REFINITIV BENCHMARK SERVICES (UK) LIMITED

Methodology Consultation

Saudi Arabian Interbank Offered Rate (SAIBOR)

Issue Date: 15 November 2021

REFINITIV™

1. Introduction

The Saudi Arabia Interbank Offered Rate ("SAIBOR" or the "Benchmark") is a daily benchmark reference rate for unsecured interbank deposits in Saudi Riyals.

SAIBOR is administered by Refinitiv Benchmark Services (UK) Limited ("RBSL") in accordance with the UK Benchmarks Regulation[1] ("BMR") and is also aligned with the IOSCO Principles for Financial Benchmarks. RBSL is incorporated in England and Wales with company number 08541574 and is a wholly owned subsidiary of Refinitiv Limited ("RL"), itself a wholly owned subsidiary within the London Stock Exchange Group. As Administrator, RBSL is responsible for collecting input data, determining and publishing the Benchmark and for the compliance and integrity of the Benchmark. RBSL is authorized and regulated in the UK by the Financial Conduct Authority ("FCA"), FCA Reference Number 610678.

The Saudi Riyal interbank deposit market together with users of SAIBOR as a reference in financial products are located primarily within the Kingdom of Saudi Arabia. For the purposes of BMR which makes reference to usage of SAIBOR in financial products within the United Kingdom and the European Union only, SAIBOR is assessed as being a non-significant benchmark.

This consultation outlines enhancements to the methodology of SAIBOR (collectively the "Enhanced Methodology") as detailed further in section 3 below and invites feedback in respect of such enhancements. The current methodology by which SAIBOR is determined (the "Current Methodology") is available from the Refinitiv website[2].

2. Global Interest Rate Benchmark Reform

Significant enhancements have been made to the methodologies of major inter-bank offered rate ("IBOR") benchmarks in recent years. These enhancements have largely been motivated by two factors. One factor has been the shift by banks towards forms of wholesale funding beyond interbank deposits, resulting in the need for IBOR benchmark methodologies to be enhanced in order that such benchmarks remain representative of actual funding costs for banks.

The second factor has been an increase in guidance regarding the design, administration and governance of benchmarks by central banks and regulators, including international organisations representing such official sector entities. Key steps in this process have included the following.

---

[1] Following the UK's withdrawal from the EU and the end of the transition period, the BMR has been onshored and brought into UK law (UK BMR). The BMR is Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016.
[2] www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/saibor-benchmark-methodology.pdf

1. Publication of the Principles for Financial Benchmarks[3] in July 2013 by the International Organization of Securities Commissions (IOSCO), introducing a widely recognised framework for the governance and administration of financial benchmarks.

2. Introduction of regulation in the EU for benchmarks in 2016 (Regulation (EU) 2016/1011).

3. Introduction of recommendations[4] by the Financial Stability Board in 2014 at the request of the G20 relating to:
   - strengthening of IBORs by anchoring them to a greater number of transactions, and
   - identifying alternative near-risk-free rates (RFRs) and, where suitable, encouraging market participants to transition new contracts to an appropriate RFR.

In response to these factors, benchmark administrators have enhanced the methodologies of major IBORs. In Europe, the European Money Markets Institute (EMMI) published a hybrid methodology for EURIBOR[5] that implements a waterfall approach for contributor banks to make submissions. The first level of the waterfall requires submissions to be based on executed transactions in the wholesale unsecured money markets. Eligible instruments include unsecured deposits, commercial paper and certificates of deposit and eligible counterparties include non-banking financial institutions and funds, central banks and general governments. The second level permits use of interpolation, non-defined tenors for instruments and updates of previous submissions by reference to futures contracts. The third level permits submissions to be based on additional transactions and data from related markets using procedures developed by each contributor bank. The hybrid methodology was published in January 2019 and was implemented in a gradual manner for individual contributor banks, such gradual implementation finishing during the fourth quarter of 2019.

The administrator for LIBOR, ICE Benchmark Administration, announced in April 2018 that contributor banks would gradually transition to making submissions in accordance with an enhanced methodology[6], a process that was completed by April 2019. The enhanced methodology comprised a waterfall to be used by contributor banks. The first level uses a volume weighted average price of commercial paper, certificates of deposit and unsecured deposits against counterparties such as banks, government entities, non-bank financial institutions and corporations. The second level permits other transactions adjusted for market

---

[3] www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf
[4] https://www.fsb.org/wp-content/uploads/r_140722.pdf
[5] www.emmi-benchmarks.eu/assets/files/D0016A-2019%20Benchmark%20Determination%20Methodology%20for%20EURIBOR.pdf
[6] https://www.theice.com/publicdocs/ICE_LIBOR_Output_Statement.pdf

REFINITIV™

movement and tenor. The third level permits expert judgment in accordance with submission procedures developed by each contributor bank.

