# Solvency II newsflash

## LIBOR transition – EIOPA risk-free rate curve … at last!

The London Interbank Offered Rate ("LIBOR") is being discontinued after 2021, and is set to be replaced by the Sterling Overnight Index Average ("SONIA") – the underlying reference rate for the sterling Overnight Index Swap ("OIS") market.

LIBOR is a significant reference rate for UK insurance companies – it forms the basis of the Solvency II sterling risk-free rate ("RFR") curve However, until now there has been no news on how or when the Solvency II curve may change when LIBOR ceases to exist. Naturally, this has been a source of frustration for firms.

On 6 February 2020, however, the European Insurance and Occupational Pensions Authority ("EIOPA") finally broke its silence on the treatment of the EIOPA RFR term structure following the future discontinuance of Interbank Offered Rate ("IBOR") instruments by publishing a discussion paper setting out the options considered and its proposed approach.

As highlighted in our previous newsflash on this topic, the impact to moving from LIBOR to SONIA could be material and will have wide-ranging implications for UK insurers.

In this newsflash, we set out the proposals from EIOPA and what this may mean for firms. Whilst EIOPA's discussion paper covers all currencies affected by the transition away from IBORs, this newsflash will focus on the implications for sterling.

**Key takeaways:**

- Insurers will be relieved that at last we have some sense of how the Solvency II curve may change.
- EIOPA's preferred approach for sterling involves using a curve which is a blend of LIBOR and SONIA, with the blend depending upon relative traded volumes in instruments referencing the two rates around the date of calculation.
- Announcements from the Bank of England on 26 February 2020 are designed to "turbo-charge" the transition of market participants away from LIBOR to SONIA. This should help accelerate the point at which the "blend" in EIOPA's proposal switches completely to sterling OIS rates.
- The interaction with the Solvency II long-term guarantee measures is, as yet, unclear. However, the change in the Solvency II curve is expected have an impact on Own Funds and Solvency II surplus regardless.

## The question of what to do with the CRA

In the current EIOPA RFR methodology, a credit risk adjustment ("CRA") is applied to adjust for the credit risk embedded in LIBOR. This is derived as 50% of the average difference between 6-month LIBOR and the 6-month sterling OIS rate over the previous 12 months, subject to a floor and cap of 10bps and 35bps respectively.

When LIBOR is discontinued and replaced by SONIA, the CRA will no longer be required, as SONIA is considered to be risk-free. Therefore, EIOPA has considered the following two options:

- **Option 1**: leave the regulation as is, which will result in a minimum 10bps CRA being applied to the RFR term structure;
- **Option 2**: retain the CRA where LIBOR swaps are used but set the CRA to zero where OIS rates are used.

EIOPA notes that neither of these options will require changes to the Solvency II Delegated Acts.

**EIOPA's recommendation is for Option 2, i.e. set the CRA to zero where OIS rates (where SONIA is the underlying in the case of sterling) are used.**

Firms will welcome EIOPA's proposal, which avoids applying a CRA to an OIS term structure that is understood to have little or no embedded credit risk.

## The production of the RFR

An important criterion that instruments will need to satisfy before being used for determining the RFR term structures is the Deep, Liquid and Transparent ("DLT") requirement. There are set thresholds[1] on trade volumes (for each currency and tenor) to determine whether the instruments are DLT and EIOPA is monitoring these closely.

EIOPA notes in the discussion paper that "currently none of the OIS swaps can be considered DLT" but envisages a time where there may be two liquid term structures as liquidity in OIS instruments continues to develop.

Therefore, EIOPA has deemed it necessary to develop an approach for transitioning to an RFR term structure derived from the OIS market to ensure a smooth transition.

In finding the right balance between ensuring a smooth transition and ease of implementation (as well as replicability), EIOPA has considered three options – set out below. (The comments in italics summarise EIOPA's thoughts on the merits of each of the options considered.)

**Option 1:** Replace the whole RFR term structure when the traded volume reaches a pre-specified threshold for all DLT points of the term structure

*This approach is the least complex to implement but will result in a step change to the RFR term structure when the switch happens.*

**Option 2:** Gradually replace the curve with a combination of old and new instruments, with the split determined based on total volume traded across the entire curve – the "Total volume based approach"

*This approach introduces some complexity but allows for a gradual shift from IBOR-based curves to OIS-based curves. However, this approach doesn't allow for the different split in traded volumes at different points in the curve.*

**Option 3:** As per Option 2 but with the split determined and applied at 10-year tenor buckets (i.e. 1-10 years, 11-20 years etc.) – the "Tenor bucket volume based approach"

*This approach allows for a gradual shift in curves as per Option 2 and allows for the different split in traded volumes at different tenor buckets. However, this approach is the most complex amongst the options considered and it may be challenging for firms to replicate*.

