

**S&P Dow Jones
Indices**

A Division of **S&P Global**

iBoxx South Africa Government Index Guide

October 2023

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1) iBoxx South Africa Government Index

The iBoxx South Africa Government Index is designed to reflect the performance of South African Rand denominated sovereign debt. The index rules aim to offer a broad coverage of the South African sovereign bond universe whilst upholding minimum standards of investability and liquidity. The index is an integral part of the global iBoxx index family, which provides the marketplace with accurate and objective indices by which to assess the performance of bond markets and investments. The index is market-value weighted.

All iBoxx indices are priced based on multiple data inputs. The iBoxx South Africa Government Index uses multi-source pricing as described in the document iBoxx Pricing Methodology publicly available under *Methodology* on <https://www.spglobal.com/spdji/en/>.

This document covers the index selection rules and calculation methodology.

1.1) Publication of the Index

The index is calculated as end-of-day and distributed once daily after 4pm EST. The index is calculated on the basis of end-of-day prices every Monday to Friday. In addition, the index is calculated with the previous trading day's close on the last calendar day of each month if that day is not a trading day.

Bond and index analytical values are calculated each day using that day's closing prices. In addition, bond and index analytical values are calculated using the previous trading day's closing prices on the last calendar day of each month if that day is not a regular trading day as well as on common bank holidays as published in the iBoxx index calculation calendar. This index calculation calendar is available on <https://www.spglobal.com/spdji/en/> under *iBoxx Indices Calendars*.

2) Bond selection rules

The following selection criteria are used to determine the index constituents for the iBoxx South Africa Government Index:

- Bond Classification
- Bond Type
- Credit Rating
- Expected remaining life
- Amount Outstanding

2.1) Bond classification

The iBoxx South Africa Government Index is a sovereign bond index. All bonds are classified accordingly as Sovereigns and therefore must meet the following criteria to be eligible:

- Issued by the central government
- Denominated in the local currency

2.2) Bond type

All the bonds must be denominated in ZAR.

In particular, bonds with the following characteristics are included:

- Fixed coupon bonds (“plain vanilla bonds”)
- Zero coupon bonds
- Sinking funds
- Amortizing bonds

The following bond types are specifically excluded from the index:

- Floating rate notes
- Fixed-to-floater bonds
- Inflation-linked bonds
- Perpetual bonds
- Callable bonds
- Dual currency bonds
- Retail bonds
- Extended bonds as defined under section 'Maturity extension' in this document

In instances where a new bond type is not specifically excluded or included according to the published index rules, S&P DJI will analyze the features of such securities in line with the principles set out in section 2 of this guide. S&P DJI may consult the specific Index 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.

2.3) Credit rating

All bonds in the index must have an iBoxx Rating of investment grade or sub-investment grade. Ratings from the following three credit rating agencies are considered for the calculation of the iBoxx Rating:

- Fitch Ratings
- Moody's Investor Service
- S&P Global Ratings

Investment grade is defined as BBB- or higher from Fitch Ratings and S&P Global Ratings and Baa3 or higher from Moody's Investor Service.

Sub-investment grade is defined as BB+ or lower from Fitch Ratings or S&P Global Ratings and Ba1 or lower from Moody's Investor Service, but not in default.

If an issuer is rated by more than one of the above agencies, then the iBoxx rating is the average of the provided ratings. The rating is consolidated to the nearest rating grade. Rating notches are not used. For more information on how the average rating is determined, please refer to the *iBoxx Rating Methodology* document available on <https://www.spglobal.com/spdji/en/> under *Methodology*.

2.4) Expected remaining life

All bonds must have at the rebalancing day an expected remaining life:

- of at least one year, and
- all new bonds issued must have an initial expected remaining life of at least one year and 6 months.

The expected remaining life is expressed in years and calculated as follows:

- The expected remaining life of the bond is its time to maturity, calculated as the number of days between the last calendar day of the current month and its maturity.

2.5) Amount outstanding

All bonds must have a minimum amount outstanding of ZAR 10 billion.

3) Index calculation

3.1) Bond prices

For more details please refer to the *iBoxx Pricing Methodology* document, available on <https://www.spglobal.com/spdji/en/> under *Methodology*.

