

iBoxx Tadawul SAR Government Sukuk & Bond Index Guide

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Table of Contents

1) iBoxx Tadawul SAR Government Sukuk & Bond Index	4
2) Bonds selection rules	5
2.1) Bond type	5
2.2) Issuer type	5
2.3) Amount outstanding	6
2.4) Credit Rating	6
3) Bond classification	7
4) Index calculation	8
4.1) Static data	8
4.2) Bond prices	8
4.3) Rebalancing process	8
4.4) Index data	8
4.5) Index calculus	9
4.6) Index and analytics weights	9
4.6.1) Index and analytics weights	9
4.6.2) Funged bonds	9
4.6.2.1) Parent and new tranche are both index constituents	9
4.6.2.2) Parent is an index constituent, but the new tranche is not	9
4.6.2.3) Parent is not an index constituent but the new tranche is	10
4.6.3) Full redemptions: exercised calls, puts and buybacks	10
4.6.4) Bonds trading flat of accrued	10
4.6.5) Multi-coupon bonds	10
4.6.6) Ex-dividend conventions	10
4.7) Index history	11
4.8) Settlement conventions	11
4.9) Calendar	11
4.10) Publication of the iBoxx Tadawul SAR Government Sukuk & Bond Index	11
4.11) Data publication and access	11
4.12) Index review	12
5) Governance and regulatory compliance	13
6) Changes to the iBoxx Tadawul SAR Government Sukuk & Bond index	14
7) Further information	15

A) ESG Disclosures	16
Disclaimer	17

1) iBoxx Tadawul SAR Government Sukuk & Bond Index

The iBoxx Tadawul SAR Government Sukuk & Bond Index is designed to reflect the performance of Saudi Arabian Riyal (SAR) denominated government bonds including Sukuk issued by Saudi Arabia. The index has been created in partnership between Saudi Stock Exchange Tadawul and IHS Markit. The index rules aim to offer a broad coverage of the SAR Sukuk government bond universe, whilst upholding minimum standards of investability and liquidity. The index is an integral part of global Markit iBoxx index families, which provides the marketplace with an accurate and objective reference index to assess the performance of Saudi Arabia's government Islamic bond markets and investments.

The bonds in the index must meet all the criteria described below as of the close of business three business days prior to the rebalancing date provided that the relevant bond data can be verified, at IHS Markit's sole discretion, as of such date ("bond selection cut-off date"). The new index composition becomes effective on the first business day of the next month.

All iBoxx indices are priced based on multiple data inputs. The Index uses multi-source prices as described in the document *Markit iBoxx Pricing Rules* publicly available on www.ihsmarkit.com.

This document covers the index rules and calculation methodology.

2) Bonds selection rules

The following selection criteria are used to determine the index constituents from the SAR denominated bond universe:

- Bond type
- Issuer
- Amount outstanding
- Credit Rating

2.1) Bond type

The iBoxx Tadawul SAR Government Sukuk & Bond Index includes only SAR denominated fixed coupon bonds.

The following bond types are specifically excluded:

- 144A bonds
- Zero coupon bonds and zero-coupon step-up bonds
- Financial non-hybrid perpetual and fixed to floater bonds
- Fixed-to-floater, non-hybrid bonds from non-financial issuers
- Convertibles
- Inflation- and other index-linked bonds
- Bonds cum or ex-warrant
- Bonds whose complete coupons are paid at maturity, as they are similar to zero-coupon bonds with only one cash flow
- New bonds entering the index that have already been called prior to rebalancing
- Optionally and mandatory convertible bonds
- Defaulted bonds
- Retail bonds
- Private placements

For retail bonds and private placements, publicly available information is not always conclusive and the classification of a bond as a retail bond or a private placement will be made at IHS Markit's discretion based on the information available at the time of determination. IHS Markit may consult with the specific Index Advisory Committees to review potential retail bonds or private placements. Any bond classified as retail or private placement is added to the list of excluded private placements and retail bonds. The list is published on www.ihsmarkit.com under *Indices News* for future reference and to ensure decision's consistency.

In instances where a new bond type is not specifically excluded or included according to the published index rules, IHS Markit will analyse the features of such securities in line with the principles set out in section 2.1 of the guide. IHS Markit may consult the specific Index Advisory Committees. Any decision as to the eligibility or ineligibility of a new bond type will be published and the index rules will be updated accordingly.

2.2) Issuer type

Only sovereign debt issued by the central government or the central bank are eligible for the index.

2.3) Amount outstanding

Eligible bonds must be denominated in SAR, with an amount outstanding of at least SAR 100 million.

