

**S&P Dow Jones
Indices**

A Division of **S&P Global**

Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices Guide

May 2023

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1) Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices

The Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices are designed to reflect the performance of EUR denominated investment grade debt issued by central governments of a member country of the Eurozone. The index rules aim to offer a broad coverage of the Eurozone universe limited to five selected countries: France, Germany, Italy, Netherlands and Spain. The indices are split into seven maturity buckets: 1-3, 3-5, 5-7, 7-10, 10-15, 15-30 and 25+. The indices are an integral part of the global iBoxx index families, which provide the marketplace with accurate and objective benchmarks by which to assess the performance of bond markets and investments.

All iBoxx indices are priced based on multiple data inputs. The Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices use multi-source prices as described in the document *Markit iBoxx Pricing Rules* publicly available under *Methodology* on www.ihsmarkit.com.

This document covers the index rules and calculation methodology.

2) Bond selection rules

The following selection criteria are applied to select the constituents for the indices:

- Bond type
- Credit rating
- Time to maturity
- Amount outstanding
- Bond classification
- Age

2.1) Bond type

The following bond types are eligible for the indices:

- Fixed coupon bonds (“plain vanilla bonds”)
- Zero coupon bonds
- Step-up bonds
- Event-driven bonds, such as rating- or tax-driven bonds
- Dated and undated callable subordinated corporate bonds, including fixed-to-floating rate bonds
- Soft bullet bonds. These are bonds with an initial fixed-coupon period, and a variable or step-up coupon period thereafter, that are structured so that they are expected to be redeemed at the end of the initial period
- Bonds with call options where the first and subsequent call dates are on a date when the bond is otherwise no longer eligible for the index, i.e. bonds with American call options within the last year prior to maturity

The following bond types are specifically excluded from the indices:

- Sinking funds and amortizing bonds
- Other callable and undated bonds
- Floating rate notes and other fixed-to-floater bonds
- Optionally and mandatory convertible bonds from non-financial issuers
- Subordinated financial debt with mandatory contingent conversion features that are based on an observable trigger, or with any conversion options before the first call date, is ineligible for the index
- Collateralized Debt Obligations (CDOs) and bonds collateralized by CDOs
- Bonds with differences between accrual and coupon payment periods and monthly-paying 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. Partial private placements where information on the specific amounts publicly placed and privately placed can be ascertained are included in the indices with the amount publicly placed. If the amount publicly placed is below the cut-off, the bond is not included in the indices. 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 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 analyze the features of such securities in line with the principles set out under section 2.1 of this 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) Credit rating

All bonds in the Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices must have an iBoxx Rating of 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.

If a bond 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. The methodology can be found on www.ihsmarkit.com under *Methodology*.

Bonds in the Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices do not use individual bond rating. The individual countries are subject to a rating requirement. All countries in the Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices require long-term local currency sovereign debt rating of investment grade. The average rating from the aforementioned rating agencies determines the index rating, which is used for all government bonds from the country.

2.3) Time to maturity

All bonds must have a remaining time to maturity of at least one year at rebalancing. The time to maturity is calculated from the rebalancing date to the assumed workout date of the bond, by using the day count convention of the bond.

The workout date for a bond is determined based on the bond features as follows:

- For plain vanilla bonds, the expected workout date is the final maturity date
- For dated and undated callable financial hybrid capital bonds, the workout date is assumed to be the first call date
- For non-financial hybrid capital bonds with an interest rate reset, the workout date is assumed to be the first reset date
- For soft bullets, the expected workout date is determined using the first call date
- For senior callable bank bonds, the first call date will be considered as the workout date if the call date is more than 11 months prior to the final maturity. In case the first call date is 11 months or less prior to the maturity date, the final maturity date will be assumed as the workout date to calculate the time to maturity

2.4) Amount outstanding

All bonds require a minimum amount outstanding of EUR 1 billion in order to be eligible for the indices. This figure indicates minimum issue size.

2.5) Age

The age of the bond is measured from the first settlement date of the bond to the current rebalancing date.

For the lower maturity buckets (1-3, 3-5, 5-7 and 7-10) all new bonds that are considered for inclusion must have a maximum age of 4 years. Bonds already included in the indices are not subject to that rule.

