears characterisation comes from the risk-free rate.

Some sizeable gaps continue to exist between the risk-free rates and the respective fallback rates. For example, USD 3mth Libor is now at sub-20bp while the 3mth USD fallback rate is at 34bp; in excess of a 15bp differential (currently).

On the first point, this is an area of contention if the swap is an overlay to a loan where the rate is set in advance, as it would be when referencing 3mth USD Libor plus a credit spread. On the second point, any differential between the libor rate and the fallback rate is netted out, to the extent that the same spread is applied to the underlying loan.

The SOFR to Libor spread to be fixed is at 26bp, but does drift lower slowly. The option to wait is tempting, but better to fix sooner rather than later

When we look at 3mth USD Libor specifically, we find that the historical median spread is currently at 26bp (over and above the comparable SOFR). That spread, along with all other applicable risk-free to libor spreads, is due to be fixed at any time. There was never a specific date set, but consultation is complete, and all is in place to have the spreads fixed.

26bp SOFR to 3mth Libor
Latest 5yr median value

The advantage of delaying the fixing of the SOFR to 3mth Libor spread is that it slowly eases lower as we progress over the coming months. We know this as it is calculated as a 5yr median, and so we have most of the applicable data. But also, we know with reasonable certainty where SOFR will trade in the coming months (as the Federal Reserve has the funds rate on hold at least through to 2023, or so they say.)

Delaying the fixing of the SOFR to 3mth Libor spread could see the fixed spread fall to the low 20bp area if we wait long enough. That would reduce the noise around the differential between the market spread and the fixed spread.

“We can't wait too long”

If the SOFR to Libor spread is fixed today it would be 26bp. Waiting would allow the spread to drift lower. Better to fix early, and get that information set and in the market

At the same time, we can't wait for too long. This is because all spreads are likely to be fixed at the same time when the end to the respective Libors is officially announced. For the likes of GBP Libor, this needs to be well before the end of 2021, as that is when GBP

Libor ceases to exist. Even though USD Libor continues through to mid-2023 for legacy product, the spread is likely to be fixed at the same time.

So for example, should the SOFR to 3mth Libor spread be fixed at 26bp, that would be a sensible spread to also apply to loans, especially those that are overlaid with derivatives that will come under ISDA-style fallback rate treatment.

All things considered, it likely makes sense to bite the bullet and fix the spread(s) early.

Accepting the move to fallback rates is the efficient solution for legacy derivatives. The "gap" is less of an issue for longer tenors, but still, it's there.

Any contention on the size of the spread (currently 26bp) is far lower for longer tenors. So for example, the market spread between SOFR and Libor is just 15bp for a 3yr tenor – quite a difference from a fixed 26bp. But the market spread for a 10yr tenor is 22bp, and 24bp for a 30yr tenor. These are much closer to a potential fix at 26bp.

For players that execute derivatives referencing USD 3mth Libor today (and since 25 January), these are the terms that are being signed up to - there is no choice in the matter. An alternative is to execute new business in SOFR or fed funds referenced swaps.

“For players that have legacy positions, there is a choice”

For players holding Libor referenced derivative legacy positions who don't sign up to the ISDA protocol, such positions could be marked to market, while simultaneously setting a new trade with a non-Libor reference.

Or, something else. But that “something else” needs to be sorted well before mid-2023 (when the ability to reference legacy product to USD Libor comes to an end).

Separately, the LCH has been working on plans to actively convert LIBOR swaps to market-standard OIS (i.e. payment delay convention) ahead of the LIBOR fallback trigger event (which is likely to be 31 Dec 2021 for EUR, CHF, JPY, GBP LIBOR as well as 1w and 2m USD LIBOR). It proposes that a spread be added to the floating legs of RFR swaps (the cash settlement option was not supported). From the legal/operational perspective, they have not yet made any decision on how the conversion would happen. The conversion date is not set yet but is expected to be shortly before LIBOR's cessation date.

For loans, the big issue is when will we get forward rates (or indeed whether we will get forward rates in time)?