**EIOPA's recommendation is for Option 2 as this is deemed to promote the highest degree of stability amongst the three options considered.**

In addition to this, EIOPA also proposes a trigger of 85% for moving entirely to the new OIS-based curve – i.e. when the total traded volume of OIS instruments represents 85% or more of the total trade volume across OIS and IBOR instruments.

This begs the question of when this trigger level might be reached for sterling ….

[1] Initial thresholds per tenor are:

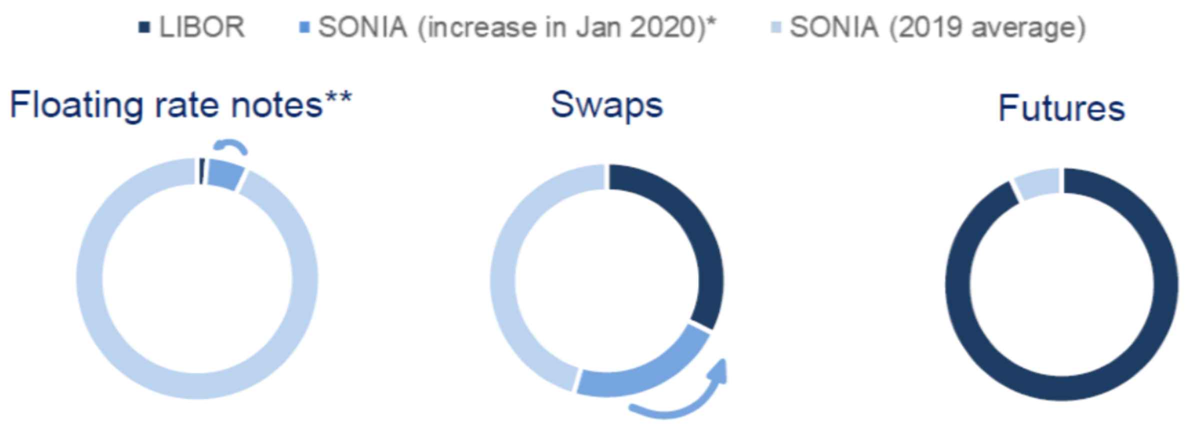
- The average daily notional amount traded is at least EUR 50m; and
- The average daily number of trades is at least 10.

## When might we hit the 85% trigger to fully switch to SONIA?

On 26 February 2020 the Bank of England published a speech given by Andrew Hauser (Executive Director, Markets). This speech gives some insights into current levels of liquidity in the SONIA market as well as the actions the Bank of England is taking to accelerate the pace of transition of market participants away from LIBOR.

**Progress in sterling derivatives markets**

FIGURE 2: SONIA vs LIBOR Linked Trading Flow Volumes (January 2020)




Sources: Bloomberg Finance L.P., CME Group, CurveGlobal, ICE and LCH Group
* Incremental increase in January 2020 from average SONIA flows in 2019
** Maturing post-2021

*Source: Transcript of speech given by Andrew Hauser, "Turbo-charging sterling LIBOR transition: why 2020 is the year for action – and what the Bank of England is doing to help", 26 February 2020*

As shown in the graphic above, progress in the sterling derivatives market has been good. Swaps account for the majority of sterling derivatives (by notional value), and the middle chart shows that during 2019 c.50% of new cleared sterling swaps referenced SONIA. In January 2020 that percentage was more than two thirds.

**Actions to accelerate the pace of transition away from LIBOR**

The Bank of England has also announced a series of measures to further accelerate the pace of transition away from LIBOR.

