

CP 1/21: Transition of UK Solvency II discount curve to SONIA

John Jenkins, FIA
 Peter Lin, FIA, FRM
 Russell Ward, FIA
 Sihong Zhu, FIA



On 7 January 2021, the first working week post-Brexit, the Prudential Regulation Authority (PRA) published [Consultation Paper \(CP\) 1/21](#), setting out the plan for the transition of the UK Solvency II discount curve to a curve that references the Sterling Overnight Index Average (SONIA).

The CP, "Solvency II: Deep, liquid and transparent assessment, and GBP transition to SONIA", covers the PRA's proposals on a number of aspects of the transition from a London Inter-Bank Offered Rate (LIBOR)-referenced risk-free rate (RFR) curve for GBP, to a SONIA-referenced RFR curve in the future production of the UK Solvency II Technical Information (TI); moreover the possible impact of this transition on UK (re)insurers from both financial and operational perspectives. The consultation sets out, in PRA's view, a number of financial mitigation measures and their operational considerations over the year 2021.

The consultation period will last to 31 March 2021, with the proposed implementation date of above proposals we believe from 31 July 2021, subject to certain tests being met.

Summary of proposals

In our view, the proposals set out by the CP can be summarised in three key aspects, as follows:

- The PRA's proposed approach to the deep, liquid and transparent (DLT) assessment for the production of the Solvency II TI
- Transition of TI methodology from a LIBOR-based RFR to a SONIA-based RFR for GBP
- Impact of the TI methodology transition on insurers and its mitigation measures

DLT ASSESSMENT APPROACH

The PRA proposes to adopt the same main indicators for assessing the depth and liquidity of swaps markets, but in GBP. These indicators are as below:

1. Average (over one year) daily notional turnover of at least GBP 45 million
2. Average (over one year) daily number of trades of at least 10.

The PRA notes other conditions adopted by the European Insurance and Occupational Pensions Authority (EIOPA) in its current approach (before the Solvency II 2020 review) for deciding whether financial instruments are traded in a DLT financial market. The PRA proposes to treat them as soft thresholds, in comparison to the main indicators above.

For the DLT assessment for relevant currencies¹ other than the GBP one, the PRA proposes to make use of the DLT analysis performed externally, including those published by EIOPA and International Association of Insurance Supervisors (IAIS). In addition to that, in the PRA's view, an active swaps market exists for all of the PRA's relevant currencies, therefore, for year 2021 at least, the PRA has no plan of adopting other supplementary DLT assessments carried out by EIOPA, including the government and corporate bonds assessment.

For the DLT assessment for GBP, the PRA recognises that, given the particular circumstances of transition from LIBOR to SONIA, the assessment may need to be supplemented with other relevant data and expert judgement.

The PRA will publish all of the relevant supplementary assessment, data and expert judgement applied at the same time when publishing the results of the DLT assessment.

TRANSITION FROM LIBOR TO SONIA

The PRA proposes to make a transition of the Solvency II TI for GBP currency first, starting from (and including) 31 July 2021, subject to the test results mentioned above. The PRA expresses the view that adopting a methodology that combines both LIBOR and SONIA rates is not practical. In particular, it notes that the risk of GBP LIBOR liquidity decreasing significantly in the second half of 2021 could put the reliability of a blended approach in doubt. Therefore, in the UK, it aims to transit to a SONIA-only-based RFR for the Solvency II TI in a single step.

¹ For 2021, the currencies are: GBP, USD, EUR, CAD, SEK, AUD, JPY, NOK and DKK.

The PRA plans to publish the results of the DLT assessment for the SONIA swaps market, as well as the indicative SONIA-based GBP RFR, ahead of the expected transition date of 31 July 2021, following the completion of this consultation. However, the final transition date is still subject to confirmation in the future Policy Statement.

The dates for transitioning other RFR curves that are currently LIBOR-referenced, such as USD and JPY, to alternative rates-referenced RFRs will be subject to further consultation, and are not covered by this CP.

IMPACT OF TRANSITION AND MITIGATION MEASURES

The PRA has identified two areas within its production of the Solvency II TI for each month going forward that may be affected by this transition. These two areas are:

1. **Credit Risk Adjustment (CRA):** A CRA is currently used to adjust for any credit risk embedded in LIBOR swap rates. In the PRA's view, given that SONIA rates are based on overnight deposits, the residual credit risk is negligible after moving to a SONIA-based RFR curve indicating that the PRA is minded to apply a zero CRA. However, this is not made explicit in the CP.
2. **Long-Term Average Spread (LTAS):** The PRA view is that the LTAS should recognise the change in spreads as a result of the LIBOR transition, and proposes that the historical LTAS values remain unadjusted.

The PRA notes that, as a result of the transition of the TI methodology for GBP RFR, there will be a financial impact on insurers in the UK. The PRA proposes to mainly use two measures that are currently already in place to smooth this transition and/or offset the financial impact.

These two measures are:

- **Transitional measures on technical provisions (TMTP):** The TMTP can be used by insurers to temporarily reduce any (negative) financial impact of LIBOR transition to SONIA on an insurer's base Solvency II balance sheet. However, this measure can only be applied to the business that was written before 31 December 2015. Also, the PRA notes that it does not expect the impact of the transition to be material enough to warrant an application for TMTP solely on the basis of LIBOR transition.
- **Matching Adjustment (MA) and Volatility Adjustment (VA):** Insurance liabilities either within a MA portfolio or covered by the VA can benefit from an increase in the amount claimed through the MA and the VA, with the proposed unadjusted historical LTAS.

