30 September 2021

BU-001: IMPORTANT CONSIDERATIONS REGARDING THE IMPACT OF IBOR REFORM ON VALUATIONS

1. Background

1.1. This bulletin from the Institute of Valuers and Appraisers, Singapore (“IVAS”) provides an overview of the replacement of benchmark Interbank Offered Rates (“IBOR”) (the “Reform”) and highlights key areas that valuation professionals should consider when performing valuation analysis affected by the IBOR Reform.

1.2. Regulators including the United Kingdom’s Financial Conduct Authority (“FCA”) and United States’ Commodity Futures Trading Commission (“CFTC”) have announced a shift away from IBOR toward alternative risk-free rates (“ARRs”). UK’s FCA, in particular, announced that banks will no longer be required to submit the quotes used to calculate London Interbank Offer Rates (“LIBOR”) after 31 December 2021. On the other hand, the majority of US LIBOR tenors will expire 18 months later on 30 June 2023[1]. The global regulators have stated that it would improve transparency by anchoring the benchmark rates to observable transactional data. In comparison, IBORs are based on survey data in the form of individual bank submissions on a daily basis.

1.3. The cessation of IBORs necessitates the use of ARRs, such as the Secured Overnight Financing Rate (“SOFR”) in the US or Sterling Overnight Interest Average (“SONIA”) in the UK[2]. IBORs, however, have been used as the underlying rates for majority of financial instruments worldwide for several decades, including derivative contracts, loans, bonds, and other retail financial products.

1.4. The IBOR Reform is expected to have a significant impact on the financial markets. Entities will need to address changes in their products, communicate effectively with their clients, amend client contracts to ensure they continue to function as well as make necessary changes to their valuation and risk management practices.

1.5. Given that IBORs underlie a significant amount of derivatives (e.g., interest rate swaps) and cash products (e.g., floating rate loans), the IBOR reform would impact the valuations of a large number of financial instruments.

2. Key Considerations

2.1. Professionals in the valuation practice should consider the impact of IBOR Reform to valuation where notable transitional consequences include changes to the pricing and valuation of financial instruments linked to IBORs.

[1] US LIBOR tenors expiring on 31 December 2021 only include 1-week and 2-month US LIBOR’s. The rest of the tenors will expire on 31 June 2023 according to the ICE Benchmark Administration Limited (“ICE”). See https://ir.theice.com/press/news-details.

[2] Other selected ARRs include Euro Short-Term Rate (“€STR”), Swiss Average Rate Overnight (“SARON”), and Tokyo Overnight Average Rate (“TONA”). In addition, the three major LIBOR currencies impacted by the transition are Japanese Yen (“JPY”), Swiss Francs (“CHF”) and the Euro (“EUR”). EURIBOR, on the other hand, will not be terminated.

2.2. Among the critical considerations highlighted in the following sections are the following overarching themes:

2.2.1. The importance of having a firm grasp on any changes in contractual terms and fallback provisions that may affect the timing and amount of cash flows and the risks associated with the underlying financial instruments;

2.2.2. Any modifications to the valuation models and valuation governance processes that are necessary in light of the IBOR Reform;

2.2.3. Consideration of any liquidity issues associated with IBOR- and ARR-based products and their impact on valuations; and

2.2.4. The importance of monitoring and staying abreast with market developments.

3. Contractual Features and Impact to Valuation

3.1. Cash flows calculated using ARRs would differ when entities transition away from IBOR in their financial instruments. Adjustments to cash flows or to ARRs may be required to account for the impact.

3.2. It is critical to have a thorough understanding of the contractual terms, particularly for existing financial instruments that will survive the IBOR termination date. These contractual terms may affect how the financial instruments are valued, at least in the context of the following valuation parameters:

3.2.1. The timing of transition for financial instruments in a portfolio;

3.2.2. The fallback rate when and if the relevant IBOR becomes unavailable, and any applicable spread adjustment on the relevant ARR or replacement rate;

3.2.3. The periodicity of the cash flows (e.g., monthly or quarterly), their timing (e.g., any payment delay or observational shift), and the interest calculations (e.g., simple or compounded, in advance or in arrears) after the transition date; and

3.2.4. Degree of certainty of cash flows underlying each financial instrument and any relevant adjustments (e.g., on credit spreads) that should be made to account for changes in risks during and after the transition.

3.3. Additionally, valuation professionals should be aware of any existing contractual considerations that would trigger upon IBOR cessation and leave the remaining contractual cash flows uncertain. Other circumstances may result in contract frustration or may even require parties to completely redefine the nature of the product.

4. Change in Valuation Models and Governance

4.1. The use of ARRs may necessitate adjustments to valuation and capital models, which may introduce model risks into the valuation and risk management process. Inputs will be needed to conform with the ARR's quoting convention, model calculations will need to be revised to match the structure of the inputs, and any outputs will need to match the terms of the associated cash flows. Some products will require a completely new modelling approach, whilst others will no longer function with ARRs.

4.2. Additionally, it is also critical to develop an appropriate governance framework that allows for effective review and challenge of the valuation process during the transition period to ensure that adequate consideration is given to the valuation impacts of IBOR Reform.

5. Liquidity Considerations with IBOR- and ARR-based Products

5.1. While ARR-based products start gaining liquidity as IBOR cessation date approaches, market liquidity and data observability of IBOR-indexed instruments are expected to deteriorate significantly. These circumstances create difficulties when valuing IBOR-indexed products and verifying prices for either audit or benchmarking purposes.

5.2. The liquidity for ARR-linked products may also be fragmented across products (e.g., futures, swaps) and jurisdictions, making it more difficult for entities to construct reliable pricing curves. Valuation professionals should be cognizant of any liquidity issues when selecting market instruments as inputs into their valuation.

6. Monitoring and staying abreast with market developments

6.1. Currently, various efforts are underway to develop and promote adoption of forward-looking, credit-sensitive term rates that are a closer substitute for IBOR than overnight rates. There are data service providers developing indices to substitute IBOR. The markets on instruments referencing those new indexes are still developing.

6.2. As this is a rapidly evolving area, valuation professionals should stay current on key market developments and develop a thorough understanding of the impact and risks associated with the transition from IBORs to ARRs or other replacement rates in order to determine their impact on their valuation engagements.