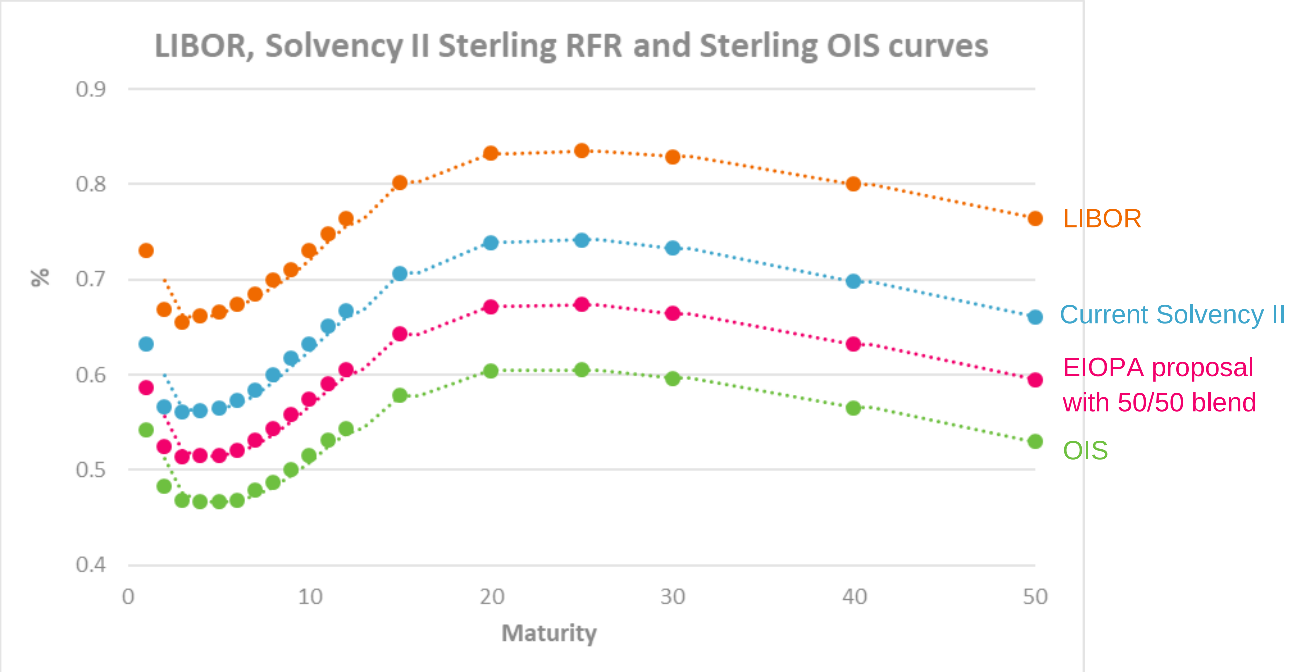
Following consultation with the industry, the Bank of England and the FCA have strongly encouraged market makers to use SONIA as the standard reference rate for sterling interest rate swaps from 2 March 2020. This is designed to "put the brakes on further increases in the stock of sterling LIBOR swaps maturing beyond 2021."

In addition to this, the Bank of England has also announced changes to the way in which it treats LIBOR-linked collateral in its lending operations to market participants. This lending is collateralised, and currently c.10% of the lending is collateralised by assets referencing LIBOR. Starting from Q3 2020, the Bank of England will progressively increase the haircuts on LIBOR-linked collateral – with these haircuts reaching 100% at the end of 2021. In addition, any LIBOR-linked collateral issued after October 2020 will be ineligible for posting.

## How the different curves compare

The graph below compares the sterling OIS curve, the LIBOR swap curve and the current Solvency II sterling RFR curve prescribed by EIOPA. The sterling RFR curve is based on the LIBOR swap curve (where LIBOR is based on a 6-month term) but allowing for a CRA, which was -10bps as at 31 January 2020.

We have also provided an indication of what the new Solvency II sterling RFR curve would look like under EIOPA's recommendations, assuming that the "blend proportions" are 50/50[2] and that the CRA continues to be applied to the portion of the curve determined using LIBOR.




*Source: Hymans Robertson, Blomberg, EIOPA (as at 31 January 2020)*

The table below shows the rates at different tenor points along the curves shown in the chart above.

| Maturity (years) | Current Solvency II curve (bps) [1] | EIOPA proposal assuming 50/50 blend (bps) [2] | *Difference vs. current Solvency II* = [2] – [1] | Sterling OIS swap curve (bps) [3] | *Difference vs. current Solvency II* = [3] – [1] |
|---|---|---|---|---|---|
| 5 | 57 | 52 | *-5* | 47 | *-10* |
| 10 | 63 | 57 | *-6* | 52 | *-12* |
| 15 | 71 | 64 | *-6* | 58 | *-13* |
| 20 | 74 | 67 | *-7* | 60 | *-13* |

As at the end of January 2020, and assuming that the blending of the current Solvency II sterling RFR curve and the sterling OIS swap curve was 50/50, the EIOPA proposal would give rise to a curve which is c.5-7bps lower than the current Solvency II curve for tenors between 5-20 years.

