



ICE BENCHMARK ADMINISTRATION

ICE SWAP RATE – MOVEMENT INTERPOLATION AND FURTHER CONSULTATION

Introduction

ICE Benchmark Administration Limited (IBA) is the Benchmark Administrator of ICE Swap Rate (ISR), which is recognised as the principal global benchmark for swap rates and spreads for interest rate swaps.

ISR represents the mid-price for interest rate swaps (the fixed leg), at particular times of the day, in three major currencies (EUR, GBP and USD) and in tenors ranging from 1 year to 30 years.

IBA issued a consultation paper in March 2017 to seek views on whether movement interpolation should be added to the methodology for the calculation of ISR. IBA then published a feedback statement stating that movement interpolation would become an integral part of the ISR methodology.

In this latest paper IBA:

- Proposes a further enhancement to the ISR methodology to increase the minimum number of snapshots for published ISR rates
- Notifies that the movement interpolation addition to the methodology will take effect on Monday 2 November 2017, and
- Seeks information about usage of the ISR benchmark rate USD Spreads 4Y tenor published at 11.00 am (EST).

Methodology enhancement

In essence, ISR represents the mid-market price for a theoretical trade in the relevant tenors using the best prices available on trading venues at the relevant times.

The current ISR methodology is described in detail on IBA's website, at:

https://www.theice.com/publicdocs/ICE_Swap_Rate_Full_Calculation_Methodology.pdf

In summary, the ISR calculation is based on using randomised 'snapshots' of data from regulated venues and applying a number of quality checks. The steps are outlined below:

1. IBA generates multiple, randomised 'snapshots' using data collected from a number of regulated venues (MTFs and SEFs) during a short 2-minute period leading to the ISR calculation time.
2. For each snapshot, IBA combines the prices and volumes from the trading venues to create a synthetic order book that represents the best prices (and accompanying volumes) available in the market at that time.

3. IBA calculates the Volume Weighted Average Mid Prices (VWAMP) at which an order in Standard Market Size (SMS) could be filled from the synthetic order book on both the bid and offer sides.
4. IBA applies liquidity checks. Any snapshot that cannot fill the Standard Market Size (on both the bid and offer side) is discarded, so that only VWAMPs from reasonably sized trades are included in the calculation.
5. IBA excludes any crossed order books. IBA also excludes any snapshot with equal best bid and best offer.
6. Outlier snapshots are also excluded from the calculation in order to protect against momentary and unrepresentative spikes in price. The snapshots that pass the liquidity checks are ranked in order of their VWAMPs and the snapshots higher than the 75th percentile and lower than the 25th percentile are discarded.
7. Quality weighting gives a higher weighting to remaining snapshots with tighter spreads between the volume weighted bid and volume weighted offer because they have more volume executable closer to the mid-point, and are therefore indicative of a better quality market.

IBA proposes enhancing the methodology to ensure that, after the liquidity and crossed order book checks, there are at least 6 snapshots remaining. This will ensure that each published tenor is based on data spanning at least one quarter of the snapshots.

It is not anticipated that this enhancement will lead to a materially increased number of 'No Publications', particularly when movement interpolation is introduced.

Movement interpolation

As stated in IBA's feedback statement in April this year, IBA intends to include movement interpolation in the ISR methodology. Movement interpolation will be applied to provide a rate for that tenor, subject to the following conditions:

- There are fewer than 6 valid snapshots (and not all 24 of the snapshots are crossed order books)
- the gap between the target tenor and the neighbouring tenors is only one year on each side
- both the neighbouring tenors are not themselves interpolated, and
- the previous day's publication for the target tenor was not interpolated

This means that an additional process step will be included within the ISR methodology. If, at the end of the current calculation methodology, a tenor would otherwise not be published, that tenor will be interpolated on the day-to-day movement in adjacent tenors, provided that the above conditions are met.

The timing for this addition is 2 November 2017.

At the end of each quarter, IBA will publish on its website a report showing the number of times that movement interpolation was used in the calculation of ISR during that quarter.

Usage of ISR USD 4Y Spreads (published at 1100 am EST)

IBA's consultation earlier this year noted three main categories of No Publications: tenors missing liquidity; days when low liquidity for certain runs can be anticipated due to holidays; and days when liquidity is unexpectedly withdrawn from the market due to exceptional market events or major news releases.

IBA has addressed each of these categories of No Publications. Since the start of 2017, there have been 7 No Publications of ISR, excluding USD 4Y Spreads. Movement interpolation would have reduced this number by 5.

USD 4Y Spreads is a tenor which sees little market liquidity and so is frequently subject to No Publication. (USD Spreads represent the fixed leg spread over an equivalent maturity bond as quoted on the relevant Trading Venues). Even movement interpolation is unlikely to reduce significantly the number of No Publications in this tenor.

Following discussions with the ICE Swap Rate Oversight Committee, IBA is minded to cease seeking to publish the USD Spreads 4Y. **Before doing so, IBA invites any users to provide information on their use of the tenor and to comment on any impact there may be if the tenor were to be withdrawn.**

Commenting on the proposals

Please address any comments to IBA@theice.com on or before **Wednesday 27 September 2017**.

Alternatively, comments may be posted to IBA at the following address, to arrive by 27 September:

ICE Benchmark Administration Limited
Milton Gate
60 Chiswell Street
London
EC1Y 4SA.

Further information

Further information about IBA, ISR and the ICE Swap Rate Oversight Committee can be found at:

<https://www.theice.com/iba/ice-swap-rate>