When we switch our focus to the loans market, we find there is no equivalent fast track route to fallback rates. Existing Libor denominated loans can be left as is through to mid-2023, but from then onwards an alternative to the Libor reference needs to be in place, and conversations on how to make that happen clearly need to have happened well ahead of this. The delay to mid-2023 means that such conversations can start in 2021, but should really be crystallised in 2022. Waiting till 2023 is leaving it too tight, likely making hedging increasingly difficult.

There is an additional twist here - not insignificant rumps of the loans market are uncomfortable with the in-arrears computation. In many cases, systems are not set up this way, and instead require a forward-looking discount calculation, one that would come from an "in-advance" calculation (just as Libor is computed and dealt with today). Where there is no forward rate available, the preference is for a simple averaging calculation of the overnight SOFR rates looking back over the period in question, so "in

arrears". This so-called waterfall approach still has forward rates as the ultimate preferred methodology that would be used as soon as they become available.

“The 1mth and 3mth futures contracts should help to map out term rate to the benchmark 3mths point. Beyond that, cash volumes are really needed.”

We know that the provision of Term (in-advance) SOFR rates are in the works; we await the outcome of a request for proposal process on this. The calculation itself is not the issue. Rather the robustness of the calculation is, and that is down to having suitable volumes, and as a second round, having suitably actionable quotes to help add shadow volumes to actual ones.

And it is not that these are shots in the dark, as there is already a functioning SOFR futures market, which by implication maps out implied term rates. The issue remains one of getting enough volumes in those futures, and ideally enough volumes in benchmark cash markets tenors. The 1mth and 3mth futures contracts should help to map out the term rate to 3 months. Beyond that, cash volumes are really needed.

Our baseline view is that volumes build through 2Q 2021. By that time the ISDA derived spreads should have been fixed, and significant moral suasion will be brought to bear on market participants to have conversations in SOFR terms rather than in Libor ones. A simultaneous build in volumes can happen quite quickly. But if volumes don't build, the process will run into difficulties, even facing the risk of further delay, as segments of the loans market will want term rates.

If there are no term rates, then the simple average in arrears would have to suffice, but with a sense of unhelpful frustration. That said, for the vast majority of sophisticated wholesale accounts, rates set in arrears calculated as simple averages will work, and will be hedgeable with minimal basis risk against swaps set compounded in arrears.

Transition for loans and key dates in the months and quarters ahead

There is an important sequence of events ahead for USA loans, and it starts with treatment for derivatives. First, the ICE Benchmark Administration (IBA) will announce cessation dates for all Libor currencies, including USD Libor. At that point, a spread adjustment fixing date would occur, which would fix all spreads from risk-free rates to respective Libor rates, including SOFR to 3mth Libor (now at 26bp). These spreads would also be the Alternative Reference Rates Committee (ARRC) recommendation to be applied to transform non-consumer cash loans from Libors to fallback rates (SOFR plus the fixed spread).

“No new USD Libor linked loans is the target from mid-year 2021 onwards.”

Note that this is an ARRC recommendation, not a directive, but a sensible one all the same that will likely be widely applied. In most cases, the new rates would be calculated as the applicable fixed spread (fixed by definition) plus the variable SOFR rate, most likely calculated as an average of the daily rates over the period in question. This would be calculated in arrears. A decent rump of players would see this as sub-optimal, preferring

instead the fixed spread plus SOFR set in advance over the period in question. For this, we'd need term rates.

For new loans, the ARRC has laid out a preferred timeline. No new USD Libor linked loans is the target from 30 June 2021 onwards (including CLOs from September). Success on this front requires 2Q 2021 to be a big quarter, where the beginnings of non-Libor linked product should come to the fore. From 31 March onwards, derivative trades should be quoted in SOFR, and not in Libor. Again that points to 2Q 2021 being the key quarter for new product. The main issue here will be reluctance from players holding out for term SOFR, which risks pushing a lot of new SOFR-linked into 3Q.

Provided there has been a decent build in SOFR-linked volume before we get to 4Q, that will be a tolerable set of circumstances. If we were to enter 4Q without having made that prior pivotal switch from critical mass Libor to SOFR-linked product, then we'd face quite a difficult and potentially destabilising transition.

That's not our base case, but one that needs to be carefully guarded against by making a good strong start through 2Q, and a solid build through 3Q. A simultaneous acceleration in volumes over a short period would work best, making for a quick and far less painful transition.

