Rates Strategy

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Libor reform

Spread, Fallbacks and Discounting changes

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Transition decision – Stop gap

The ISDA protocol is imminent ...and is hugely important. We examine the pros and cons, pitfalls and, ultimately, the reasons for sign-up. There are also some key nuances to be aware of, like Fallbacks being calculated in arrears, complications given USD Libor transitions but EURIBOR does not, and ongoing gaps between the Ibors and Fallbacks.

SOFR discounting – Auction action

SOFR discounting is up next as a key technical switch for centrally cleared trades. The basis is complex as it varies by maturity, and over time (not fixed as in EONIA to ESTER switch). A smart auctioning system is in play where choices can be made on dealing with valuation shifts. Here, a simple in and out strategy works fine.

Transition decision – Stop gap

- **The ISDA IBOR protocol is imminent, and it is hugely important. A strong take-up is key for a successful transition away from Ibors. There are good reasons to sign up, as it provides an efficient means to incorporate Fallback provisions into numerous documents referencing Ibors, the result of wide-ranging consultations.**
- **These Fallback rates are not simply the new Risk Free Rates. They can't be, as the economics surrounding the switch from Ibors to Fallbacks should be broadly neutral. So the Fallback rates are intended to represent the Ibors as best as possible. They are calculated as Risk Free Rates plus suitable spread adjustments.**
- **These spread adjustments will ultimately be fixed, coinciding with a pre-cessation statement that deems specific Ibors as unrepresentative at a certain point. Note that the spreads may be fixed well in advance of transition to Fallbacks, potentially spanning a number of months or a couple of quarters.**
- **The fixed spread adjustments will be useful information for all types of products that will be looking for a sensible spread with which to translate legacy Libor production to suitably replicate rates with minimal economic displacement. The early fixing of adjustment spreads may serve to facilitate this process.**
- **We find that Ibor fixings currently lie below Fallback rates to the tune of 10-15bp. These gaps are predicated to narrow going forward, but not by much. But a gap does not necessarily imply a net loss or gain; as that depends on the path of the Fallbacks. And even then, there are other nuances in play. We explain.**

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Here we explore the market implications and circumstances around the ISDA protocol.

The ISDA protocol and what it means for participants

In the very near future ISDA will publish a protocol that caters for legacy derivative contracts that currently reference Ibors. It will provide a mechanism for counterparties to sign up to, which would be enough to facilitate a transition from legacy Ibor-linked product to Fallback rates, in the event that an Ibor comes to an end.

ISDA is close to publishing the protocol[1], although there is still some uncertainty as to when this will be exactly. It is likely a matter of weeks away.

A key starting point is the fixing of the spreads[2] between RFRs (Risk Free Rates) and Ibors. Once the spreads are fixed, the Fallback rates are then entirely driven by the changes in RFRs. And Fallback rates should track the Ibors, provided there is no big change in the implied credit component in the Ibor rates.

An advantage of knowing what the fixed spreads are is a potential application in all types of product outside of the protocol. So just fixing these spreads is a big step. At the

[1] Once the competition authorities have given a green light. The US Department of Justice has just provided its approval to proceed.

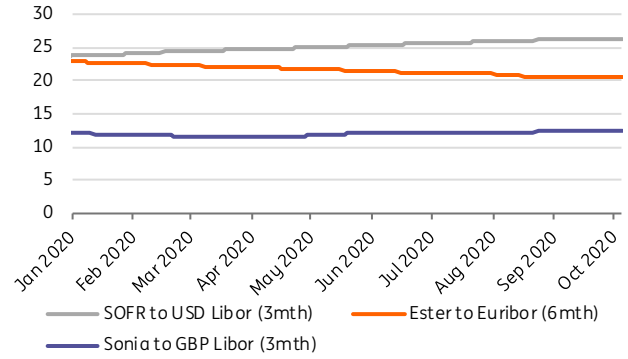
[2] Calculated as the 5yr median of the difference between the Ibor and the RFR compounded in arrears, where the compounding in arrears is set to occur over the same time period as the implied term of the Ibor.

same time, it must be recognised that some layers could use a real time RFR-Ibor basis to make the transition for certain products. There is no obligation either way. It is up to the parties involved.

