Methodology

Saudi Arabian Interbank Offered Rate (SAIBOR)

Effective Date: 02 March 2020

Refinitiv Document Classification: Public
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1. Introduction

1.1 Overview

This document specifies the Methodology of the Saudi Arabian Interbank Offered Rate Benchmark ("SAIBOR" or "the Benchmark").

The purpose of SAIBOR is to represent the rate at which contributing banks 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 Riyadh time (AST).

1.2 Benchmark Administrator

Refinitiv Benchmark Services (UK) Limited (RBSL) is the Administrator of SAIBOR. RBSL is a Refinitiv company.

As Administrator, RBSL is responsible for collecting input data, determining and publishing the Benchmark, and for all aspects of governance, oversight, compliance and integrity of the Benchmark.

1.3 Description of the Benchmark

SAIBOR comprises six tenors: Overnight, 1 week, 1 month, 3 months, 6 months, and 1 year. SAIBOR is calculated using submitted rates (contributions) from a panel of contributor banks active in the money market in Saudi Riyals.

SAIBOR is published Sunday to Thursday at 11:00am Saudi Arabia Time, subject to local market holidays.

The Benchmark is calculated for each tenor as the arithmetic average of the contributions after 2 highest and lowest contributions have been discarded and is published to 5 decimal places.

This Methodology is dependent on sufficient liquidity in the underlying market or otherwise in accordance with the hierarchy of data sources permitting contributor banks to make representative contributions.

1.4 Intended Readership

This document is intended for Stakeholders of the Benchmark.

1.5 Document Publication

This document is available on the Refinitiv website and on request.
2. **Input Data**

2.1 **Contributions**

SAIBOR is calculated based on the submitted rates (“Contributions”) from a panel of contributor banks that are active participants in the money market in Saudi Riyals (“Contributors”). Contributions are rates at which Contributors 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 Riyadh time.

The market for Saudi Arabian interbank deposits is considered sufficiently active for the purposes of determining the SAIBOR benchmark if there are prices available in accordance with the hierarchy of data sources to be used by Contributors (section 2.4) that allow Contributors to establish a representative market level when making Contributions.

2.2 **Contributor Eligibility**

The universe of banks eligible for consideration as Contributors in respect of the Benchmark will be banks that are:

- Active in the Saudi Arabian Money Market
- Willing to agree to regulation by relevant authorities in Saudi Arabia, should the Benchmark become regulated

If anything comes to the attention of the Administrator that leads the Administrator to believe that a Contributor is not adhering to the SAIBOR Contributor Code of Conduct, the Administrator may not use input from that Contributor until the situation is clarified or rectified to the Administrator’s satisfaction in accordance with the process specified in the SAIBOR Contributor Code of Conduct.

2.3 **Contributor Panel**

At the Effective Date of this methodology, the Contributor panel comprises:

- Arab National Bank
- Bank Aljazira
- Banque Saudi Fransi
- National Commercial Bank
- Riyad Bank
- Saudi British Bank
- Samba Financial Group
• Saudi Investment Bank
• Alinma Bank
• Bank Albilad
• Al Rajhi Bank

The panel may be updated from time to time. Changes to Contributors on the panel are available on request to the Administrator. The panel size and membership are sufficient to ensure that the input data used in the determination of SAIBOR is representative of the unsecured market for interbank funds in Saudi Riyals.

2.4 Hierarchy of Data Sources to be Used by Contributors

In accordance with EU BMR Annex 1 (L 171/58) for Interest Rate Benchmarks, in general the priority of use of input data shall be as follows:

(a) a Contributor’s transactions in the underlying market that a benchmark intends to measure or, if not sufficient, its transactions in related markets, such as:
- the unsecured inter-bank deposit market
- other unsecured deposit markets, including certificates of deposit and commercial paper, and
- other markets such as overnight index swaps, repurchase agreements, foreign exchange forwards, interest rate futures and options, provided that those transactions comply with the input data requirements in the code of conduct,

(b) a Contributor’s observations of third party transactions in the markets described in point (a),

(c) committed quotes,

(d) indicative quotes or expert judgment.

The Contributor shall determine to what extent, if any, a Contribution should be subject to a review prior to its contribution to the Administrator in addition to the post-contribution review required under the “Oversight” provisions of the Contributor Code of Conduct.
3. Determination and Publication of the Benchmark

3.1 Contribution Procedures

Contributors must contribute rates to all data points between 10:00:00am to 10:29:59am AST. The last Contribution received from each Contributor before the contribution window is closed will be taken for use in the calculation.

Contributors can make changes to their Contributions as many times as required up until 10:29:59am AST. Any new Contribution will overwrite the previous Contribution.

