

**S&P Dow Jones
Indices**

A Division of **S&P Global**

Markit iBoxx EUR High Yield Indices Guide

February 2024

Table of Contents

1	Markit iBoxx EUR High Yield Indices	4
	1.1 Index family structure	4
2	Bond selection rules	6
	2.1 Bond type	6
	2.2 Credit rating	7
	2.3 Issuer eligibility	7
	2.4 Time to maturity	7
	2.5 Amount outstanding	8
3	Bond classification	9
	3.1 Corporates	9
	3.2 Additional classification	10
4	Index calculation	12
	4.1 Static data	12
	4.2 Bond prices	12
	4.3 Rebalancing process	12
	4.3.1 Weekly preview	12
	4.4 Index data	13
	4.5 Caps for issuers	13
	4.6 Index calculus	13
	4.7 Index calculation in foreign currency	13
	4.8 Index and analytics weights	13
	4.9 Treatment of the special intra-month events	13
	4.9.1 Funged bonds	13
	4.9.1.1 Parent and new tranche are both index constituents	14
	4.9.1.2 Parent is an index constituent, but the new tranche is not	14
	4.9.1.3 Parent is not an index constituent but the new tranche is	14
	4.9.2 Full redemptions: exercised calls, puts and buybacks	14
	4.9.3 Bonds trading flat of accrued	14
	4.9.4 Maturity extension	14
	4.9.4.1 Maturity extension for perpetual bonds without a reset date	14
	4.9.4.2 Maturity extension for perpetuals & dated fixed-to-fixed bonds with a reset date	15

4.9.5 Multi-coupon bonds	15
4.9.6 Ex-dividend conventions	15
4.10 Index history	16
4.11 Settlement conventions	16
4.12 Calendar	16
4.13 Publication of the Index	16
4.14 Data publication and access	16
4.15 Annual index review	17
5 Governance and regulatory compliance	18
6 Changes to the Markit iBoxx EUR High Yield Indices	19
7 Further information	21
A ESG Disclosures	22
Disclaimer	23

1 Markit iBoxx EUR High Yield Indices

The Markit iBoxx EUR High Yield Indices are designed to reflect the performance of EUR denominated sub-investment grade corporate debt. The index rules aim to offer a broad coverage of the EUR bond universe, whilst upholding minimum standards of investability and liquidity. 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.

The Markit iBoxx EUR High Yield Index family is split into four different indices: overall, maturity, rating and sector indices. The standard bond structures are included in the Markit iBoxx EUR Core High Yield Index. To address different investors' requirements, all indices are calculated both with and without crossover bonds: Markit iBoxx EUR High Yield indices cum crossover includes split-rated bonds, and the Markit iBoxx EUR High Yield indices ex-crossover excludes split-rated bonds. To address concerns about the excessive weight of individual issuers, each index is calculated constrained and unconstrained. The maximum weight of an issuer in the constrained indices is set to 3% of the overall index market value and is adjusted monthly. All iBoxx indices are priced based on multiple data inputs. The Markit iBoxx EUR High Yield Indices use multi source prices as described in the document *Markit iBoxx Pricing Rules* publicly available under Methodology at <https://www.spglobal.com/spdji/en/>.

This document covers the index family structure, rules and calculation methodology.

1.1 Index family structure

Overview of Markit iBoxx EUR HY family indices. For more detailed information on the classification levels please refer to Section 3 - *Bond Classification*.

Table 1: Markit iBoxx EUR HY family structure

Markit iBoxx EUR High Yield Overall		
Core High Yield	Special Bond Types	Corporate Sectors
<ul style="list-style-type: none"> • Fixed coupon bonds • Floating rate notes • Callable bonds • Sinking funds • Rating sensitive bonds • Bonds with poison put option • Bonds with make-whole call or tax changes call provision 	<ul style="list-style-type: none"> • Fixed rate bonds <ul style="list-style-type: none"> > Step up bonds > Callable bonds > Sinking funds • FRNs • PIK Notes 	<ul style="list-style-type: none"> • Financials <ul style="list-style-type: none"> > Market sector indices <ul style="list-style-type: none"> – Market sub-sector indices • Non-Financials <ul style="list-style-type: none"> > Market sector indices <ul style="list-style-type: none"> – Market sub-sector indices
Rating and maturity indices (BB, B, CCC) (1-3, 3-5, 5-7, 7-10, 1-5, 5-10, 5+, 1-10, 10+)		

All indices are calculated both including and excluding crossover bonds. In addition to the overall index several types of sub-indices are calculated:

- Core high yield index
- Indices for special bond types
- Corporate sector Indices
- Rating Indices
- Maturity Indices

Other bond types such as zero coupon bonds, perpetual bonds, pay in kind bonds and fixed to floater bonds are excluded from the core index. All other bond selection rules remain unchanged. The column “core” in the membership file indicates whether a bond is included in the core index. Sector sub-indices are calculated for each set of indices, Overall and Core Index cum Crossover, Overall and Core Index ex Crossover.