The anatomy of the Fallback rates

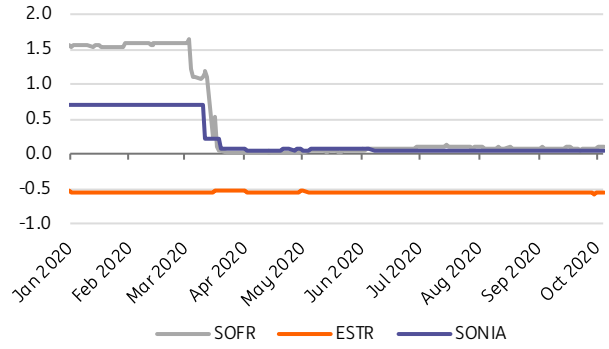
Below is a breakout of the Fallback rates – on the left is the RFR-Ibor spreads (Figure 1) and on the right is the RFRs (Figure 2). The Fallback rates are then calculated as the sum of the two, and ideally should track the Ibors reasonably closely.

Fig 1 5yr median spreads from RFRs to Ibors (bp)



Source: Macrobond, ING estimates

Fig 2 RFRs (%)



Source: Macrobond, ING estimates

As can be seen, the spreads have been slowly evolving (wider in the US versus tighter in the Eurozone).

The timeline ahead for LIBOR, and how we get to Fallback rates

The timeline and sequencing of events is of particular interest here.

First, ISDA needs to announce that the protocol is live. Once it is, the three month window (approx.) for sign-up is open. Sign-up implies acceptance of fixed adjustment spreads between respective RFRs and Ibors, to be set in advance of the demise of the relevant Ibor, that will be applied when that Ibor ceases to be available/published. The baseline view is the adjustment spreads will be set shortly after the protocol period comes to an end, which currently is mooted to be in late January 2021, at the very earliest.

It is not impossible that the adjustment spreads could be fixed earlier, prompted by an early announcement from the FCA that some Ibors will be unrepresentative. Such an announcement could even happen before the end of 2020 based on some public comments from regulators.

Such a pre-cessation moment would acknowledge that a Libor is no longer representative and is coming to a definitive end. But not for all. For example, EURIBOR will continue beyond 2021, so a spread will not be set for EURIBOR. But the EUR Libor spread to ESTER will be fixed, as EUR Libor will be replaced. In fact most "Ibors" will not transition. We expect that USD, GBP and CHF will. Many others will not, and in particular those that have been reformed.

By the end of the ISDA protocol window (likely January, but it could be later) or likely shortly thereafter, market participants will know the exact spreads that have been fixed. These will be respective spreads for Ibors for which a cessation trigger event has occurred, and across all the benchmark maturities.

Nuances on fixed spreads and the phased introduction of fallback rates

The ISDA protocol caters for legacy Ibor derivatives, but there is a clear link to RFRs, as the Fallback rates are driven by the RFRs, plus the fixed spread adjustment. So the "driver" of the Fallback rates are the underlying RFRs.