Libor: Sonia, proceed as planned

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The sterling market is making the most progress in weaning itself off Libor. Transitioning loans is a particular challenge and approaching target dates make it an important case study for other jurisdictions. Term Sonia rates are now live but the jury's still out on which one will become market standard



A woman looks toward's London's financial district

Sterling markets showing the way

2021 is shaping up to be a decisive year in the Libor transition. Sterling markets are no exception. The working group (WG) on sterling risk-free reference rates has maintained a [number of targets](#) this year for linear and non-linear products, which you can see in the table below, They should all but seal the fate of most GBP Libor-referencing products.

2021 sterling Libor product targets

Exposure	Product	Q1	Q2	Q3	Q4
New	Linear derivatives	Cease initiation of all Libor-referencing products			
	Bonds/securitisations				
	Loans				
	Non-linear derivatives		Cease initiation		
	Cross currency		Cease initiation of cross currency derivatives with a GBP		Be fully prepared for the end of Libor in Q4 2021
Existing	Linear derivatives	Identify legacy Libor contracts and accelerate conversion	Progress active conversion of all legacy contracts		
	Bonds/securitisations			Complete active conversion	
	Loans				
	Non-linear derivatives				
	Cross currency				

Source: Working group on sterling risk-free reference rates, ING

Tight deadlines on loans

One key challenge in the libor transition has been the speed at which the loan market can switch to using the new alternative Risk-FreeRates. With its near-term deadlines, the

sterling loan market will no doubt be closely watched by market participants across multiple jurisdictions.

“By the end of Q1 2021, the issuance of Libor-linked loans expiring after end-2021 must cease.”

In accordance with the WG's roadmap, lenders should be in a position to offer non-Libor alternatives from the beginning of Q4 2020 and to include contractual conversion mechanisms to alternative RFRs in any new Libor-referencing loans. By the end of Q1 2021, the issuance of GBP Libor-linked loans expiring after the end of 2021 must cease. An important milestone has been reached since Q3 2020 and the publication of exposure drafts by the Loan Market Association (LMA), allowing for a more standardised approach.

After that date, the Bank of England's [schedule of haircuts](#) on Libor-linked collateral start to apply: 10% from 1st April 1st 2021, rising to 40% on 1st September 2021, and to 100% on the final day of the year. This, however, is only directly relevant for firms participating in the BOE's monetary operations.

According to the [indicative timeline](#) published by the WG's loan enablers taskforce, the final stretch to the Q1 2021 deadline should be dedicated to system readiness to cope with the new conventions. And indeed, [the minutes of the December 2020 WG meeting](#) stress that the lack of system readiness is one factor holding back syndicated deals. As a result, and as international lenders are more focused on the transition in the USD market, according to the UK Finance Lender Readiness Survey, more progress was noted in the bilateral loan market.

Loan conventions

The Working Group has repeated that it expects Sonia compounded in arrears to become the standard for wholesale products, irrespective of a Term Sonia Reference rates (TSRR) being available since early 2021, and we'll look at that in a moment. The convention retained by the WG is for Sonia compounded in arrears with a 5 banking days lookback but without observational shift.

From the details of the [transaction reported by the LMA](#), there appears to be a clear preference for using the WG's preferred RFR convention, encouragingly.

Of [the two methods identified by the WG](#) to calculate credit adjustment spreads (CAS) in converting Libor loans to Sonia, the five-year median approach is the most consistent with the ISDA's methodology for derivative fallbacks. It is also the approach taken in many of the LMA's reported transactions.

Numerous factors are in play

As you'd expect, the majority of the new transactions referencing alternative RFR, containing a switch to alternative RFR or amendment of legacy loans to reference alternative RFR, was in sterling. It is hard to distinguish in the Loan Market Association list of relevant transactions a clear acceleration in the fourth quarter of 2020, however.

There are a number of factors in play here. Firstly, not all transactions are reported by the LMA. Secondly, of the two possible approaches available to counterparties, where either the complete provisions are already included and the switch occurs at the borrower's request, or a rendezvous clauses where the detailed provisions still have to be agreed closer to the switch-date, and lenders' consent is also necessary; we think the former is gaining in popularity.