Contributors failing to contribute rates before 10:29:59am AST will be reminded by RBSL. If obtained before 10:59:59am, late Contributions will be included.

Where 5 or more Contributions are received by 10:59:59am AST, the 2 highest and lowest Contributions are discarded in accordance with the Minimum Contribution Criteria detailed in 3.2, and the remaining rates averaged.

3.2 Minimum Contribution Criteria

If fewer than 5 Contributions are received, the Benchmark will not be calculated.

Where 5 or more Contributions are received, the Contributions will be applied with a trimming methodology where the 2 highest and lowest Contributions, per tenor, are excluded from the calculation, once 5 or more Contributions are received.

<table>
<thead>
<tr>
<th>Contributions Received</th>
<th>Number of High Contributions Trimmed</th>
<th>Number of Low Contributions Trimmed</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 4</td>
<td>N/A – No Fix</td>
<td>N/A – No Fix</td>
</tr>
<tr>
<td>= 5 or &gt; 5</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Once the trimming methodology has been applied, the SAIBOR rates will be calculated as an average of the remaining rates and published to 5 decimal places.
3.3 Publication Time

SAIBOR is published at 11:00am AST Sunday to Thursday, subject to local market holidays.

3.4 Fallback Arrangement

If the minimum 5 Contributions are not received by 10:59:59am AST, a fallback arrangement is triggered.

Triggering the fallback arrangement extends the contribution window by 30 minutes from 11:00am to 11:30am AST to accept additional Contributions from Contributors who have not contributed.

If the minimum Contributions are reached by 11:30am AST, the benchmark will be released. If not, "NO FIX" will be issued at 11:30am AST.

3.5 Exercise of Expert Judgment by the Administrator

The Administrator, RBSL, will not exercise Expert Judgement in the determination of SAIBOR.

3.6 Re-fix Policy

The Benchmark will not be re-fixed if a contributor identifies an error to its Contribution(s) after the publication time.

If an error is identified in the calculation or published Benchmark before 12:00pm AST, the Administrator will publish an alert on the Refinitiv FIXALERT page to alert market participants and will use reasonable efforts to re-fix and republish the Benchmark by 12:00pm AST.

If the Benchmark is re-fixed and republished, the Administrator will publish an alert on the FIXALERT page to alert market participants.
4. **Benchmark Methodology Reviews and Change Procedures**

4.1 **Review of the Methodology**

The Administrator will conduct a review of the Methodology on a periodic basis of at least once per year. This review will include analysis of the underlying market that the Benchmark seeks to represent, performance and appropriateness of the current Contributors, and analysis of other potential Contributors as applicable.

The aim of the review will be to ensure that the Benchmark is still representative of the underlying market, that the Contributors are the optimum grouping to provide Contributions to represent the underlying interest, and that the current Contributors have been contributing in an accurate and timely manner.

4.2 **Changes to the Methodology**


4.3 **Objective of the Methodology**

The objective of this Methodology is to reflect best practice across the industry for the calculation and Administration of Benchmarks that seek to represent the behaviour of markets showing similar characteristics as the Saudi Arabian Money Market. The Methodology shall also comply with all applicable regulations and policies.

4.4 **Identification of Potential Limitations of the Benchmark**

This Benchmark is based upon rates collected from contributing banks, the content of which is reliant upon there being a liquid Saudi Arabian Money Market, plus the ability of contributing banks to provide their data to RBSL.

As a matter of general policy, RBSL as the Administrator believes that contribution-based benchmarks similar to this benchmark should not be published if fewer than five contributors can be identified. Should the number of contributors drop below five or be expected to drop below five (apart from as an effect of short term disruption or technical issues at one or more contributors), or any ongoing constraint or fragmentation to liquidity in this market is identified or foreseen, RBSL will consult with Stakeholders to consider an appropriate course of action.
5. Governance and Further Information

5.1 Benchmark Administrator

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As Administrator, RBSL is responsible for collecting input data, determining and publishing the Benchmark, and for all aspects of governance, oversight, compliance and integrity of the Benchmark.

5.2 Oversight Committee

The RBSL Interest Rate Benchmark Oversight Committee is responsible for oversight of all aspects of the provision of the benchmark, including reviewing the benchmark definition and Methodology at least annually, overseeing any changes to the benchmark Methodology or cessation of the benchmark, and overseeing the administrator's control framework, management and operation of the benchmark.

5.3 Benchmark Manager

A benchmark manager is appointed from time to time by the Administrator who will be a subject matter expert responsible for interpreting the Methodology.