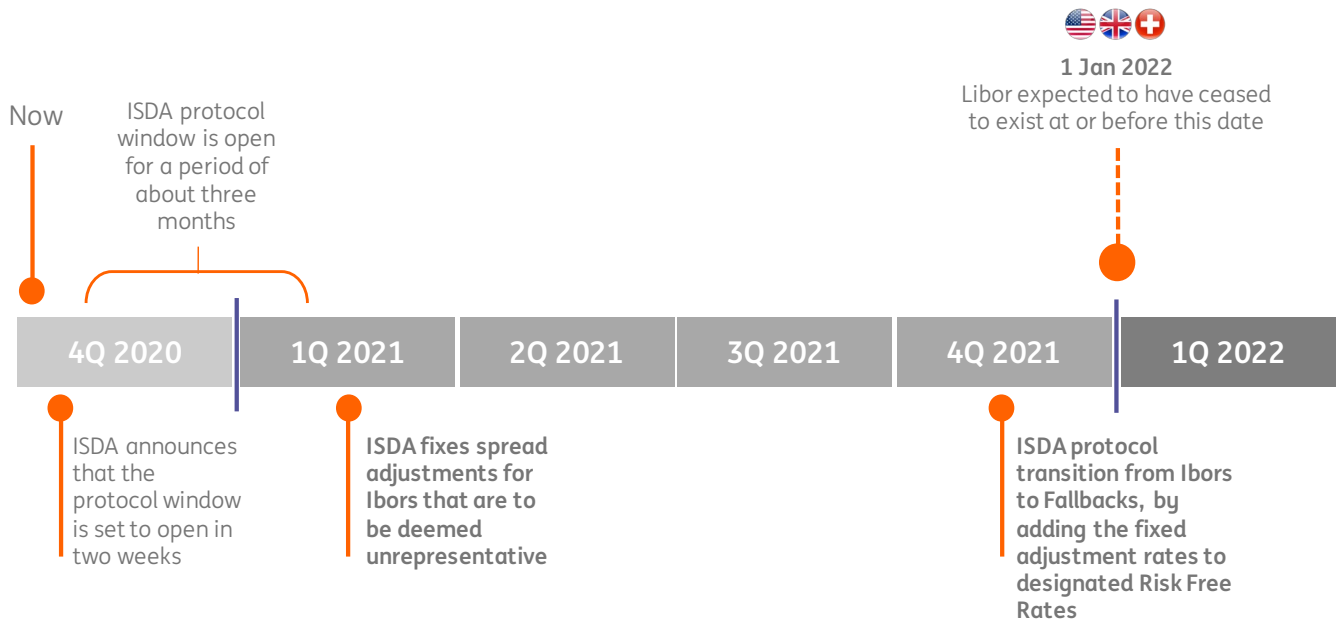
There is an important additional consideration. When a player moves from a legacy Ibor product to a product that is linked to a Fallback rate, there is also a change from a legacy forward looking structure to one that is set in arrears. This must be the case, as RFRs themselves evolve in arrears.

Once the spreads are fixed, it is then a waiting game for the moment when Ibors are no longer available. That date will determine when an ISDA trade subject to the protocol and all trades conducted after the effective date actually transitions from contracts denominated in Ibors to contracts denominated in respective Fallback rates. That is likely to be much later in 2021, but likely to be by the end of 2021.

As noted, some Ibors will transition, while others will not. Notably EURIBOR will not be deemed unrepresentative by end 2021, as EURIBOR has been reformed and there is no specific end date to its usage. So, contracts referencing EURIBOR will continue to reference EURIBOR, and so will not transition to Fallback rates, even as USD and GBP Libor will.

This is a complication, as it means, eg, that a cross currency swap could have EURIBOR on one leg and a USD Fallback rate on the other, with the latter calculated in arrears versus the former in advance. Not unworkable; just an important nuance. Here, use of Fallback rates on both legs could in fact make more sense.

Fig 3 ISDA protocol – timeline from fixing adjustment spreads to transition to Fallback



Source: ISDA, FCA, ING estimates

Some pros and the cons of signing up to the protocol

The big advantage of the protocol is efficiency. Signing up means that all contracts with counterparties that have also signed up are transformed to include these Fallbacks, with minimal fuss and expense.

The remaining uncertainty is not knowing with precision what the Fallback adjustment spreads will be. This could be rectified should spreads get fixed when the protocol window is still open. But more likely is acceptance by players that the fixed adjustment spread in the end will not be too dissimilar from where spreads stand during the protocol window (by virtue of the slow moving 5yr median calculation).

As we progress through 2021, Ibors will trek a path just as the Fallback rates will. There should not be any significant difference between the two. If a central bank were to change its policy rate it would impact both the Ibor and the RFR, and ideally not result in much of a deviation in spread between the two.

The biggest risk here lies in an Ibor spike, as we saw most recently in March/April 2020 as the Covid-19 crisis broke. We don't anticipate a repeat but, at the same time, few anticipated Covid-19; we can never know for sure what lies ahead. There is an argument that the official sector could step in at the appropriate moment to attempt to control any such spike in Ibors, especially if it were to occur at a planned transition moment.