From an operational perspective, the PRA confirms that a new MA application is not required to implement the changes noted above. However, an application of the TMTP recalculation will still be required, if the recalculation needs to happen before 31 December 2021, when a biennial TMTP recalculation will be required by Solvency II rules.

Moreover, the PRA invites insurers to consider the appropriateness of their approved internal models in light of this transition of the RFR to SONIA, without giving further detail on how best to approach this assessment.

Our observations

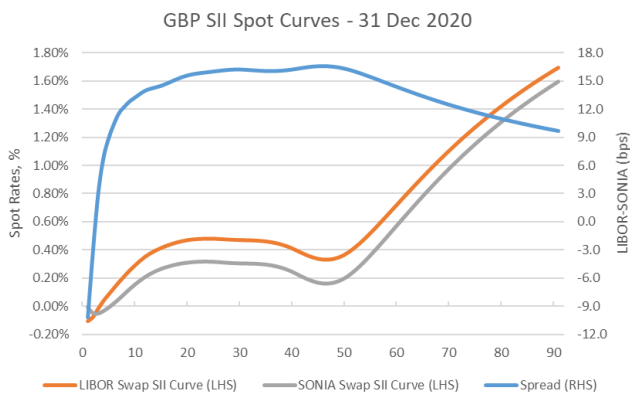
1. **Transition from LIBOR to SONIA:** The PRA and the Bank of England have already set out a clear timetable and road map² to reduce LIBOR's footprint in the financial market in the UK. Now that the UK is officially out of the EU and the transition period which ended on 31 December 2020, the PRA has what it needs to take the next step of embedding this into the supervisory framework for (re)insurance companies in the UK. The approach of an instant switch is in line with the expectation of UK insurers, referencing a result from our recent Milliman industry survey on derivative usage by insurers. However, most had expressed a preference for a phased switch.³
2. **CRA:** The PRA makes it clear in the CP that it views only a negligible residual credit risk still embedded within the SONIA rates. However, the PRA is not quite clear about whether or not a zero CRA would be applied, once the RFR curve is purely SONIA swap rates-referenced. A zero CRA is one of the most likely outcomes. According to our recent Milliman survey, a zero CRA is both expected and preferred by most UK insurers. However, we understand that some insurers may consider that a negative CRA could be more appropriate, i.e., instead of a reduction adjustment applied to the curve, an increase adjustment would be applied. With a zero CRA, the RFR curve referencing SONIA is likely to be slightly lower than the existing RFR curve referencing LIBOR, at least in the current economic environment. See Figure 1, showing a gap between the two RFR curves assuming a zero CRA applied on the SONIA-based curve, and 11 basis points (bps) CRA applied on the LIBOR-based curve, and assuming the transition happened on 31 December 2020.
3. **Post-2016 business:** In the PRA's view, the impact of the transition of the Solvency II TI for GBP, from being LIBOR-based to SONIA-based, is eligible for the TMTP calculation. However, this is restricted to only business written pre-2016. For post-2016 business, a negative financial impact is expected to be experienced on the Solvency II balance sheet.

² Working Group on Sterling Risk-Free Reference Rates (RFRWG) Top Level Priorities - 2021 (January 2021). RFRWG Roadmap. Bank of England. Retrieved 26 January 2021 from <https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/rfr-working-group-roadmap.pdf?la=en&hash=92D95DFA056D7475CE395B64AA1F6A099DA6AC5D>.

³ Dissanayake, N., Huang, V., Kelkar, R. et al. (November 2020). Milliman Derivatives Survey 2020: Key Findings. Milliman Research Report. Retrieved 26 January 2021 from <https://www.milliman.com/en/insight/Milliman-Derivatives-Survey-2020-Key-findings>.

4. **DLT assessment on SONIA:** The PRA intends to carry out the DLT assessment on SONIA based on a framework set out in this CP. However, the PRA has not been clear on the exact timing for this assessment, the market reference date, and what could happen to the planned transition if the DLT assessment did not produce a clear “pass” result. This could affect the transition timetable. We do note that SONIA is one of the most advanced of the new risk-free benchmarks in terms of market liquidity.

FIGURE 1: GBP SOLVENCY II SPOT RATES



Conclusion

This CP sets out clearly that the PRA has the intention to make the transition of the Solvency II methodology for GBP, from being LIBOR-referenced to SONIA-referenced, before the end of 2021, and ahead of the Intercontinental Exchange (ICE) Benchmark Administration’s intention to cease the publication of LIBOR swap rates at end of 2021. The transition is proposed to happen on 31 July 2021 at the earliest, following the conclusion of this consultation, and subject to satisfactory DLT testing outcomes.

The proposals in this consultation may create both operational and financial burdens to insurance companies, the exact extent of which will be subject to individual circumstances. For insurers that have not considered this as part of the wider LIBOR transition work, they need to perform a near-term exercise to identify any gaps in their current processes, and formalise an early view of the potential financial impact on their solvency positions.

Milliman consultants are experienced with helping insurers understanding both financial and operational implications from any changes in regulatory rules.

To discuss this note or LIBOR transition in general please contact [Sihong Zhu](#), [John Jenkins](#), [Russell Ward](#) or your usual Milliman consultant.



Milliman is among the world’s largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com

CONTACT

John Jenkins
john.jenkins@milliman.com

Peter Lin
peter.lin@milliman.com

Russell Ward
russell.ward@milliman.com

Sihong Zhu
sihong.zhu@milliman.com