AN UPDATE ON INTEREST RATE CONVENTIONS IN THE SONIA-LINKED FLOATING RATE NOTE MARKETS

The early take-up in 2019 of SONIA in the Sterling floating rate note markets was made possible because SONIA (unlike SOFR and many other risk free rates) was already in use in the well-established market of sterling denominated overnight indexed swaps (OIS). This fortuitous fact meant that regular issuers of Sterling LIBOR-linked securities could, with some degree of confidence, consider SONIA as a "ready-baked" alternative to Sterling LIBOR that was supported by a pool of liquidity in the swaps and futures markets, priced by reference to observable transactions entered into by buyers and sellers in these markets and subject to standardised conventions for interest rate determination.

As most OIS are transacted pursuant to an ISDA Master Agreement using the 2006 ISDA Definitions, it seemed natural that, in kicking off the SONIA-linked floating rate note market in June 2018, The European Investment Bank (EIB) would employ the interest rate conventions of OIS in the terms of its notes.

Observation Lookback Convention: The floating rate on an OIS is typically compounded daily using the following formula (which can be found in the ISDA definitions):

$$\left[\prod_{i=1}^{d_o}\left(1+\frac{\text{SONIA}_{i\text{-pLBD}} \text{ x } n_i}{365}\right)-1\right] \text{x} \frac{365}{d}$$

The EIB's £1bn floating rate notes issued in June 2019 adopted the OIS formula – a backward looking overnight compounded rate, compounded in arrears over the interest period with a five day lag and with margin added. The provisions related to the five day "lag" provide that the interest observation period (the period of days on which the rate of SONIA on the published screen would be used) would lag the interest period by 5 London banking days[1], so that the observation period ended 5 London banking days before the end of the interest period and the aggregate interest amount in respect of the relevant interest period could, accordingly, be determined 5 London banking days before it was due to be paid.

This look-back or lag mechanism was designed to ensure for EIB (and the underlying investors in the notes) certainty of cash flow and, until January 2020, was employed in all new SONIA-linked floating rate notes.

Weighting: Though, as mentioned above, the SONIA rate specified for any day in the interest period was, in the case of the EIB's initial issue of SONIA-linked floating rate notes, the published SONIA screen rate on the London banking day falling 5 London banking days prior to such day, the "weighting" of such rate in the compounding formula for the relevant interest period is, in this and similar floating rate notes that adopt the observation lookback convention, determined by reference

1 This lag period has been a lower number of London banking days in certain SONIA-floating rate notes, but most London Agent Banks seem to be most comfortable with a minimum of 5 London banking days' lag.

to the day in the interest period itself (i.e. the day of application of the rate in the interest period, rather than the day on which the rate is published on the screen).[2]

Observation Shift Convention: Until January 2020, all new SONIA-linked floating rate notes adopted the observation look-back convention described above. However, in January 2020, the European Bank for Reconstruction and Development issued the first series of SONIA-linked floating rate notes that employed the observation shift convention.

The introduction of this alternative convention to the floating rate notes' market seemed natural. In the derivatives space, members of the International Swaps and Derivatives Association (ISDA) had indicated in earlier consultations on LIBOR fall-backs that they were supportive of this convention. There had, moreover, been some evidence that, in the context of SOFR-linked floating rate notes in the United States, U.S. market participants were in favour of the observation shift convention.

Similarly to the observation look-back convention, the observation shift convention provides for the application of SONIA rates published during an observation period that ends 5 London banking days prior to the interest determination date for an interest period (and, accordingly the SONIA rate specified for any day in the interest period is the published SONIA screen rate on the London banking day falling 5 London banking days prior to such day). In contrast, however, to the observation look-back convention, the weighting of each daily SONIA rate is determined by reference to the day on which the reference rate is published on the screen in the observation period, rather than by reference to the day in the relevant interest period for which the rate is to be applied).

The SONIA Compounded Index: The Bank of England began to publish the SONIA Compounded Index from 3 August 2020, given overwhelming market support for such an index following the Bank's publication of a discussion paper dated 26 February 2020 entitled "*Supporting Risk-Free Rate transition through the provisions of compounded SONIA, February 2020*" (the **"Discussion Paper"**)[3].

As noted in the Discussion Paper, the publication of the index by a trusted official source was intended, in part, to address concerns of market participants as to whether the relevant compounded rate for the period has been properly determined (so, for example, if the correct daily rates had been used and all weightings for weekends and public holidays falling within the relevant period had been properly made).

The Discussion Paper also outlined that the SONIA Compounded Index would adopt (and it has adopted since 3 August 2020) the observation shift convention in its calculations. Consequently, this makes it more likely that new issuances of SONIA-linked floating rate notes will adopt the same observation shift convention going forwards (though previous SONIA-linked floating rate notes using the observation lookback convention should not be affected). Indeed, shortly after the launch of the SONIA Compounded Index, the EIB confirmed the probability of this shift in convention in the Sterling floating rate note markets when, continuing its tradition of "firsts", it elected to peg a new series of SONIA-linked floating rate notes to the Index.

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2 "Weight" here refers to the weighting in the compounding formula to account for calendar days when the SONIA rate is not published (e.g. weekends and bank holidays). On most days, the weighting of a rate is equal to "1", but, for example, a daily SONIA rate for a Friday during the interest period (that, in this case, would be a rate published on the screen on the relevant day of the observation look-back period) is generally given a weight of 3 (to account for Saturday and Sunday).

3 See https://www.bankofengland.co.uk/paper/2020/supporting-risk-free-rate-transition-through-the-provision-of-compounded-sonia