“The pipeline suggests a greater number of transactions referencing RFRs in the near future.”

We cannot exclude a degree of caution from borrowers as well. For instance, on facilities where the main currency of borrowing is EUR, while USD and GBP are optional currencies, it is sometimes simpler for the borrower to drop the optional currencies. Nevertheless, we see reasons for optimism. These transactions can have a long lead time and the pipeline suggests a greater number of transactions referencing RFRs in the near future.

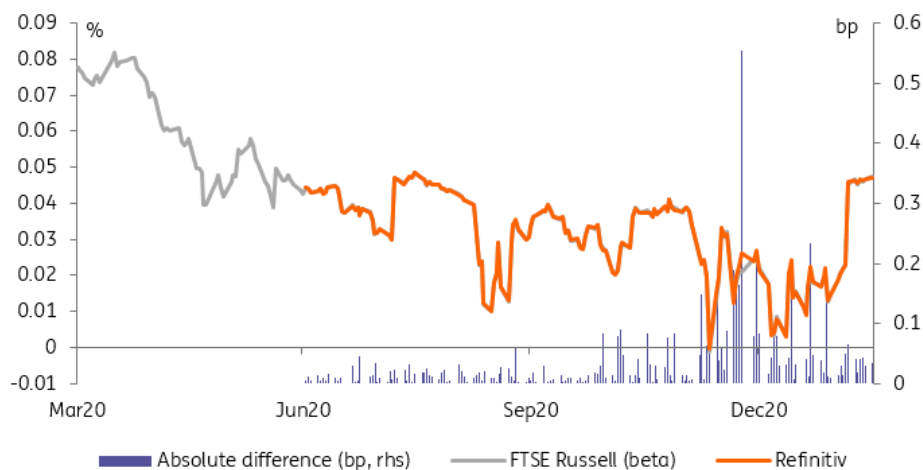
Term Sonia: and the winner is...still unknown

Another milestone is the publication of the forward-looking term Sonia (TSRR) by two index providers, IBA and Refinitiv. These were approved for use on 11 January 2021. The conceptual differences between TSRR methodologies ([summarised here](#)) are limited in our opinion. Broadly, all rely on a myriad of contributions using primarily interdealer broker overnight index swaps (OIS) quotes and then relying on other data such as dealer to client quotes, and/or futures.

“The conceptual differences between TSRR methodologies are limited.”

The WG has repeatedly said that the preferred alternative to Libor for wholesale markets is the backwards-looking Sonia compounded in arrears, so the introduction of Term Sonia should be a development mostly relevant for smaller types of borrowers in the loan markets, such as [SME, retail, and wealth clients](#) as well as for products that are offered on a discount basis (such as discounted trade finance products). A transparency draft of the proposed market standard for limited use of TSRR is due to be published in Q1 2021 by the [FICC Market Standards Board](#), taking into account financial stability and conduct risk considerations.

The conceptual differences between TSRR methodologies are limited



Source: Refinitiv, FTSE Russell, ING

“We do see a benefit in the market building a critical mass in one TSRR”

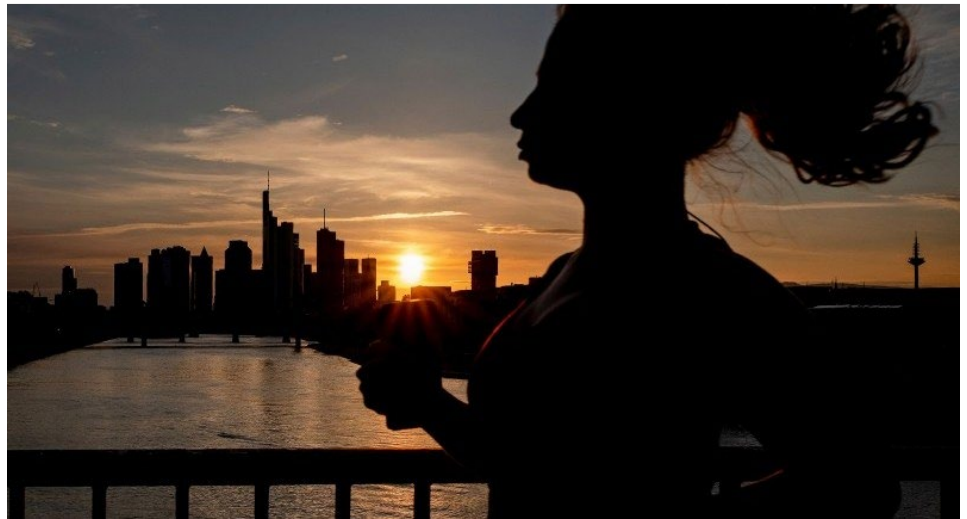
The question of which one of the above term Sonia becomes market standard remains open. We do however see the benefit in the market of building critical mass in one of them, rather than remaining fragmented between TSRR alternatives. One reason is that it would benefit the emergence of a basis market to hedge backwards-looking and forward-looking (TSRR) risks. But, in light of the limited differences between them, we suspect the Term Sonia benchmark which gathers the most interest at the start will stand the best chance.