For all higher maturity buckets (10-15, 15-30 and 25+) the above age limitation does not apply.

3) Bond classification

All bonds in the Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices are classified as Sovereigns under the iBoxx sector classification scheme. The Sovereigns classification level consists of all bonds issued by a central government of a member country of the Eurozone that are denominated in Euro or in a pre-Euro currency.

The issuer classification is reviewed regularly based on updated information received by IHS Markit, and status changes are included in the indices at the next rebalancing if necessary. Where the classification of a specific entity is not very clear, decision will be made at IHS Markit's discretion and IHS Markit may consult with the Index Advisory Committees. Membership list including classification is published on the FTP server and on www.ihsmarkit.com for registered users.

3.1) Denomination

Bonds must be denominated in EUR.

3.2) Issuer

For the purpose of selecting candidates for the indices, only the following five sovereign countries are eligible:

- France
- Germany
- Italy
- Spain
- Netherlands

3.3) Sovereigns

The Sovereigns classification level consists of all bonds issued by a central government of a member country of the Eurozone that are denominated in Euro or in a pre-Euro currency. The bonds are further broken down into Issuer Country.

4) Index calculation

4.1) Static data

Information used in the index calculation is sourced from offering circulars and checked against standard data providers.

4.2) Bond prices

For more details please refer to the *Markit iBoxx Pricing Rules* document, available in the *Methodology* section of the iBoxx Documentation page on www.ihsmarkit.com.

4.3) Rebalancing process

The Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices are 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.

A preliminary membership list is published on the 6th calendar day of the month (moved to the next business day in case of holiday/weekend).

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. Bonds which are known to have been upgraded to investment grade two trading days before the end of the month are not included in the membership, but bonds which are known to have been downgraded to sub-investment grade two trading days before the end of the month do get excluded from the membership. However, if any bonds which are part of the broader EUR universe become eligible two business days prior to rebalancing because of rating or amount changes, they will be included in the Index.

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

4.4) Index data

The calculation of the indices is based on bid prices. New securities are included in the indices 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) Maturity bands

The bonds selected in the respective maturity band indices are subject to minimum and maximum expected remaining life.

Maturity band	Expected Remaining Life (ERL)
1-3	ERL needs to be greater than or equal to 1 and below 3 years
3-5	ERL needs to be greater than or equal to 3 and below 5 years
5-7	ERL needs to be greater than or equal to 5 and below 7 years
7-10	ERL needs to be greater than or equal to 7 and below 10 years
10-15	ERL needs to be greater than or equal to 10 and below 15 years
15-30	ERL needs to be greater than or equal to 15 and below 30 years
25+	ERL needs to be greater than 25 years

4.7) Treatment of the special intra-month events

Data for the application of corporate actions in the indices may not be fully or timely available at all times, e.g. the final call prices for make-whole calls or the actual pay-in-kind percentage for PIK-payment options. In such cases, S&P DJI will estimate the approximate value based on the available data at the time of calculation.

4.7.1) 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.

4.7.2) 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).

4.7.3) 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.

4.7.4) 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.

4.8) Index history

The Index history starts on 31 December 1998. The indices have a base value of 100 on that date.

4.9) Settlement conventions

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

4.10) 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.

4.11) Publication of the Index

The Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices are calculated as end-of-day indices and distributed once daily after market close.

Bond and index analytical values are calculated end of day Monday to Friday 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 www.ihsmarkit.com under *iBoxx Calendars*. Index data is also available from the main information vendors.

Closing index values and key statistics are published at the end of each calculation day in the *Indices* section on www.ihsmarkit.com for registered users.

4.12) Data publication and access

The table below summarizes the publication of Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices in the *Indices* section of the IHS Markit website www.ihsmarkit.com for registered users and on the FTP server.

