



iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index Guide

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1 iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index

The iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index is designed to reflect the performance of USD denominated bonds issued by entities domiciled in the Asia ex-Japan region. The index is an integral part of the global iBoxx index families, which provide the marketplace with accurate and objective reference indices by which to assess the performance of bond markets and investments.

The index applies ESG filters to high yield bonds with an average life of more than 1 year and an issuer notional of at least USD 400m to screen out issuers that breach ESG standards and product involvement screening on Thermal Coal, Adult Entertainment, Alcohol, Gambling, Tobacco, Controversial Weapons, Nuclear Weapons, Conventional Weapons, Civilian Firearms, Nuclear Power, Genetically Modified Organisms and Cannabis Recreational as captured by MSCI ESG Research. Issuers in breach of the UN Global Compact or with notable controversies related to its operations and/or products with a severe social or environmental impact are also not eligible for the index. In addition, an ESG tilt and momentum factor is applied. The index also has a 3% issuer cap and 50% sector cap, where excess weights are redistributed proportionately to the remaining bonds.

The bonds in the iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index must meet all the criteria described below as of the close of business three business days prior to the rebalancing date provided that the relevant bond data can be verified as of such date ("bond selection cut-off date"). The index is rebalanced on a monthly basis and is market-value weighted. The new index composition becomes effective on the first business day of the next month.

All iBoxx indices are priced based on multiple data inputs. The iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index uses multi-source prices as described in the document *iBoxx Pricing Rules* publicly available under methodology on <http://www.ihsmarket.com/>.

This document covers the index selection rules and calculation methodology.

1.1 Publication of the Index

The index is calculated at the end of each business day and re-balanced at the end of each month. The index is calculated on the basis of end-of-day prices on each trading day defined in the iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index calculation calendar. The index calculation calendar is available in the indices section on www.markit.com/Documentation/Product/iBoxx under Calendar for data subscribers. The approximate publication time for the Asian end-of-day is 7 pm HKT/SGT. Index data and bond price information is also available from the main information vendors. The Asian end-of-day indices are rebalanced using the Asian end-of-day prices from the last business day of the month.

The index calculation calendar conforms to the recommendations of the Securities Industry and Financial Markets Association (SIFMA):

- Pricing for domestic and global bonds takes place on each SIFMA recommended US trading day
- Pricing for Eurodollar bonds takes place on each SIFMA recommended UK trading day (additional holidays to the US calendar: Easter Monday, May Day, Summer Bank Holiday and Boxing Day)
- The indices are calculated on each SIFMA recommended US trading day and on the last calendar day of each month

2 Bond selection rules

The iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index captures USD-denominated investment grade rated debt from issuers domiciled in the Asia ex-Japan region. Further, the selection criteria used to determine the index constituents broadly follow the below three categories:

- Eligible geographies
- Bond selection
- ESG screening

2.1 Eligible geographies

2.1.1 Issuer domicile

Only issuers from countries/territories belonging to the Asia ex-Japan region are eligible for the index.

As of 31 January 2021, the following countries/territories are represented in the index:

Country / Territory

- | | | |
|------------------|-----------------|---------------|
| • Mainland China | • Hong Kong SAR | • India |
| • Indonesia | • Macao SAR | • Vietnam |
| • Philippines | • Singapore | • South Korea |
| • Cambodia | • Thailand | • Mongolia |

2.1.2 Defaulted countries/territories and sovereign debt rating

Issuers that are domiciled in countries/territories in default on their external debt or that do not have a long term foreign debt rating from at least one of Fitch, Moody's or S&P are excluded from the indices. A default is determined based on information from the rating agencies, either through rating reports or ratings of D or RD from Fitch, C or Ca from Moody's and D or SD from S&P.

In addition, a country/territory is considered to be in default in case one of the 6 credit events as defined by ISDA occurs:

- Bankruptcy
- Obligation Acceleration
- Obligation Default
- Failure to pay
- Repudiation / Moratorium
- Restructuring

2.1.3 Countries/territories on financial sanctions regimes

Issuers which are domiciled in countries/territories that are on the financial sanctions' lists of the European Union or the US are excluded from the index, unless:

- Sanctions are applied to specific individuals only, or
- Funds, funding and financial transactions of the government and government-related entities are unaffected by the sanctions

When a country/territory is placed on the EU or the US sanctions lists, IHS Markit will assess the likely impact on international bondholders. IHS Markit may consult with the External Advisory Committee to review the applicability of specific sanctions. Any decision will be published and the index rules updated accordingly.