If, however, at the point of adoption the proportion of traded sterling swaps referencing SONIA is greater than 85%, then the new Solvency II curve equals the OIS swap curve under EIOPA's proposals. As at 31 January 2020, this would result in a curve which is c.10-13bps lower than the current Solvency II curve for tenors between 5-20 years.

[2] As noted earlier in this newsflash, the Bank of England has stated that, during 2019, c.50% of new cleared sterling swaps referenced SONIA.

## What this all means for insurers

Below we explore some of the implications for UK insurers of the transition away from LIBOR as well as EIOPA's proposals for the new Solvency II sterling RFR curve.

| Area | Potential implications for firms |
|---|---|
| **Operational considerations** | • The switch to a new Solvency II curve will require updating of systems, models and infrastructure<br>• For example, firms will need to identify any processes (such as MA calculation models, hedge monitoring tools, valuation models etc.) that require a regular feed of the Solvency II curve and ensure these are updated |
| **Solvency II balance sheet items** | • A decrease to the RFR curve will increase Best Estimate Liabilities, the Risk Margin and the Solvency Capital Requirement ("SCR")<br>• However, as set out below, some of the impacts may be dampened by elements of the long-term guarantee measures |
| **Matching Adjustment ("MA")** | • For MA portfolios, a decrease in the RFR curve will be largely offset by a corresponding increase in the MA<br>• There may be a second-order impact via changes in Fundamental Spreads which are floored at a proportion of the Long-Term Average Spread |
| **Volatility Adjustment ("VA")** | • The impact of a decrease in the RFR curve may be dampened for liabilities valued using a VA<br>• The VA will not fully offset the impact of a decrease in the RFR curve as it is based on 65% of the spread on a reference portfolio of which only a proportion is invested in fixed income assets |
| **Transitional Measures on Technical Provisions ("TMTP")** | • For business written before 1 January 2016, a TMTP recalculation may dampen the impact of a change in the RFR curve on the Technical Provisions. However, the TMTP will not dampen any impact on a firm's SCR<br>• Unless the introduction of EIOPA's proposals is deemed to have caused a material change in risk profile (as defined in SS6/16) for insurers and hence triggers an early recalculation, the next round of scheduled recalculation will happen on 31 December 2021 |
| **Asset liability management ("ALM")** | • EIOPA's proposal to use a blended curve will make it more complex for firms to hedge their Solvency II interest rate exposures – exacerbated by the fact that the blending of the current Solvency II Sterling RFR curve and the Sterling OIS swap curve will change over time as the market in Sterling OIS swaps develops<br>• However at the point at which EIOPA's proposals are adopted, it could be that traded volumes in Sterling OIS swaps have reached the point where the blend is fully based on Sterling OIS swaps – in which case this would not be an issue for firms<br>• Nevertheless, the switch to a new Solvency II curve will require firms to revisit their hedging programmes and rebalance as necessary |
| **With-profits funds** | • A reduction in the RFR curve will increase the regulatory value of with-profits guarantees<br>• For with-profits funds which have a support arrangement in place, the increase in the cost of guarantees may increase the extent and period over which support is required<br>• For closed with-profits funds which are distributing surplus assets, the increase in cost of guarantees may impose a constraint on the ability to distribute at the same rate<br>• Additionally, firms may need to review their hedging of guarantees, reassess the level of excess surplus available and reconsider their approach to managing capital in the estate |
| **IFRS** | • Where firms have taken actions to harmonise discount rates between IFRS and Solvency II (including those as part of their IFRS17 developments), the implications of the discontinuance of LIBOR and the EIOPA proposals on their IFRS positions will need to be assessed |
| **Brexit** | • UK firms will need to keep an eye out for any developments in relation to the UK's exit from the EU. The transition period is due to conclude at the end of this year, at which point the PRA will have the power to set the Sterling RFR curve |

## Next steps

EIOPA is currently seeking responses to the proposals set out in its discussion paper and firms will have the opportunity to do so until 30 June 2020. Following this, EIOPA will produce a consultation which will include specific policy recommendations on the subject of IBOR transitions.

## How Hymans Robertson can support you

Hymans Robertson has a wealth of experience in Investment & ALM and Risk & Capital Management. We are well-positioned to support you in your transition away from LIBOR, for example by:

- Identifying the areas of your business that are affected by the transition;
- Assessing the impact in these areas;
- Formulating a transition plan which minimises disruption to your business; and
- Implementing the transition plan in an efficient manner.

If you would like to discuss with one of our specialists, please **get in touch**.

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