2 Bond selection rules

The following selection criteria are used to determine the index constituents:

- Bond type
- Bond rating
- Issuer eligibility
- Time to maturity
- Amount outstanding
- Bonds classification

2.1 Bond type

In particular, bonds with the following characteristics are included:

- fixed coupon bonds (“plain vanilla bonds”)
- zero coupon bonds
- floating rate notes with EURIBOR or €STR as a reference interest rate (including overall/base rate floors at 0% and/or regulatory caps set at the rate defined by the usury laws of the relevant jurisdiction)
- sinking funds with known redemption schedules
- bonds with American and European call options
- bonds with poison put options
- bonds with make-whole call or tax changes call provisions
- event-driven bonds such as rating and registration-sensitive bonds
- pay-in-kind bonds
- callable perpetuals
- callable Fixed-to-floater bonds
- financial subordinated debt with a contingent conversion feature at the point of non-viability, in line with the capital adequacy requirements of Basel III

The following bond types are specifically excluded from the indices:

- structured notes (CDO, CLO)
- index-linked notes
- bonds with redemption linked to an entity other than the issuer
- optionally and mandatory convertible bonds
- floating rate with base/overall floors that are not set at 0% or with caps that are not regulated by the usury laws of the relevant jurisdiction
- subordinated bank or insurance debt with mandatory contingent conversion features that are based on an observable trigger
- retail bonds
- private placements
- Extended bonds as defined under section 'Maturity extension' in this document

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 S&P DJI's discretion based on the information available at the time of determination. Any bond classified as retail or private placement is added to the list of excluded private placements and retail bonds. The list is published at <https://www.spglobal.com/spdji/en/> for future reference and to ensure consistency.

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 2.1 of this guide. S&P DJI may consult 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.

2.2 Credit rating

All bonds in the Markit iBoxx EUR High Yield Indices must have an iBoxx Rating of 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

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 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. If a new tranche of a bond is not rated, the rating of its parent applies. In case of an ID change or exchange of a Regulation S offerings into a registered bond the ratings from the Regulation S offerings are also used for the registered bond.

If a bond is rated "defaulted" by any agency (D by Fitch Ratings or S&P Global Ratings, or no longer rated by Moody's Investor Service) or if it trades flat the bond is no longer eligible for the Markit iBoxx EUR High Yield Indices and is removed at the next rebalancing. Bonds with a rating downgrade to RD/SD will remain eligible in the Markit iBoxx EUR High Yield Indices until the second rebalancing after the downgrade. If such bonds have not been upgraded by T-3 of the second rebalance following the initial downgrade, they will be removed from the indices. This means RD/SD rated bonds remain eligible in the Markit iBoxx EUR High Yield Indices for the first rebalancing after their downgrade to allow for sufficient time to complete a distressed debt exchange or change of terms (assuming they meet all other criteria).

All split-rated bonds considered high yield are included in the Markit iBoxx EUR High Yield cum crossover index.

For more information on how the average rating is determined, please refer to the *iBoxx Rating Methodology* document available at <https://www.spglobal.com/spdji/en/>.

2.3 Issuer eligibility

Only EUR denominated debt from corporate issuers is eligible, independent of country of risk or origin.

2.4 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

2.5 Amount outstanding

The minimum required amount outstanding is EUR 150 million. The cutoff date to determine the amount outstanding is three business days before the rebalancing.

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 S&P DJI, and status changes are included in the indices 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 S&P DJI's discretion. S&P DJI will assign the classification according to its evaluation of the business risk presented in the security prospectus and annual reports, if available. S&P DJI will also compare the classification to peers in the potential sectors. Membership lists including classification are published on the FTP server and in the *Indices* section of the webpage for registered users.

3.1 Corporates

Bonds issued by public or private corporations. Corporate bonds are further classified into Financials and Non-Financials bonds and then into their multiple-level economic sectors, according to the issuer's business scope. The category insurance-wrapped is added under Financials for corporate bonds whose timely coupon and/or principal payments are guaranteed by a special mono-line insurer such as AMBAC or MBIA. The sector overview is shown in Table 1 below.