Euribor and a global IBOR overview

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Euribor will continue, but the quest to find appropriate fallbacks for cash products is still underway. There is a desire for forward-looking euro short-term-rates as a fallback for some products, but that hinges on the development of the OIS market. We also provide a broader overview of benchmark reform developments beyond the major Ibors



Frankfurt's skyline

Euribor stays, but work on required fallbacks continues

The Euribor has been fully reformed to comply with the regulatory requirements of a critical benchmark. There are no plans to discontinue Euribor. However, that does not imply all work is done in the Eurozone. One remaining issue is that even if a benchmark continues to exist, the regulation still requires that contracts and instruments referencing a benchmark need to incorporate fallback provisions.

“Regulation still requires that contracts and instruments referencing a benchmark need to incorporate fallback provisions”

This week the working group released the responses to the public consultation on a) [the events that would trigger the fallback](#), and b) [the €STR based fall back rates to be used in cash products](#). It was acknowledged that the

ISDA IBOR Fallbacks Supplement to the 2006 ISDA Definitions and the IBOR Fallbacks Protocol covers the derivatives.

While a backwards-looking compound €STR will be the ultimate backstop in all cases, for some asset classes there is still a desire to have a forward-looking term €STR as a first fallback instance within a waterfall structure, such as for retail mortgages, consumer and SME loans or trade and export financing products.

Being able to meet the desire for a forward-looking term benchmark hinges on the further development of the €STR OIS market. For all practical purposes, EONIA OIS and €STR OIS already represent the same underlying market given the linear link between the two fixings ($EONIA = \text{€STR} + 8.5\text{bp}$). Still, the final transition to €STR has yet to occur. Once also the €STR-linked EONIA is discontinued at the start of 2022 the expectation is that market activity will fully consolidate in the €STR based OIS.

“Being able to meet the desire for a forward looking term benchmark hinges on the further development of the €STR OIS market”

However, some question marks remain surrounding whether the required level of robustness for a forward-looking term €STR benchmark can be achieved. As has been stressed at the working group meetings, it remained to be seen whether the current

liquidity of the OIS market (EONIA and €STR) was sufficient for the calculation of a term rate and whether a methodology based on committed OIS quotes would perform well in periods of market stress.

ECB representatives also expressed concern regarding the high level of concentration observed in the OIS markets. Concentration makes a benchmark more susceptible to the behaviour of individual agents.

A [study](#) from 2019 showed strong concentration in terms of counterparties as well as countries out of which participating banks operate. Based on the ECB’s money market statistical reporting data set covering 2018, France accounted for 62% of all reported volumes, followed by Germany with 20%. In terms of counterparty concentration data showed that the ten most active banks represented more than 75% of market turnover.

Overview of the global benchmark landscape

We have covered the major USD and GBP Libors impacted directly by the FCA regulation in previous sections.

Among the other majors, **Japan’s** JPY Libor will also require a transition as it is also anticipated to be discontinued by the end of this year. For some cash instruments such as loans, the domestically used TIBOR benchmark could still find use as a fallback in a waterfall structure ahead of the designated uncollateralised TONA RFR. This multiple-rate approach differs from **Switzerland** which has taken the hard line of discontinuing CHF Libor and requiring a full transition to the secured SARON RFR.