3.2) Rebalancing process

The iBoxx South Africa Government Index is rebalanced monthly on the last business day of the month after the close of business. Changes to outstanding amounts are only taken into account if they are publicly known three business days before the end of the month. Changes in ratings are only taken into account if they are publicly known two business days before the end of the month. New bonds issued are taken into account if they are publicly known to settle until the last calendar day of the month, inclusive, and if their rating has become known at least three trading days before the end of the month.

Three business days before the end of each month, a membership list with final amount outstanding for each bond is published.

Two business days before the end of each month, the rating information for the constituents is updated and the list is adjusted for all rating changes which are known to have taken place two trading days before the end of the month.

On the last business day of each month, S&P DJI publishes the final membership with closing prices for the bonds, and various bonds analytics based on the index prices of the bonds.

3.3) Index data

The calculation of the index is based on bid prices. New securities are included in the index at their respective ask prices. 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, S&P DJI may consult market participants prior to the next rebalancing date. Decisions are made publicly available on a timely basis and S&P DJI may refer back to previous cases.

The index is calculated if at least one bond matches all inclusion criteria. If no more bonds qualify for an index, then its level remains constant. If at least one bond becomes available again, the index calculation resumes and is chained to the last calculated level. The assignment of a bond to a certain maturity bucket is based on its expected remaining life. All bonds remain in their maturity bucket for the entire month.

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

3.4) 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 at <https://www.spglobal.com/spdji/en/>.

3.5) Maturity extension

3.5.1) Maturity extension for perpetual bonds without a reset date

Maturity	Coupon/call structure	Workout date at issuance	Updated Workout date if not called
Perpetual	Fixed/ Callable	Assume first call date as workout date	Extend workout date until the assumed next call date - 5 years from first call date*.

*Assumes the terms allow for a redemption at the new assumed maturity date.

3.5.2) Maturity extension for perpetuals & dated fixed-to-fixed bonds with a reset date

Maturity	Coupon/Call structure	Workout Date at issuance	Updated Workout date if not called
Perpetual	Reset*/Callable	Assume first call date as workout date	Extend workout date until the end of the next reset date*
Dated	Reset/Callable	Assume reset date as workout date	Extend workout date until the end of the next reset date or final maturity date*

*Assumes the bond terms allow for a redemption at the new assumed maturity date

3.6) Index and analytics weights

The iBoxx South Africa Government 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.

3.7) Index history

The Index history starts on 29 Feb 2008. The index has a base value of 100 on that date.

3.8) Settlement conventions

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

3.9) Data publication and access

The table below summarizes the publication of iBoxx South Africa Government Index on the SFTP server.

Frequency	File Type	Access
Daily	Underlying file – Bond level	SFTP Server
	Indices file – Index level	SFTP Server
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)	Forwards	SFTP Server
Monthly	End of Month Components	SFTP Server
	XREF files	SFTP Server

3.10) FX rates

FX spot rates are sourced from WM/Reuters. The index calculation uses the FX rates from 4pm London time. If the rebalancing day is a non-business day the 4pm London time FX rates from the previous business day are used.

3.11) Calendar

S&P DJI publishes an index calculation calendar in the *iBoxx Calendars* section of the iBoxx Documentation page at <https://www.spglobal.com/spdji/en/>. This calendar provides an overview of the index calculation holidays of the iBoxx bond index families in a given year.

4) 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](#).

5) Changes to iBoxx South Africa Government Index

Date	Change
30 Jun 2023	Annual Index Review 2022 <ul style="list-style-type: none">● Introduction of 'Maturity extension' section● Index eligibility of bonds with extended workout dates
15 Jun 2023	Launch of iBoxx South Africa Government Index
31 Dec 2016	Sinking/Amortizing bonds allowed in the index from 31 December 2016

6) Further information

Client support

For client support please contact:

E-mail:	indices@ihsmarkit.com		
Phone:	Asia Pacific	Japan: Singapore:	+81 3 6402 0127 +65 6922 4210
	Europe	General: UK:	+800 6275 4800 +44 20 7260 2111
	USA	General:	+1 877 762 7548

Formal complaints

Formal complaints should be emailed to spdji_compliance@spglobal.com.

Please note: spdji_compliance@spglobal.com should only be used to log formal complaints.

General index inquiries

For general index inquiries, please contact indices@ihsmarkit.com.

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:		June 2023
Appendix first publication:		June 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.

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