Table 2: Overview of Markit iBoxx Corporates Sectors

	Economic Sector	Market Sector	Market Sub-Sector
Financials	Core Financials	Banks	Banks
		Insurance	Life Insurance
			Nonlife Insurance
	Financial Services	Financial Services	Equity Investment Instruments
			General Financial
			Nonequity Investment Instruments
		Insurance-wrapped	*
	Real Estate	Real Estate	Real Estate Investment & Services
			Real Estate Investment Trusts
Non-Financials	Basic Materials	Basic Resources	Forestry & Paper
			Industrial Metals
			Mining
		Chemicals	Chemicals
	Consumer Goods	Automobiles & Parts	Automobiles & Parts
		Food & Beverage	Beverages
			Food Producers

	Economic Sector	Market Sector	Market Sub-Sector
		Personal & Household Goods	Household Goods
			Leisure Goods
			Personal Goods
			Tobacco
	Consumer Services	Education	Academic & Educational Services
		Media	Media
		Retail	Food & Drug Retailers
			General Retailers
		Travel & Leisure	Travel & Leisure
	Energy	Oil & Gas	Oil Equipment / Services & Distribution
			Oil & Gas Producers
		Renewable Energy	Renewable Energy
	Health Care	Health Care	Health Care Equipment & Services
			Pharmaceuticals & Biotechnology
	Industrials	Construction & Materials	Construction & Materials
		Industrial Goods & Services	Aerospace & Defense
			Electronic & Electrical Equipment
			General Industrials
			Industrial Engineering
			Industrial Transportation
			Support Services
	Technology	Technology	Software & IT Services
			Technology Hardware & Equipment
	Telecommunications	Telecommunications	Integrated Telecommunications
			Wireless Telecommunications
	Utilities	Utilities	Electricity
			Gas / Water & Multiutilities

3.2 Additional classification

Corporate debt is further classified into senior and subordinated debt. Non-core-financials senior debt differentiates between Senior Secured and Senior Unsecured bonds. Bank senior debt structure additionally differentiates between Bail-in and Preferred bonds. The Bail-in classification captures all senior notes which are subject to write-down or conversion into a subordinated instrument on the occurrence of a resolution event, as well as senior bank debt issued by bank holding companies.

Hybrid capital issued by banking and insurance institutions is further detailed into the respective tiers of subordination.

The market information on the tier of subordination for insurance capital is often less standardized and clear than the equivalent issues by banks. In these cases, the classification is based on the maturity, coupon payment and deferral provisions of the bond from the offering circulars of the bonds. The table below displays the seniority classification of debt issued by both financial and non-financial sectors.

Table 3: Overview of seniority levels

Market Sector	Seniority Level 1	Seniority Level 2	Seniority Level 3	
Bank	SEN	Preferred	*	
		Bail-in	*	
	SUB	T2 (post-Jan '13 issuances)	T2 callable	
			T2 non-callable	
		T2 (pre-Jan '13 issuances)	LT2 callable	
			LT2 non-callable	
			UT2	
		T1	T1 step	
	T1 non-step			
	Insurance	SEN	*	*
SUB		T3	*	
		T2 dated	T2 dated callable	
			T2 dated non-callable	
		T2 perpetual	*	
		T1	*	
Other sectors	SEN	Senior Secured	*	
		Senior Unsecured	*	
	SUB	Other	Hybrid**	
			Non-hybrid	

** Bonds will be required to fulfil the following criteria to be considered hybrids:

- Subordinated
- Deferrable coupons
- First non-call period \geq 5 years
- Either perpetual or 'long-dated', where 'long-dated' is defined as $>$ 25 years of the time to maturity at issuance

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 *iBoxx Pricing Methodology* document, available in the *Methodology* section of the webpage at <https://www.spglobal.com/spdji/en/>.

4.3 Rebalancing process

The Markit iBoxx EUR High Yield 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 each month (moved to the next business day in case of holiday/weekend) on the FTP server and in the *Indices* section at <https://www.spglobal.com/spdji/en/> for registered users.

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 downgraded to sub-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 upgraded to 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 broader EUR indices 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, 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.

4.3.1 Weekly preview

In addition to the regular monthly rebalancing, a preview list (including sector classification for new bonds) is published each Friday with predicted changes to the index constituents at the next rebalancing. The preview list includes the next month's index constituents and shows bonds joining or leaving the indices at the next rebalancing, based on information available on such Fridays.

The first weekly preview will be published on the Friday that is at least three business days after the preceding month-end rebalance.

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

4.5 Caps for issuers

An issuer cap is calculated on the last business day of each month using the end-of-month closing prices for each bond. The capping procedure is applied to the overall index including crossover names and the overall index excluding crossover names. The cap is applied across all bonds from the capped issuer according to their relative size.