The information about the sanctions regime is compiled from:

- For the European Union from the Common Foreign & Security Policy at http://eeas.europa.eu/cfsp/sanctions/docs/measures_en.pdf
- For the US from the Office of Asset Control (OFAC) at <http://www.treas.gov/offices/enforcement/ofac/>

Based on current information, the following countries/territories are excluded from the index because of applicable sanctions:

- North Korea

2.2 Bond selection

The following selection criteria are used to determine the index constituents from the USD denominated bond universe.

2.2.1 Issuer type

Only bonds issued by corporate issuers are eligible for the index.

2.2.2 Bond type

General inclusion criteria:

- Bonds with known cash-flows are eligible for the index

In particular, the following bond types are eligible:

- Fixed coupon bonds
- Zero coupon bonds
- Callable and puttable bonds
- Step-ups and event-driven bonds such as rating-driven or registration-driven bonds
- Amortizing bonds and sinking funds with fixed sinking schedules
- Perpetuals and fixed-to-float bonds with a reset date at or after the first call date

The following bond types are specifically excluded:

- Floating Rate Notes
- AT1 contingent convertibles and preference share-style AT1s
- 144As and private placements
- Retail bonds
- Inflation and other index-linked bonds
- Structured notes
- Collateralized bonds and brady bonds
- Catastrophe bonds
- Payment-In-Kinds (PIKs)
- Optional and mandatory convertible bonds
- Perpetuals and fixed-to-float bonds with a reset date prior to the first call date
- Subordinated bank or insurance debt with non-regulatory conversion options before the first call date
- Bonds cum- or ex-warrant
- New bonds entering the index that have already been called prior to rebalancing

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

In instances where a new bond type is not specifically excluded or included according to the published index rules, IHS Markit will analyse the features of such securities in line with the principles set out in 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.

2.2.3 Time to maturity

All bonds must have a remaining time to maturity of at least one year at rebalancing. Newly issued bonds must meet the minimum initial time to maturity rule. The minimum initial time to maturity as measured from the first settlement date to the maturity date of the bond, must be 18 months or more. 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 sinking funds and amortizing bonds, the workout date is based on the average life

2.2.4 Credit rating

Rated and unrated bonds are eligible for the index.

For rated bonds, they must be rated high yield by one or more of the following three credit rating agencies to be considered for the index:

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

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 *Markit iBoxx Rating Methodology* document. The methodology can be found on www.ihsmarkit.com under *Methodology*.

Defaulted bonds are ineligible for the index. Bonds that are in default or that trade flat of accrued are removed from the index at the first rebalancing following the default/start of trading flat of accrued.

For senior debt, if a bond is not rated by any of the three credit rating agencies, the bond's issuer rating applies to the bond if available. Long-term foreign currency issuer ratings will be applied to bonds issued by foreign issuers and long-term local currency issuer ratings will be applied to bonds issued by domestic entities.

Unrated bonds must be assigned a high yield implied credit quality based on their yield spreads to be considered for the index. The implied credit quality will be used to differentiate bonds into investment grade and high yield as well as to individual rating indices. The implied credit quality

methodology is available in a separate document on www.ihsmarket.com under Documentation – iBoxx → Methodology.

2.2.5 Amount Outstanding

All eligible bonds must be denominated in USD and the minimum outstanding amount required is USD 250m.

In the case of 144A/RegS securities that are registered as global securities, the remaining amount of the 144A/RegS version and the registered version are recombined if the bond is not exchanged in full.

RegS bond tap issue amounts, regardless of fungibility status will be added to existing RegS versions to maintain consistency with the treatment of tap issues as reflected under existing 144A versions.

2.2.6 Minimum Issuer Notional

All the eligible bonds must have a minimum issuer notional of USD 400m.