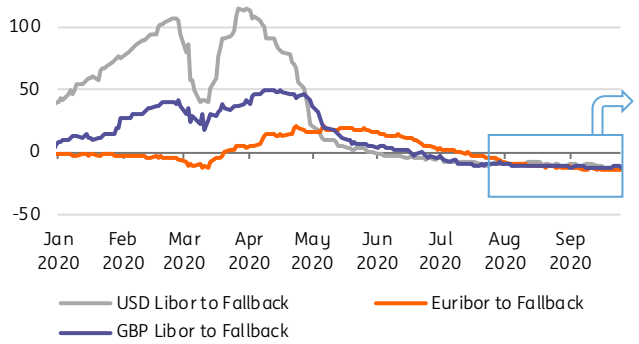
But the baseline should be that this won't be necessary as rates evolve in an uncontroversial manner in the coming months and quarters. See previous coverage of Ibor spike risk scenarios here.

How to interpret differences between Ibors and Fallback rates

One bone of contention is the deviation that we currently see between Ibors fixing and calculated Fallback rates. Ideally the gap between the two should be minor, as Fallback rates are effectively replicating the full economics of Ibor rates when the Ibors become unrepresentative, effectively measured on an historical basis.

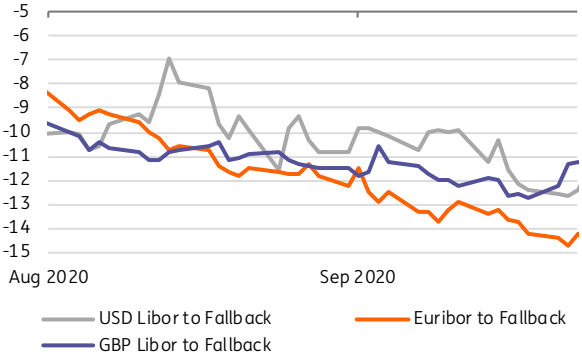
We illustrate below the gaps for USD, EUR and GBP through 2020 to date (Figure 4), and a close-up on the past number of weeks (Figure 5).

Fig 4 Spreads from Ibors to Fallbacks, YTD (bp)



Source: Macrobond, ING estimates

Fig 5 Close-up of the same spread since August 2020 (bp)



Source: Macrobond, ING estimates

The first point to note is the gaps are not zero. Ideally they should be much closer to zero, especially in the current period where rates are flat-lining, and central bank forward guidance provides a strong anchor to where rates currently are. The RFRs will compound in arrears, so if the term rates discount this (through the Ibors) and the flat profile is then realised by the RFRs as they progress over time, then there should be minimal difference between a term rate versus a rate that compounds in arrears.

As it is, we find that Ibors tend to fix below respective Fallback rates to the tune of 10-15bp (Figure 5). So for the RFRs in arrears to break-even versus the Ibor term rates today, the RFRs would need to fall considerably from where they currently are. On a steady state scenario from central banks this is unlikely. But, as an aside, if central banks were to (unexpectedly) cut rates, then these gaps in fact could be in the right direction.

That said, transition is not happening today. Transition happens in late 2021. So the question now is how will this look around that time.

What will the Ibors vs Fallback gap look like at the moment of transition

We develop some scenarios that examine the path of the calculated spread, the Fallback rates and the gap between those Fallback rates and legacy Ibors.

In Figure 6 are three scenarios with just one variable – the timing of the fixing of the spread between RFRs and Ibors.