In the **Eurozone**, EUR Libor will come to an end, but it is only a niche benchmark. The main Euribor benchmark will still be around.

Currency	IBOR rate	RFR/ARR	Administrator	Type	Remarks
USD	USD LIBOR	SOFR	NY Fed	secured	Transition necessary
GBP	GBP LIBOR	SONIA	Bank of England	unsecured	Transition necessary
EUR	EUR LIBOR	€STR (EUR Short Term Rate)	ECB	unsecured	Transition necessary
EUR	EURIBOR	€STR (EUR Short Term Rate)	ECB	unsecured	Multiple-rate approach
JPY	JPY LIBOR	TONA	Bank of Japan	unsecured	Transition is necessary
JPY	TIBOR	TONA	Bank of Japan	unsecured	Multiple-rate approach possible
JPY	Euroyen TIBOR	TONA	Bank of Japan	unsecured	Future consolidation with TIBOR anticipated
CHF	CHF LIBOR	SARON (Swiss Average Rate Overnight)	SIX Swiss Exchange	secured	Transition necessary

Source: Benchmark administrators, ING

In the following sections we provide an overview of the benchmark landscape beyond the majors.

Overview of libors in the Americas

In the Americas outside the US, **Canada** has chosen a multiple-rate approach letting a reformed CDOR exist next to the collateralised CORRA RFR, although the ambition is to have the latter dominate. Note that the 6-month and 12-month CDOR tenors will be discontinued this May.

Mexico also plans to follow a multiple-rate approach by retaining a strengthened interbank TIIE rate and replacing the shortest tenor with the new collateralised Overnight TIIE RFR. **Brazil** has started a review of the collateralised Selic to ensure its IOSCO compliance. It is already a default fallback of the DI rate which serves as underlying for futures contracts. Based on the latter Term DIs are considered, but also backwards-looking term RFR are being explored.

Currency	IBOR rate	RFR/ARR	Administrator	Type	Remarks
CAD	CDOR	CORRA (Can. O/N Repo Rate Average)	Bank of Canada	secured	Multiple-rate approach
BRL	DI rate	Selic	Central Bank of Brazil	secured	Multiple-rate approach
MXN	TIIE	O/N TIIE (Interbank Equilibrium Interest Rate)	Banco de México	secured	Multiple-rate approach

Source: Benchmark administrators, FSB, ING

Overview of Scandinavian Ibors

Scandinavia has or at least plans to follow a multiple-rate approach by keeping the known Ibors.

Norway's NIBOR was reformed in 2019 and fallback solutions using Nowa RFR are being worked on. **Denmark's** CIBOR was strengthened in 2019 and Denmark's Nationalbank is working on DESTR as an unsecured RFR set to be launched at the beginning of 2022 with aims to transition from the current 'Tom/Next' short-term reference rate.

After a review of its STIBOR, **Sweden** is anticipating a seamless transition to an adjusted STIBOR benchmark after consultations this year. The Riksbank has launched a six-month testing phase for SWESTR last month, the future designated unsecured RFR that will replace the shortest STIBOR tenor (t/n).

Currency	IBOR rate	RFR/ARR	Administrator	Type	Remarks
DKK	CIBOR	DESTR (Denmark Short-Term Rate)	Danmarks Nationalbank	unsecured	Multiple-rate approach foreseen
NOK	NIBOR	NOWA (Nor. O/N Weighted Average)	Norges Bank	unsecured	Multiple-rate approach
SEK	STIBOR	SWESTR (Sw. Krona Short Term Rate)	Riksbank	unsecured	Multiple-rate approach foreseen

Source: Benchmark administrators, ING

Overview of EMEA Ibors

In central Europe, **Poland** has reformed its WIBOR and is considering using the existing WIBON as a fallback in the context of EU BMR. In many places, benchmark reforms have yet to kick off in earnest, although discontinuation of existing Ibors is also not foreseen. Alternative rates have not yet been designated but there are existing short term rates that could potentially be used.

In the wider region, **Israel** is seen sticking to TELBOR (based on quoted o/n rates) for now but is exploring ways to fully adapt to global benchmark standards. **Turkey** pursues to follow global timelines in discontinuing TRLIBOR and transitioning to the collateralised TLREF RFR which has already been widely adopted, including functioning derivatives markets.