2.4) Credit Rating

Both rated and unrated bonds are eligible for the index.

3) Bond classification

All bonds are classified based on the principal activities of the issuer and the main sources of the cash flows used to pay coupons and redemptions. In addition, a bond's specific collateral type or legal provisions are evaluated. Hence, it is possible that bonds issued from different subsidiaries of the same issuer carry different classifications.

The issuer classification is reviewed regularly based on updated information received by IHS Markit, and status changes are included in the index at the next rebalancing if necessary.

Where the sector classification of a specific entity is not very clear due to the diversified business of the entity, decision will be made at IHS Markit's discretion. IHS Markit will assign the IHS Markit classification according to its evaluation of the business risk presented in the security prospectus and annual reports, if available. IHS Markit will also compare the classification to peers in the potential sectors and may consult with the Index Advisory Committees. Membership lists including classification are published on the FTP server and in the *Indices* section on www.ihsmarkit.com for registered users.

4) Index calculation

4.1) Static data

Information used in the index calculation is sourced from offering circulars and checked against reference data provided by Tadawul.

4.2) Bond prices

The bond prices used to calculate the index will be provided by [Markit Evaluated Bond Pricing Service \(EVB\)](#). To make sure that illiquid bonds are being priced constantly on a daily basis, EVB will use its independent and proprietary evaluated pricing methodology and the following are the primary inputs into the evaluation process:

- Trades, including real-time trades
- Primary dealer quotes which are buy and sell quotes for Sukuks
- Yield curve pricing
 - > Yield curve will be derived from liquid traded bonds across the term structure using trades and dealer quotes
 - > Less liquid bonds will be plotted on the yield curve in respect to their maturity and their yield will be derived
 - > Derived yields will be converted to cash prices

In this methodology, the more liquid bonds data points (trades, dealer quotes) are available, the more accurate the yield curve will be.

4.3) Rebalancing process

The iBoxx Tadawul SAR Government Sukuk & Bond Index is rebalanced monthly on the last calendar day.

The preview and cut-off date determination follows a global preview cycle assuming a Monday to Friday working week. Two business days before the end of each rebalancing month, the rating and amount information for the constituents is updated and the list is adjusted for all rating and amount changes which are known to have taken place three business days before the end of the month which could also result in exclusion of the bond. However, if bonds become eligible into the index two business days prior to rebalancing because of rating and/or amount changes, they will be included.

Two business days before the end of the month the final index membership list for the following month is published at the close of business.

On the last business day of each month, IHS Markit publishes the membership list with the capped amount outstanding and closing prices of all bonds at the close of business.

4.4) Index data

The calculation of the index is based on bid prices. New securities are included in the index at their respective ask prices when they enter the index family. In the event that no price can be established for a particular security, the index continues to be calculated based on the last available price. This might be the case in periods of market stress, or disruption as well as in illiquid or fragmented markets. If the

required inputs become impossible to obtain, IHS Markit may consult market participants prior to the next rebalancing date. Decisions are made publicly available on a timely basis and IHS Markit may refer back to previous cases.

The rebalancing takes place after close of market on the last trading day of a rebalancing month.

The indices are transaction cost adjusted. For specific cost factor calculation formulae please refer to the Markit iBoxx Bond Index Calculus document, available in the Methodology section of the Markit iBoxx Documentation page on www.ihsmarkit.com.

4.5) Index calculus

For specific index formulas please refer to the *Markit iBoxx Bond Index Calculus* document, available in the *Methodology* section of the iBoxx Documentation page on www.ihsmarkit.com.

4.6) Index and analytics weights

The iBoxx Tadawul SAR Government Sukuk & Bond Index is market-value-weighted. The amount outstanding of a bond is only adjusted within the rebalancing process.

All calculations are based on the adjusted amount outstanding that reflects the outstanding bond notional at the last rebalancing. The bond prices relate to the nominal value of 100.

4.6.1) Index and analytics weights

The iBoxx Tadawul SAR Government Sukuk & Bond Index is market-value-weighted. The amount outstanding of a bond is only adjusted within the rebalancing process.

All calculations are based on the adjusted amount outstanding that reflects the outstanding bond notional at the last rebalancing. The bond prices relate to the nominal value of 100.