Fig 6 End-2021 Ibor transition scenarios, all under the assumption of stable rates

		3m USD	6m GBP	6m EURIBOR*
Spread fixed mid-Dec 2020	**Ibor**	**22**	**9**	**-48**
	RFR in arrears	8	7	-55
	Spread adj.	26	27	21
	Fallback rate	34	34	-35
	Ibor vs Fallback	**-12**	**-25**	**-13**
Spread fixed end-1Q21	**Ibor**	**22**	**9**	**-48**
(baseline scenario)	RFR in arrears	8	7	-55
	Spread adj.	26	26	20
	Fallback rate	34	33	-35
	Ibor vs Fallback	**-12**	**-24**	**-13**
Spread fixed end-2021	**Ibor**	**22**	**9**	**-48**
	RFR in arrears	8	7	-55
	Spread adj.	24	19	18
	Fallback rate	32	25	-37
	Ibor vs Fallback	**-10**	**-16**	**-11**

*for illustrative purposes. The assumption is that EURIBOR will continue to exist Fallback spreads will not be fixed
Source: ING calculations

The baseline view here is the spread adjustment gets fixed in 1Q21. Here, there are gaps between Ibors and Fallbacks in the range -12bp to -25bp, with Ibors sitting below Fallbacks. We assume here unchanged RFRs and Ibor stability. If the RFRs were lower and/or the Ibors higher, then the gaps would be narrower, or could even be zero.

We also find that the spread adjustments tend to gradually edge lower over the course of 2021. For example, for SOFR it would fall from 26bp currently to 24bp by the end of 2021. And, as a consequence, the Fallback rate falls from 34bp to 32bp. This narrows the gap between USD Libor and the USD Fallback rate from -12bp to -10bp.

Whether the official sector would use this as a rationale for delay in fixing spreads is unclear, but unlikely we think.

As an aside, it is quite conceivable that Ibors could converge on Fallback rates as we approach transition, as the Fallbacks could act as proxy forwards. As it is, forward gaps as discounted on the market are not large, and therefore do anticipate convergence.

Does a gap between Ibors and Fallbacks matter?

Having a gap does not mean that there is a definite winner or loser.

The gap just identifies a difference between the Ibor rate versus the Fallback rate at the time of submission. The nuance is the Ibor rate, if it were continued, would provide the rate for settlement in the period ahead, eg, 3m USD Libor today pitches the rate to be settled in 3 months time.

By contrast, the Fallback rates identify where the rates are today. To find out the applicable Fallback rates in three months time, the applicable RFR must be compounded daily in arrears for 3 months, and the fixed adjustment spread is added to this.

So only after three months will we know whether there is a difference between the 3m Libor rate set 3 months previous, and the Fallback rate that has journeyed through those three months.

A perfect scenario would be where; (1) the Ibor term rates were perfect predictors of the future; and (2) the RFR to Ibor calculated spread were fixed at the perfect fair value level. But even if we were to get this, there could still be gaps – all it would take would be for actual Ibors to under or overshoot for technical or other reasons.

For that reason, low gaps should be tolerated. Ideally though, these should be single digit gaps. However, our unbiased and conservative scenario analysis churns out double digit gaps, and especially with the adjustment spread fixed by end-1Q21.

Whether early transition makes sense depends on the weight of fixed vs floating

We find that if the transition were to be done today, it would tend to benefit floating rate receivers (fixed rate payers). The rationale is the probability that the compounded in arrears end rate would likely be higher than the Ibor term rates could lock in today. And based on our scenario analysis, it looks like we could see similar circumstances at end 2021.

The opposite holds for floating rate payers, where the preference would be not to transition too early. Very low Ibor rates are the key rationale here. There is an open question as to whether Ibor fixings morph in a manner that act to narrow the gaps as we get closer to transition moment.

We have concentrated on flat forward curve structures, which makes perfect sense given the Covid-19-impacted environment that we find ourselves in, and communication from central banks that suggests steady rates for the foreseeable (in particular from the Federal Reserve).

We could also consider the complication that could come from central banks changing rates. For example, the Bank of England has been making noises about a possible rate cut. Here the arbitrage around transition will depend on whether the term Ibor rates discount the future accurately, relative to the Fallback rates in arrears that will map out the future as it evolves.

In fact, one a part rationale for the large gap between 6mth GBP Libor and its Fallback rate is that the 6mth rate is pricing in the probability of a Bank of England rate cut down the line. If the BoE did cut, the Fallback rate would slowly ratchet lower, approaching the lower 6mth GBP Libor rate. Whether it breaks even or even falls through the 6mth GBP Libor rate would depend on the size of the cut.