The administrator of TIBOR, the Japanese Bankers Association (JBA), implemented reforms to TIBOR in July 2017[7] with an enhanced methodology that introduced a waterfall for contributor banks to determine submissions. The first level uses data from the unsecured call market, including trades and quotes. The second level includes transactions in the offshore market and interbank negotiable certificate of deposits (NCDs), then quotes. The third level includes transactions in other markets including non-interbank NCDs, large term deposits, quotes for short term government bonds, GC repos and OIS contracts.

3. An Enhanced Methodology for SAIBOR

Under the direction of the regulator and central bank of the Kingdom of Saudi Arabia, SAMA, a working group was established in 2018 involving the panel banks for SAIBOR and RBSL as Administrator for SAIBOR. The working group was tasked with considering enhancements for the methodology of SAIBOR in order to reflect a broader range of wholesale funding transactions for banks than interbank deposits alone and to introduce a waterfall for submissions so as to permit the determination of SAIBOR in a wide range of market conditions. In developing the Enhanced Methodology, regard has been paid to both international best practice and the specifics of wholesale funding for banks in the Kingdom of Saudi Arabia.

The Current Methodology for the determination of SAIBOR relies on a panel of contributor banks submitting rates at which they would be able to borrow unsecured interbank funds in Saudi Riyals, were they to accept offers in reasonable market size from other banks in the SAIBOR panel at 11:00am KSA. The panel comprises 11 banks and the minimum number of banks required to determine SAIBOR is five banks. There is no waterfall in the Current Methodology.

The Enhanced Methodology developed for SAIBOR introduces a waterfall to be used by the existing panel of contributor banks when making submissions. The waterfall comprises three levels as described below.

Level one of the Enhanced Methodology uses volume weighted average prices from wholesale funding transactions from counterparties including banks, central banks, government related entities, non-bank financial institutions, corporates and, subject to a minimum threshold, retail clients.

Level two of the Enhanced Methodology uses volume weighted average prices from repo transactions (excluding repo transactions with SAMA) in which the collateral may be any type of Saudi Riyal fixed income security and the same range of eligible counterparties as Level 1 applies. Contributor banks shall

---

7 www.jbatibor.or.jp/english/%E5%88%A9%E7%94%A8%E8%80%85%E5%90%91%E3%81%91%E8%AA%AC%E6%98%8E%E8%B3%87%E6%96%99%E6%A1%88_EN_100217.pdf

REFINITIV™

use expert judgment to apply a spread to such repo transactions to reflect the difference in the rate of secured repo transactions and the unsecured nature of SAIBOR.

Level three of the Enhanced Methodology requires the use of expert judgment by the individual contributor bank or banks subject to submission procedures developed by each contributor bank and where such submission procedures are subject to an appropriate level of internal governance and oversight.

As SAIBOR is representative of the offered side of the market but transactions involving a wide range of counterparties are typically representative of the bid side of the market, contributor banks will add a spread percentage of 16% to the transacted rates derived from levels one and two of the waterfall before making a SAIBOR submission. (Level 3 submissions will use expert judgment of the rate of unsecured eligible transactions had any occurred and will include the 16% spread percentage.) The 16% spread percentage has been established as the historical spread between SAIBOR and the bid side of the market (represented by SAIBID) over all tenors and over five years[8]. The methodology will include a process for reviewing the Spread Percentage from time to time and, should market conditions require it, a process for the introduction of a cap ("Spread Cap") to the spread calculated using the Spread Percentage. The mechanism for both will be specified in the methodology document.

In order to minimise disruption, implementation of the Enhanced Methodology would be done in a gradual manner over a period of several weeks during which contributor banks adopt the Enhanced Methodology on a staggered basis. At the time of the transition to the Enhanced Methodology, the publication of SAIBOR will be moved by one hour from 11:00am KSA to 12:00pm KSA (subject to any delay procedure to be specified in the methodology). Following this move, SAIBOR will be in respect of a transaction data collection window that ends as of 11:00am KSA on the relevant publication day. In addition, under the Enhanced Methodology, if insufficient submissions are received for the determination of SAIBOR, the previous published value of SAIBOR would be republished together with a flag indicating republication.