4.6.2) Funged bonds

Bonds may be issued in several tranches. The different tranches are initially legally separate and therefore trade independently for a certain period. On and after the funge date, the tranches will be combined into one bond, i.e. the parent tranche will contain the original security, as well as the additional notional(s) from the new tranche(s). After the funge date, the prices for both the securities are the same, because they constitute one uniform bond. This is reflected in the indices as follows:

4.6.2.1) Parent and new tranche are both index constituents

- After the funge date, the price from the parent tranche is used for the funged tranche; no price for the funged bond
- Funged tranche leaves the index at the next rebalancing and parent amount outstanding increases accordingly

4.6.2.2) Parent is an index constituent, but the new tranche is not

- No special intra-month treatment necessary
- Parent amount outstanding increases at the next rebalancing

4.6.2.3) Parent is not an index constituent but the new tranche is

- No special intra-month treatment necessary
- Funged tranche leaves the index; parent tranche enters the index at the next rebalancing

4.6.3) Full redemptions: exercised calls, puts and buybacks

If a bond is fully redeemed intra-month, the bond effectively ceases to exist. In all calculations, the redeemed bond is treated as cash based on the last price, the call price or repurchase price, as applicable. The redemption factor, redemption and the redemption price are used to treat these events in the index and analytics calculation. In addition, the clean price of the bond is set to the redemption price, and the interest accrued until the redemption date is treated as an irregular coupon payment.

4.6.4) Bonds trading flat of accrued

If a bond is identified as trading flat of accrued, the accrued interest of the bond is set to 0 in the total return index calculation and is excluded from the calculation of all bond and index analytical values.

Bonds will be considered trading flat of accrued in any of the following situations:

- a bond has been assigned a default rating and/or
- issuer has announced a failure to pay a coupon and/or
- issuer has announced an intention not to make a payment on an upcoming coupon (grace period).

4.6.5) Multi-coupon bonds

Some bonds have pre-defined coupon changes that lead to a change in the annual coupon over the life of the bond. In all instances, the coupon change must be a fixed amount on top of a fixed coupon, i.e. floating coupon bonds are not eligible for the indices. The two main categories of bonds are step-up bonds and event-driven bonds.

- **Step-up bonds:** These are bonds with a pre-defined coupon schedule that cannot change during the life of the bond. The coupon schedule is used in all bond calculations.
- **Event-driven bonds:** These are bonds whose coupon may change upon occurrence (or non-occurrence) of pre-specified events, such as rating changes, e.g. rating-driven bonds, failure to register (register-driven bonds), or failure to complete a merger (merger-driven bonds). In the calculation of the indices and the analytics, the coupon schedule as of the calculation date is used. That is to say, any events occurring after the calculation date are ignored in the determination of the applicable coupon schedule. *Example of an event-driven bond:* A bond's rating changes on 31 December 2003 from A- to BBB+ and the coupon steps up from 6% to 6.25% from 1 March 2004 onward. The coupon dates are 1 October and 1 April each year. The correct coupon schedule for the bond and index calculations is date dependent. The index calculation on 20 December 2003 uses the 6% coupon for the whole life of the bond, while the calculation on 31 January 2004 uses a 6% coupon for the current coupon period to 29 February 2004, and a 6.25% coupon for all later interest payments. The index calculation on 20 March uses a 6% coupon until 29 February, a 6.25% coupon for the remainder of the current coupon period and a 6.25% coupon for all future coupon payments. The index calculation after 1 April uses a 6.25% coupon.

4.6.6) Ex-dividend conventions

Some markets have ex-dividend conventions. Ex-dividend means that the next coupon is detached from the bond several days in advance of the coupon payment date. The date on which the next coupon is detached is the ex-dividend date and the period between the ex-dividend date and the coupon payment

date is the ex-dividend period. If a bond is in the ex-dividend period, the next coupon payment will not be paid to a buyer of this bond, but will be paid to the original bond holder.

The indices and analytics calculations take ex-dividend conventions into account. During the ex-dividend period, the accrued interest of the bond is negative, while the next coupon payment is held separate in the variable coupon adjustment. If the bond enters the index during the ex-dividend period, then the next coupon payment and the coupon adjustment will not accrue to the index. However, if the bond was already in the index, the next coupon payment needs to be included in the total return calculations. This is controlled via the ex-dividend indicator which is 0 if the bond enters the index during the current ex-dividend period and 1 if not. The same treatment is also applied to all analytics calculation, i.e. the first cash flow is excluded from the calculations if the bond enters during the current ex-dividend period.

4.7) Index history

The Index history starts on 31 January 2020. The index has a base value of 100 on that date. The calculation of Sunday starts from 31st August 2020 going forward.

4.8) Settlement conventions

All iBoxx indices are calculated using the assumption of T+0 settlement days.

4.9) Calendar

IHS Markit publishes an index calculation calendar in the *iBoxx Calendars* section of the iBoxx Documentation page on www.ihsmarkit.com. This calendar provides an overview of the index calculation holidays of the iBoxx bond index families in a given year.