So gaps, in some cases, can make complete sense, as they are simply a function of the difference between a term rate versus one in arrears. Negative gaps as currently seen could in fact fit with a rate cutting environment. Whether there is a winner or loser will depend on that gap relative to individual expectations of that gap.

There are also other ways to transition (using the basis)

As a final note, there is also a basis that can be traded between Ibors and RFRs. For example, the SOFR-IBOR spread varies from 18bp for a 2yr tenor to 24bp for a 10yr tenor. This compares with an ISDA calculated spread estimate at 26bp. So there is a moderate excess in the 5yr median spread relative to rolling market estimates.

This confirms our relative value exercise above. Indeed, some players will decide to transition using RFR-IBOR basis estimates rather than the fixed spreads to be applied in the ISDA protocol. The official sector would like to see a big take-up of the protocol, but the bigger desire would be to see the marketing transitioning away from Ibors using whatever means individual market players deem appropriate for them.

SOFR discounting – Auction action

- **SONIA secured a number of advantages by virtue of its reformed nature, and in particular the fact that it has been in use for a number of years. It has meant a quicker build in volumes, but also avoidance of a change in discounting rate. €STR went through its discounting change recently. SOFR is up next for centrally cleared trades.**
- **The discounting change to €STR (from EONIA) was simpler as there was a fixed basis of 8.5bp in play. On the switch from EFFR to SOFR the basis is typically lower than that, but the complication is that it varies by maturity, and over time.**
- **That said, there is a very smart auctioning system in place where players can make choices as to how they would like to deal with valuation shifts. Here a simple in and out strategy can work, or the position could be traded.**
- **Our preference is to take advantage of the liquidity available on transition through the auction system, to make the move as efficient as possible. Potential pain should be minimised. Trading it does not guarantee a better outcome.**
- **For many liability managers this will be a bit of a sideshow, bi-lateral contracts with banks on their derivatives portfolio dominate for corporates. But at the same time this is an important stepping-stone in the direction of more SOFR use.**

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RFR discounting switch: two down, one to go

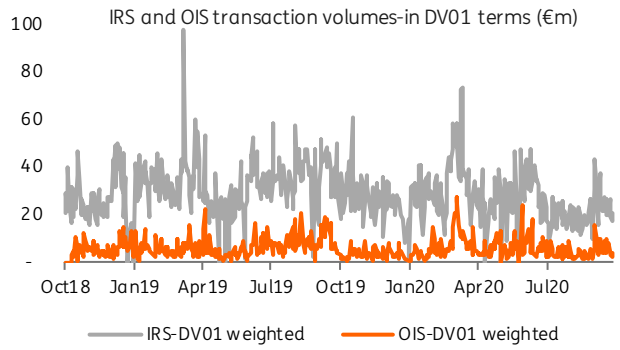
The 'big bang' label is a hotly contested one in the IBOR transition. One can argue that, from the point of view of cleared derivatives, the date at which a new RFR becomes the discounting and PAI (price alignment interest) standard should mark a turning point in its adoption.

This has long been a done deal for GBP rates (and other currencies), due to the decision to reform the incumbent SONIA (or other relevant) index to make it IOSCO compliant. For cleared EUR derivatives, the switch occurred at the end of July. By most accounts, the move went smoothly.

Whilst on paper the switch involved a basis risk between EONIA and €STR, that added difficulty was pre-empted by the fact that EONIA has been fixed since last October at an 8.5bp spread to €STR. From a risk management standpoint, the switch amounted mostly to a change in present value of derivative exposure, that could be offset with one-off cash payments. In practice, PV changes also resulted in changes in residual risk exposure that had to be hedged once recognised.