Under the Enhanced Methodology, the following benchmark definition would be adopted: *The Saudi Arabian Interbank Offered Rate ("SAIBOR") benchmark is an indicative offer rate at which contributor panel banks would be able to borrow unsecured interbank funds in Saudi Riyals, anchored in transactions where possible together with a historical spread adjustment. A waterfall methodology is applied to enable a rate to be published in a wide range of market circumstances.*

It is RBSL's assessment that by reflecting transactions in a wider range of wholesale funding instruments, the Enhanced Methodology would strengthen the representativeness of SAIBOR with respect to actual

[8] SAIBID is currently administered by a third party. As part of any implementation of the Enhanced Methodology, RBSL is likely to become administrator for SAIBID. If RBSL becomes the administrator of SAIBID, it will be administered in accordance with the Enhanced Methodology described in this consultation (but without the 16% percentage spread that is proposed for SAIBOR submissions only). Consequently, the SAIBID methodology will change in line with that of SAIBOR.

funding levels experienced by major banks active in the market for unsecured Saudi Riyals and would further anchor SAIBOR in actual transactions to the extent possible.

4. Analysis of Enhanced Methodology

The Enhanced Methodology was tested from July 2020 to October 2021. The spread of rates calculated using the Enhanced Methodology to rates calculated using the Current Methodology (together with the standard deviation of spreads) for the SAIBOR tenors are shown below. During the initial part of the testing phase, a fixed spread of 12.5 basis points was applied to transacted rates derived from the Enhanced Methodology waterfall. However, in the test results shown below, the results have been adjusted to reflect a spread percentage of 16% consistently throughout the testing phase (in accordance with the proposed Enhanced Methodology) rather than a fixed spread of 12.5 basis points during part of it.

	O/N	1W	1M	3M	6M	1Y
Average spread (%)	-0.15	-0.13	-0.08	-0.03	0.01	0.01
Median spread (%)	-0.16	-0.14	-0.08	-0.04	0.00	0.01
Max spread (%)	0.04	0.01	0.13	0.17	0.13	0.11
Min spread (%)	-0.30	-0.28	-0.30	-0.20	-0.19	-0.19
Standard Deviation (%)	0.06	0.06	0.06	0.07	0.04	0.03

The standard deviation of daily changes in the same rates over the same period are shown below.

	O/N	1W	1M	3M	6M	1Y
Current Methodology	0.001	0.001	0.001	0.001	0.001	0.001
Enhanced Methodology	0.032	0.025	0.031	0.029	0.018	0.019

Where a spread shown in the first table above is negative, it implies that rate calculated using the Enhanced Methodology is lower than rate calculated using the Current Methodology. Overall, the Enhanced Methodology produces rates that are slightly lower and slightly more volatile than those produced by the Current Methodology. This reflects the actual funding transaction basis for the Enhanced Methodology.

REFINITIV™

5. Consultation Feedback and Next Steps

Feedback is invited from SAIBOR stakeholders on the following points:

1. **Please indicate any impact or factors relating to the Enhanced Methodology for SAIBOR that you would wish to be considered.**

2. **Please indicate any impact if the publication time of SAIBOR is moved back one hour from 11:00am KSA to 12:00pm KSA (subject to any delay procedure to be specified in the methodology).**

3. **Please indicate any usage of SAIBOR by your firm in financial instruments, contracts or funds issued or traded in the United Kingdom or the European Union, including the type of instrument, contract or fund (for example, derivative, floating rate note, bilateral loan, UCITS).**

4. **Please indicate any other points relating to SAIBOR that we should consider.**

RBSL as the SAIBOR Administrator reserves the right to use such feedback and to take such actions as it deems appropriate in order to ensure ongoing compliance with existing regulations and to maintain the integrity of SAIBOR and its alignment with international best practice.

Feedback from stakeholders should be sent to index_queries@refinitiv.com and include 'SAIBOR Consultation' in the email title. Feedback is requested by 29 November 2021 and if it should be treated by RBSL as confidential, it should be marked accordingly.

Any decisions taken in due course by RBSL will be announced with a suitable notice period of around four weeks before any actions arising from such decisions are implemented. A summary of key points received by RBSL in relation to this consultation may be included in the announcement.

REFINITIV™