As a result, each bond may have up to three notionals: unconstrained, constrained ex- crossover and constrained cum crossover.

4.6 Index calculus

For specific index formulas please refer to the *iBoxx Bond Index Calculus* document available on <https://www.spglobal.com/spdji/en/> under *Methodology*.

4.7 Index calculation in foreign currency

All indices are calculated in EUR.

4.8 Index and analytics weights

The Markit iBoxx EUR High Yield Indices are 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.

4.9 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.

4.9.1 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 funged 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:

4.9.1.1 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

4.9.1.2 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

4.9.1.3 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

4.9.2 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.

4.9.3 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).

4.9.4 Maturity extension

4.9.4.1 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.

4.9.4.2 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

4.9.5 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.

4.9.6 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.

4.10 Index history

The Index history starts on 31 December 2002. The indices have a base value of 100 on that date.

4.11 Settlement conventions

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

4.12 Calendar

S&P DJI publishes an index calculation calendar available on <https://www.spglobal.com/spdji/en/> under *iBoxx Indices Calendars*. This calendar provides an overview of the index calculation holidays of the iBoxx bond index families each year.

4.13 Publication of the Index

The Markit iBoxx EUR High Yield 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 at <https://www.spglobal.com/spdji/en/> under *iBoxx Indices 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 of the website for registered users.

4.14 Data publication and access

The table below summarizes the publication of Markit iBoxx EUR High Yield Indices at <https://www.spglobal.com/spdji/en/> for registered users and on the FTP server.

Table 4: Frequency, File type and Access

Frequency	File Type	Access
Daily	Underlying file – Bond level	FTP Server
	Indices file – Index level	FTP Server / website / Bloomberg for index levels only
Weekly	Preview components	FTP Server / website
On the 6th calendar day of the month (or the next index publication day if the 6th calendar day falls on a non-business day), T-4, T-3, T-2	Preview components	FTP Server / website
Monthly	End of month components	FTP Server / website
	XREF files	FTP Server

4.15 Annual index review

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

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
- 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 High Yield Indices

Aug. 31, 2023	Annual Index Review 2022 <ul style="list-style-type: none"> ● Treatment of distressed debt exchanges ● Introduction of new economic sector classification "Energy" with new market sector classification "Renewable Energy" ● Maturity extension section added
June 30, 2022	<ul style="list-style-type: none"> ● Monthly forward start date updated from 10th calendar day to 6th calendar day
March 31, 2022	Annual Index Review 2021 <ul style="list-style-type: none"> ● Introduction of new market sector classification "Education" with market sub-sector classification "Academic & Educational Services" ● Updated iBoxx EUR High Yield rating methodology to follow iBoxx EUR Benchmark methodology
Sep. 30, 2021	<ul style="list-style-type: none"> ● Updated to reflect €STR as a valid reference rate for FRNs
Sep 1, 2021	<ul style="list-style-type: none"> ● Monthly forward start date updated from 12th calendar day to 10th calendar day
March 31, 2021	<ul style="list-style-type: none"> ● Governance and Regulatory Compliance section added Annual Index Review 2020 <ul style="list-style-type: none"> ● Introduction of updated classification schema
July 31, 2020	<ul style="list-style-type: none"> ● update of changes to Forward Schedule
July 31, 2020	Annual Index Review 2019 <ul style="list-style-type: none"> ● Introduction of updated corporate classification schema ● Implementation of updated Bank Tier Classification ● Updates as part of the changes in definition and treatment of hybrid bonds

Sep. 30, 2018	Annual Index Review 2018 <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
Nov. 30, 2016	<ul style="list-style-type: none"> ● Update of seniority levels for Markit iBoxx indices ● Eligibility of Floating Rate Notes with overall/partial floors chapter 2.1 ● Clarification of the rule regarding bonds trading flat of accrued
Sep. 20, 2016	<ul style="list-style-type: none"> ● Eligibility of Floating Rate Notes per AIR 2015 in chapter 2.1
Aug. 4, 2016	<ul style="list-style-type: none"> ● Contingent convertible bond eligibility update in chapter 2.1
Dec. 1, 2014	<ul style="list-style-type: none"> ● Markit iBoxx EUR High Yield index family will follow the pricing methodology described in the 'Markit iBoxx Pricing Rules' ● Index restatement, complaints sections added ● Additional clarifications on bond eligibility, classification and corporate actions.
Nov. 30, 2011	<ul style="list-style-type: none"> ● No rating requirement for issuer country
July 31, 2010	<ul style="list-style-type: none"> ● Rating requirement for issuers country changed from lowest to average rating
Dec. 31, 2007	<ul style="list-style-type: none"> ● Introduction of average rating methodology
Jan. 1, 2007	<ul style="list-style-type: none"> ● Launch of Markit iBoxx EUR High Yield Index Family

7 Further information

Client support

For client support please contact index_services@spglobal.com.