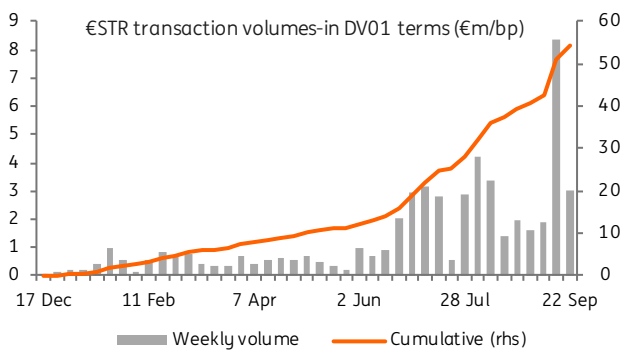
We feel it is too early to conclude on the impact of the €STR discounting/PAI transition on €STR OIS volumes. If volumes jumped in the weeks around the switch date at the end of July, the build-up in volume since has been slow. Whilst there is room for €STR OIS volume to catch up to their EONIA equivalent, DV01-adjusted volumes risks being capped by the fact that longer-dated volumes are concentrated in Euribor swaps.

Fig 7 OIS are still only a fraction of EUR swap volumes



Source: ING estimates

Fig 8 A spike but no step change in €STR volumes



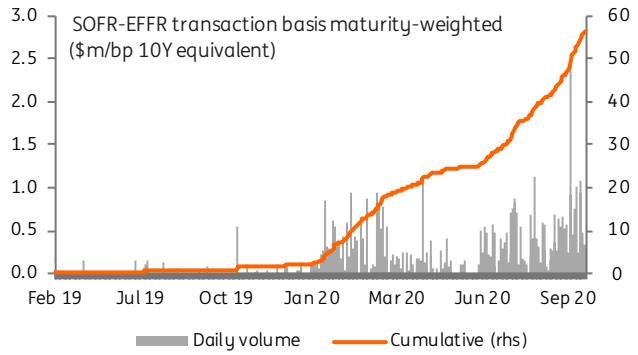
Source: ING estimates

SOFR switch: place your bets

The transition from Effective Fed Fund (EFFR) to SOFR discounting will take place between 16 and 19 October and goes one degree of complexity further. Here, the basis risk arising between the old and new overnight indices is not fixed and could require re-hedging. To facilitate the process, the CME and LCH will book a series of basis swaps to their participants' accounts. The day-one PV impact should be roughly neutral as the swap will be struck at market with residual PV differences settled via cash compensation payments, but participants could have a residual basis risk to manage.

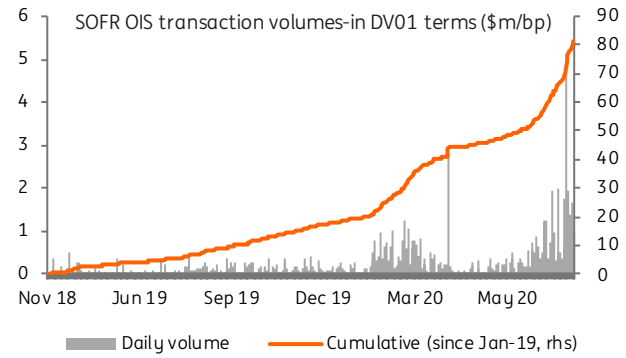
What to do with it depends on one's risk appetite and market view. We surmise that a number of market participants will look to unwind any residual basis risk relatively quickly, taking advantage of the window of liquidity provided by the discounting switch. For instance, the CME said it will run auctions on 19 October to allow participants to immediately unwind their SOFR-EFFR basis risk portfolio to dealers if they wish. Similarly, LCH will run an auction on the morning of 16 October to allow clients who 'opt-out' of the basis swap compensation to receive cash payments instead. In both cases, there is no guarantee that participants who elect to do so will see all their basis risk unwound, nor is there any certainty about the cost.

Fig 9 SOFR-EFFR basis taking off in 2020



Source: ING estimates

Fig 10 SOFR OIS volumes accelerating ahead of switch



Source: ING estimates

Note that participants who chose to do nothing will see their EFFR exposure reduce mechanically as the residual basis swaps mature. Others might decide that they will find better conditions in the basis swap market rather than going through the auction process. Lastly, it is also possible that some participants decide to pre-hedge this basis ahead of time, market liquidity permitting.