South Africa eyes longer-term plans of discontinuing JIBAR. It has identified a set of RFR candidates in a first step but does not exclude the RFR could coexist alongside a new risk-based term rate.

Currency	IBOR rate	RFR/ARR	Administrator	Type	Remarks
CZK	PRIBOR	to be identified (existing CZEONIA)	-	-	No discontinuation foreseen
HUF	BUBOR	to be identified (existing HUFONIA)	-	-	No discontinuation foreseen
PLN	WIBOR	to be identified (existing WIBON)	-	-	No discontinuation foreseen
RUB	MosPrimeRate	RUONIA	Bank of Russia	unsecured	Multiple-rate approach
ILS	TELBOR	-	-	-	No discontinuation foreseen
TRY	TRLIBOR	TLREF	Borsa Istanbul	secured	Transition necessary
ZAR	JIBAR	to be identified: ZARONIA (reformed SABOR), ZASFR (Secured O/N Financing Rate), ZARIBOR (Interbank O/N Rate)	South African Reserve Bank	-	Future transition envisaged, the key overnight RFR may or may not co-exist alongside a risk-based term rate

Source: Benchmark administrators, ING

Overview of APAC Ibors

Developed markets are taking the lead in the APAC benchmark reform process.

Australia has domestically adopted a multiple-rate approach, keeping a reformed BBSW rate (the Ibor) alongside the interbank overnight cash rate (AONIA) as RFR. For some

tenors, it is assumed that the RFRs may be more suitable, and the global transition may also lead to a corresponding migration away from the BBSW. **New Zealand** also keeps its lbor, the BKBM and the compounded Official Cash Rate (NZONIA) will serve as a fallback, but the intention is to develop an RFR and develop a term structure.

A multiple-rate approach is a way forward in **Hong Kong**, with an unsecured HONIA as the RFR. Singapore is replacing the SOR rate, which has USD Libor as an input, with the unsecured SORA. This will eventually also replace the SIBOR, a benchmark mainly used in retail and by SMEs. **Thailand** faces a similar issue with THBFX which uses USD Libor as input. It will be replaced by the THOR repo rate, although a THBFX fallback calculated from USD Libor SOFR fallback will be available for legacy contracts. Despite its drawbacks, BIBOR is maintained as a forward-looking term rate. Early in its planning, **India** also faces the issue of USD Libor dependency of its MIFOR rate which will need to be transitioned. The same goes for the **Philippines'** PHIREF, but the stated aim is to retain the local benchmark rates.

Currency	IBOR rate	RFR/ARR	Administrator	Type	Remarks
AUD	BBSW	AONIA (Interbank O/N Cash Rate)	Reserve Bank of Australia	unsecured	Multiple-rate approach
HKD	HIBOR	HONIA (HKD O/N Index Average)	Treasury Markets Association	unsecured	Multiple-rate approach
IDR	JIBOR	IndONIA	Bank of Indonesia	unsecured	Multiple-rate approach near term
INR	MIFOR (FX based)	to be identified, adjusted MIFOR (SOFR based to keep link to INR in absence of XCCY)			Transition necessary
KRW	KORIBOR	to be identified	-		Multiple-rate approach foreseen
KRW	CD RATE	to be identified	-		Multiple-rate approach foreseen
MYR	KLIBOR	to be identified	-		Multiple-rate approach foreseen
NZD	BKBM	(NZONIA / OCR (Official Cash Rate))	Reserve Bank of NZ	-	Multiple-rate approach foreseen
PHP	PHIREF (FX based)	to be identified	-		Transition necessary, aim is to retain local benchmarks
SGD	SOR (FX based)	SORA (Singapore O/N Rate Average)	MAS	unsecured	Transition necessary
SGD	SIBOR	SORA (Singapore O/N Rate Average)	MAS	unsecured	Transition necessary, rate mainly used retail and SMEs
THB	THBFX (FX based)	THOR (Thai Overnight Repurchase Rate)	Bank of Thailand	secured	Transition necessary
THB	BIBOR	THOR (Thai Overnight Repurchase Rate)	Bank of Thailand	secured	Multiple-rate approach foreseen

Source: Benchmark administrators, ING

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