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 index_services@spglobal.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:		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 by 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. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. 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).

Intellectual Property Notices/Disclaimer

© 2024 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI, and SOVX are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P DJI does not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P DJI is impersonal and not tailored to the needs of any person, entity, or group of persons. S&P DJI receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P DJI does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, "promoter" (as defined in the Investment Company Act of 1940, as amended) or "expert" as enumerated within 15 U.S.C. § 77k(a), and S&P DJI makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse engineered, reproduced, or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness, or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" "WHERE IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM

BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special, or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global's other divisions such as S&P Global Market Intelligence. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P DJI does not act as a fiduciary or an investment advisor. While S&P DJI has obtained information from sources it believes to be reliable, S&P DJI does not perform an audit or undertake independent verification of any information it receives. S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI's control might necessitate material changes to indices.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings, disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof. Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global Ratings publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

S&P Global keeps certain activities of its various divisions and business units separate from each other to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions, and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate, or otherwise address.

Some indices use the Global Industry Classification Standard (GICS[®]), which was developed by, and is the exclusive property and a trademark of, S&P Global and MSCI. Neither MSCI, S&P DJI nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P DJI, any of their affiliates

or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

S&P Dow Jones Indices products are governed by the terms and conditions of the agreements under which they may be provided. A license is required from S&P Dow Jones Indices to display, create derivative works of and/or distribute any product or service that uses, is based upon and/or refers to any S&P Dow Jones Indices and/or index data.

ESG Indices Disclaimer

S&P DJI provides indices that seek to select, exclude, and/or weight index constituents based on, but not limited to, certain environmental, social or governance (ESG) indicators, or a combination of those indicators, including the following: environmental indicators (including the efficient use of natural resources, the production of waste, greenhouse gas emissions, or impact on biodiversity); social indicators (such as, inequality and investment in human capital); governance indicators (such as sound management structures, employee relations, remuneration of staff, tax compliance, respect for human rights, anti-corruption and anti-bribery matters), specific sustainability or values-related company involvement indicators (for example, production/distribution of controversial weapons, tobacco products, or thermal coal), or controversies monitoring (including research of media outlets to identify companies involved in ESG-related incidents).

S&P DJI ESG indices use ESG metrics and scores in the selection and/or weighting of index constituents. ESG scores or ratings seek to measure or evaluate a company's, or an asset's, performance with respect to environmental, social and corporate governance issues.

The ESG scores, ratings, and other data used in S&P DJI ESG indices is supplied directly or indirectly by third parties (note these parties can be independent affiliates of S&P Global or unaffiliated entities) so an S&P DJI ESG index's ability to reflect ESG factors depends on these third parties' data accuracy and availability.

ESG scores, ratings, and other data may be reported (meaning that the data is provided as disclosed by companies, or an asset, or as made publicly available), modelled (meaning that the data is derived using a proprietary modelling process with only proxies used in the creation of the data), or reported and modelled (meaning that the data is either a mix of reported and modelled data or is derived from the vendor using reported data /information in a proprietary scoring or determination process).

ESG scores, ratings, and other data, whether from an external and/or internal source, is based on a qualitative and judgmental assessment, especially in the absence of well-defined market standards, and due to the existence of multiple approaches and methodologies to assess ESG factors and considerations. An element of subjectivity and discretion is therefore inherent in any ESG score, rating, or other data and different ESG scoring, rating, and/or data sources may use different ESG assessment or estimation methodologies. Different persons (including ESG data ratings, or scoring providers, index administrators or users) may arrive at different conclusions regarding the sustainability or impact of a particular company, asset, or index.

Where an index uses ESG scores, ratings or other data supplied directly or indirectly by third parties, S&P DJI does not accept responsibility for the accuracy or completeness of such ESG scores, ratings, or data. No single clear, definitive test or framework (legal, regulatory, or otherwise) exists to determine 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. In the absence of well-defined market standards and due to the existence of multitude approaches, the exercise of judgment is necessary. Accordingly, different persons may classify the same investment, product and/or strategy differently regarding 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. Furthermore, the legal and/or market position on what constitutes an 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled

objectives may change over time, especially as further regulatory or industry rules and guidance are issued and the ESG sustainable finance framework becomes more sophisticated.

Prospective users of an S&P DJI ESG Index are encouraged to read the relevant index methodology and related disclosures carefully to determine whether the index is suitable for their potential use case or investment objective.