As with any risk management decision, market participants will find themselves balancing a number of factors, including trading cost, liquidity, and risk associated with basis moves. Given that they will take place immediately before and after the discounting switch, it is likely that the auctions will concentrate a majority of the unwind

interest, and thus represent the best chance to reduce basis risk. Pre-hedging is an option for participants but liquidity in SOFR-EFFR basis swaps has so far been sporadic. It is likely that liquidity picks up after the switch, but we surmise it will go, decreasing with time.

The final parameters of the CME auction will only be known on 12 October, but the process could prove cheaper than hedging each maturity point separately. As the CME explains, the trading cost will be calculated on the net DV01 of the basis swap portfolio providing participants with potential savings. What's more, each participant can set a maximum cost above which the auction isn't executed. Similarly, the LCH auction plans a competitive bidding process for clients' basis portfolios but with an option to set a cap to the cost of auctioning their basis portfolio in advance.

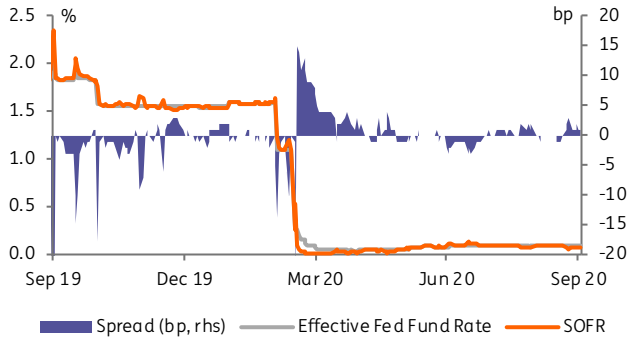
SOFR-Fed Fund basis widening: a taste of things to come?

From a market level point of view, the SOFR-EFFR basis is now entirely positive (by market convention, the spread is applied to the SOFR leg so a positive spread implies that, over the life of the swap, SOFR will be lower than EFFR). As one might expect, front-end developments have followed the spot SOFR-EFFR spread, and SOFR's more frequent forays below EFFR have been reflected in the basis. More importantly perhaps, the absence of upward SOFR spikes that characterised the pre-Covid-19 regime has also justified the basis moving higher.

Since a regime change where liquidity becomes scarce relative to the amount of collateral available (as was the case for most of 2019) is unlikely in the near term, we would tend to agree with small positive basis pricing at short tenors.

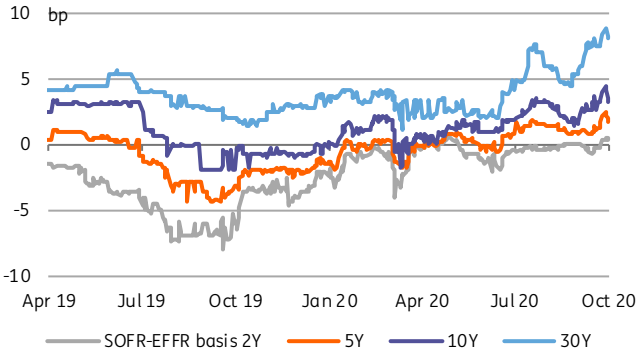
At longer tenors, where the basis is indicated upward of 7bp, we have reservations. Whilst it is not inconceivable to see SOFR spike lower in the future in the case of a structural shortage of safe collateral, as was the case in the Eurozone at the onset of QE, we doubt this will occur sufficiently often to justify current basis pricing.

Fig 11 SOFR-EFFR widening explain a positive basis...



Source: ING estimates

Fig 12 ...but long-end basis is hard to justify



Source: ING estimates

For market participants, this point may seem moot, as holding a swap for 30 years in order to collect a few basis points of mispricing would be a sub-optimal use of one's risk allocation. As a result, we suspect long-end basis pricing is more a reflection of flow occurring in the market. Traded volumes may still be limited compared to the amount of SOFR risk that will be recognised during the discounting switch, but the recent widening might indicate structural EFFR receiving exposure (for instance from participants with a large out of the money exposure and thus in need to hedge the cost of posting collateral). This in turn would mean that further widening into and out of the discounting switch is possible.

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