5.4 User Feedback

RBSL shall communicate periodically with the panel of Contributors in order to assess conditions in the market for unsecured interbank funds in Saudi Riyals and to assess the ongoing fitness and suitability of the Methodology. Such feedback may be used as part of the periodic review of the Methodology.

5.5 Enquiries

RBSL welcomes feedback and any queries or questions regarding this Methodology should be sent to index_queries@refinitiv.com.
6. Definition of Key Terms

Capitalized terms used in this document but not otherwise defined are defined in the following table. Definitions are sourced from IOSCO Principles for Financial Benchmarks.\(^1\)

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>Includes all stages and processes involved in the production and dissemination of a Benchmark, including: a) Collecting, analysing and/or processing information or expressions of opinion for the purposes of the determination of a Benchmark; b) Determining a Benchmark through the application of a formula or another method of calculating the information or expressions of opinions provided for that purpose; and c) Dissemination to users, including any review, adjustment and modification to this process.</td>
</tr>
<tr>
<td>Administrator</td>
<td>An organisation or legal person that controls the creation and operation of the Benchmark Administration process, whether or not it owns the intellectual property relating to the Benchmark. In particular, it has responsibility for all stages of the Benchmark Administration process, including: a) The calculation of the Benchmark; b) Determining and applying the Benchmark Methodology; and c) Disseminating the Benchmark.</td>
</tr>
<tr>
<td>Arm’s-length Transaction</td>
<td>A transaction between two parties that is concluded on terms that are not influenced by a conflict of interest (e.g., conflicts of interest that arise from a relationship such as a transaction between affiliates).</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Prices, estimates, rates, indices or values that are: a) Made available to users, whether free of charge or for payment; b) Calculated periodically, entirely or partially by the application of a formula or another method of calculation to, or an assessment of, the value of one or more underlying Interests; c) Used for reference for purposes that include one or more of the following: • determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments; • determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument; and/or • measuring the performance of a financial instrument.</td>
</tr>
<tr>
<td>Bona Fide</td>
<td>Refers to data where the parties contributing the data have executed, or are prepared to execute, transactions generating such data and the concluded transactions were executed at Arm's-length from each other.</td>
</tr>
<tr>
<td>Calculation Agent</td>
<td>A legal entity with delegated responsibility for determining a Benchmark through the application of a formula or other method of calculating the information or expressions of opinions provided for that purpose, in accordance with the Methodology set out by the Administrator.</td>
</tr>
<tr>
<td>Expert Judgment</td>
<td>Refers to the exercise of discretion by a Contributor with respect to the use of data in determining a Benchmark. Expert Judgment includes extrapolating values from prior or related transactions, adjusting values for factors that might influence the quality of data such as market events or impairment of a buyer or seller's credit quality, or weighting firm bids or offers greater than than a particular concluded transaction.</td>
</tr>
<tr>
<td>Market Participants</td>
<td>Legal entities involved in the production, structuring, use or trading of financial contracts or financial instruments used to inform the Benchmark, or which reference the Benchmark.</td>
</tr>
<tr>
<td>Methodology</td>
<td>The written rules and procedures according to which information is collected and the Benchmark is determined.</td>
</tr>
<tr>
<td>Panel</td>
<td>Subset of Market Participants who are Benchmark Contributors.</td>
</tr>
<tr>
<td>Publish or Make Available</td>
<td>Refers to the expectation that a party such as an Administrator should provide a document or notice to Stakeholders. The means by which such notice is made should be proportionate to the breadth and depth of Benchmark use by Stakeholders, as determined by the Administrator on a &quot;best efforts&quot; basis. Ordinarily, posting a document or notice on the Administrator's website will meet this expectation.</td>
</tr>
<tr>
<td>Regulated Authority</td>
<td>A governmental or statutory body (not being a Self-Regulatory Organisation) with responsibility for securities and/or commodities and futures regulation.</td>
</tr>
<tr>
<td>Regulated Market or Exchange</td>
<td>A market or exchange that is regulated and/or supervised by a Regulatory Authority.</td>
</tr>
<tr>
<td>Self-Regulatory Organisation or “SRO”</td>
<td>An organisation that has been given the power or responsibility to regulate itself, whose rules are subject to meaningful sanctions regarding any part of the securities market or industry. This authority may be derived from a statutory delegation of power to a non-governmental entity or through a contract between an SRO and its members as is authorized or recognized by the governmental regulator.</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>Refers to Subscribers and other persons or entities that own contracts or financial instruments that reference a Benchmark.</td>
</tr>
<tr>
<td>Subscriber</td>
<td>A person or entity that purchases Benchmark determination services from an Administrator.</td>
</tr>
</tbody>
</table>