4.10) Publication of the iBoxx Tadawul SAR Government Sukuk & Bond Index

The iBoxx Tadawul SAR Government Sukuk & Bond Index is calculated as end-of-day closing values and distributed once daily after the close of trading in the market from Sunday to Monday to cover European and Saudi Arabian business days. Overall pricing of the index follows a Saudi Arabian holiday and business calendar with index values for Friday based on Thursday pricing and Sunday index levels being published on Monday. In addition, the index is calculated with the previous trading day's closing price on the last calendar day of each month if that day is not a trading day.

IHS Markit publishes an index calculation calendar, which is available on www.ihsmarkit.com under *iBoxx Calendars*. Index data and bond price information is also available from the main information vendors.

Bond and index analytical values are calculated each trading day using the daily closing prices. Closing index values and key statistics are published at the end of each business day in the indices section on www.ihsmarkit.com for registered users.

4.11) Data publication and access

The table below summarizes the publication of the iBoxx Tadawul SAR Government Sukuk & Bond Index in the *Indices* section of the IHS Markit website www.ihsmarkit.com for registered users and on the FTP server.

Table 1: Publication types and access

Frequency	File Type	Access
Daily	Underlying files – Bond level	IHS Markit FTP Server
	Indices files – Index level	IHS Markit FTP Server / IHS Markit website/ Bloomberg for index levels only
Daily from the 6th calendar day of the month (or the next index publication day if the 6th calendar day falls on a non-business day)	Forward Files	IHS Markit FTP Server
Monthly	End of Month Components	IHS Markit FTP Server / IHS Markit website
	XREF files	IHS Markit FTP Server

Below is a summary of the identifiers for each publication channel:

Table 2: Summary of the available index identifiers

Indexname	Return type	ISIN	Ticker	RIC
iBoxx Tadawul SAR Government Sukuk & Bond	CPI	GB00BL08V079	IBXXSNB1	.IBXXSNB1
iBoxx Tadawul SAR Government Sukuk & Bond	TRI	GB00BL08V186	IBXXSNB2	.IBXXSNB2

4.12) Index review

The rules for the Index are reviewed on a periodic basis during the public review and consultation process to ensure that the index provides a balanced representation of the EUR denominated debt market. Decisions made following feedback from market participants, the index review and External Advisory Committees (EAC) will be published on www.ihsmarkit.com shortly after the EACs have been held. The publication will contain a detailed overview and timelines for implementation of any rules changes.

5) Governance and regulatory compliance

IHS Markit Benchmark Administration Limited (IMBA UK) is the Index Administrator of iBoxx indices. Information on IMBA UK's governance and compliance approach can be found [here](#). This document covers:

- Governance arrangements, including external committees
- Input data integrity
- Conflicts of interest management
- Market disruption and Force Majeure
- Methodology changes and cessations
- Complaints
- Errors and restatements
- Reporting of infringements and misconduct
- Methodology reviews
- Business continuity

More details about IMBA UK can be found on the [Administrator's website](#).

6) Changes to the iBoxx Tadawul SAR Government Sukuk & Bond index

Jun 2022	<ul style="list-style-type: none">Monthly forward start date updated from 10th calendar day to 6th calendar day
Aug 2020	<ul style="list-style-type: none">Introduction of Sunday calculation
Jun 2020	<ul style="list-style-type: none">Launch of the iBoxx Tadawul SAR Government & Sukuk Bond Index

7) Further information

Glossary of key terms

The Markit iBoxx Glossary document of key terms is available in the *Methodology* section of the iBoxx *Documentation* page on www.ihsmarkit.com.

Contractual and content issues

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A) ESG Disclosures

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY [1]		
1	Name of the benchmark administrator.	IHS Markit Benchmark Administration Limited (IMBA)
2	Underlying asset class of the ESG benchmark. [2]	N/A
3	Name of the S&P Dow Jones Indices benchmark or family of benchmarks.	iBoxx Benchmark Statement
4	Do any of the indices maintained by this methodology take into account ESG factors?	No
Appendix latest update:		May 2023
Appendix first publication		May 2023

[1] The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK (The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019).

[2] The 'underlying assets' are defined in European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

Disclaimer

Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates (“S&P DJI”) defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index’s launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using “Backward Data Assumption” (or pulling back) of ESG data for the calculation of back-tested historical performance. “Backward Data Assumption” is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as “product involvement”) were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on “Backward Data Assumption” please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used. Index returns shown do not represent the results of actual trading of investable assets/securities. S&P DJI maintains the index and calculates the index levels and performance shown or discussed but does not manage any assets.

Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

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