Table 1: Publication frequency, file types and access

Frequency	File Type	Access
Daily	Underlying file – Bond level	IHS Markit FTP Server
	Indices file – 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)	Forwards	IHS Markit FTP Server
Monthly	End of Month Components	IHS Markit FTP Server / IHS Markit website

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

Index Name	Return type	ISIN	SEDOL	RIC	Ticker
Markit iBoxx EUR Eurozone (DE ES FR IT NL) 1-3	TRI	GB00BDGJ3576	BDGJ357	.IBXXEUZ1	IBXXEUZ1
	CPI	GB00BDGJ3683	BDGJ368	.IBXXEUZ2	IBXXEUZ2
Markit iBoxx EUR Eurozone (DE ES FR IT NL) 3-5	TRI	GB00BDGJ3790	BDGJ379	.IBXXEUZ3	IBXXEUZ3
	CPI	GB00BDGJ3808	BDGJ380	.IBXXEUZ4	IBXXEUZ4
Markit iBoxx EUR Eurozone (DE ES FR IT NL) 5-7	TRI	GB00BDGJ3915	BDGJ391	.IBXXEUZ5	IBXXEUZ5
	CPI	GB00BDGJ3B37	BDGJ3B3	.IBXXEUZ6	IBXXEUZ6
Markit iBoxx EUR Eurozone (DE ES FR IT NL) 7-10	TRI	GB00BDGJ3C44	BDGJ3C4	.IBXXEUZ7	IBXXEUZ7
	CPI	GB00BDGJ3D50	BDGJ3D5	.IBXXEUZ8	IBXXEUZ8
Markit iBoxx EUR Eurozone (DE ES FR IT NL) 10-15	TRI	GB00BYYPLB66	BYYPLB6	.IBXXEUZ11	IBXXEUZ11
	CPI	GB00BYYPLC73	BYYPLC7	.IBXXEUZ12	IBXXEUZ12
Markit iBoxx EUR Eurozone (DE ES FR IT NL) 15-30	TRI	GB00BDGJ3F74	BDGJ3F7	.IBXXEUZ9	IBXXEUZ9
	CPI	GB00BDGJ3G81	BDGJ3G8	.IBXXEUZ10	IBXXEUZ10
Markit iBoxx EUR Eurozone (DE ES FR IT NL) 25+	TRI	GB00BYYPLD80	BYYPLD8	.IBXXEU13	IBXXEU13
	CPI	GB00BYYPLF05	BYYPLF0	.IBXXEU14	IBXXEU14

4.13) Annual index review

The rules for the index are reviewed at least once per year during the public annual index review 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 annual index review and External Advisory Committees (EAC) will be published on www.ihsmarkit.com shortly after the EAC meetings 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 Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices

30 Jun 2022	<ul style="list-style-type: none"> Monthly forward start date updated from 10th calendar day to 6th calendar day
01 Sep 2021	<ul style="list-style-type: none"> Monthly forward start date updated from 12th calendar day to 10th calendar day
31 Mar 2021	<ul style="list-style-type: none"> Governance and Regulatory Compliance section added
31 Jul 2020	<ul style="list-style-type: none"> Update of changes to Forward Schedule
30 Sep 2018	<p>Annual Index Review 2018</p> <ul style="list-style-type: none"> Treatment of bond rating upgrades on t-2 Clarification on bond eligibility during tender Clarification of treatment of called bonds
24 Feb 2017	<p>Introduction Markit iBoxx EUR Eurozone (DE ES FR IT NL) Maturity Bands Indices</p> <ul style="list-style-type: none"> Markit iBoxx EUR Eurozone (DE ES FR IT NL) 1-3 Markit iBoxx EUR Eurozone (DE ES FR IT NL) 3-5 Markit iBoxx EUR Eurozone (DE ES FR IT NL) 5-7 Markit iBoxx EUR Eurozone (DE ES FR IT NL) 7-10 Markit iBoxx EUR Eurozone (DE ES FR IT NL) 10-15 Markit iBoxx EUR Eurozone (DE ES FR IT NL) 15-30 Markit iBoxx EUR Eurozone (DE ES FR IT NL) 25+

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

For contractual or content issues please contact:

Markit Indices GmbH Friedrich-Ebert-Anlage 35-37 60327 Frankfurt am Main Germany email: indices@ihsmarkit.com web: www.ihsmarkit.com

Technical issues and client support

For technical issues and 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

Licences and data

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Ownership

Markit Indices GmbH is a wholly-owned subsidiary of IHS Markit Limited.

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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