2.2.7 International clearability

Bonds need to be clearable via one of the following three clearing venues:

- Clearstream
- Euroclear
- Hong Kong CMU

2.2.8 US Executive Order 13959 sanctions

The index follows the Executive Order treatment of the iBoxx USD Asia ex-Japan (Restricted) indices, excluding bonds and/or issuers identified to be subject to the US Executive Order 13959 sanctions.

2.2.9 Issuer cap

Issuers and sectors are subject to a maximum weight of 3% and 50% respectively in the index on the index rebalance date. The excess weight is equally redistributed to the remaining bonds.

2.3 ESG screens

The iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index screens out constituents based on the following ESG-related criteria.

2.3.1 MSCI ESG Business Involvement Screening

Issuers with exposure to the following activities and at the following thresholds are excluded:

- *Adult Entertainment*
 - > derives 5% or more revenue from production of Adult Entertainment material, or;
 - > derives 15% or more revenue from Adult Entertainment material.
- *Alcohol*
 - > derives 5% or more revenue from production of Alcohol-related products, or;
 - > derives 15% or more revenue from Alcohol-related products.
- *Cannabis Recreational*
 - > produce and/or retail cannabis for recreational use.
- *Civilian Firearms*
 - > involved in production of civilian firearms, or;
 - > derives 5% or more revenue from civilian firearms.
- *Controversial Weapons*
 - > involved in production/ownership of chemical or biological weapons or related components, depleted uranium weapons, blinding lasers, non-detectable weapons, incendiary weapons, or;
 - > has industry tie to manufacturing of landmines, except those for safety purposes, or;
 - > has industry tie to cluster bombs.
- *Conventional Weapons*
 - > derives 5% or more revenue from production of Conventional Weapons, or;
 - > derives 15% or more revenue from weapons systems, components, and support systems and services.

- *Gambling*
 - > derives 5% or more revenue from ownership or operation of Gambling-related activities, or;
 - > derives 15% or more revenue from Gambling-related activities
- *Genetically Modified Organisms*
 - > derives 5% or more revenue from activities like genetically modifying plants, such as seeds and crops, and other organisms intended for agricultural use or human consumption.
- *Nuclear Power*
 - > generates 5% or more of its total electricity from nuclear power, or;
 - > has 5% or more of installed capacity attributed to nuclear sources, or;
 - > derives 15% or more revenue from Nuclear Power-related activities.
- *Nuclear Weapons*
 - > manufactures nuclear warheads and/or whole nuclear missiles, or;
 - > manufactures components for nuclear-exclusive delivery platforms, or;
 - > provides auxiliary services related to nuclear weapons, or;
 - > manufactures components that were developed or are significantly modified for exclusive use in nuclear weapons, or;
 - > manufactures components that were not developed or not significantly modified for exclusive use in nuclear weapons but can be used in nuclear weapons, or;
 - > manufactures or assembles delivery platforms that were developed or significantly modified for the exclusive delivery of nuclear weapons, or;
 - > manufactures or assembles delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons but have the capability to deliver nuclear weapons.
- *Tobacco*
 - > involved in production of Tobacco products, or;
 - > derives 5% or more revenue from Tobacco products.

2.3.2 MSCI Climate Change Metrics

- Thermal coal
 - > derives 30% or more revenue (either reported or estimated) from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties. It excludes: revenue from metallurgical coal; coal mined for internal power generation (e.g. in the case of vertically integrated power producers); intra-company sales of mined thermal coal; and revenue from coal trading
 - > derives 30% or more revenue (either reported or estimated) from the thermal coal based power generation

2.3.3 MSCI ESG Ratings

- all issuers without ESG ratings or coverage are excluded

2.3.4 MSCI ESG Controversies

- Controversies score
 - > all companies that are involved in very serious controversies involving the environmental, social, or governance impact of their operations and/or products and services. In particular, companies with an MSCI ESG Controversies Score of 0 are excluded.

Corporate issuers that have incomplete MSCI ESG Research data coverage as of the bond selection cut-off date are excluded from the index.

2.3.5 ESG Tilt

An ESG rating factor is applied on the weight of the underlying bonds according to the following table:

ESG Rating	Rating Factor
AAA	1.75
AA	1.50
A	1.25
BBB	1
BB	1/1.25
B	1/1.50
CCC and Below	1/1.75

2.3.6 ESG Momentum

The following ESG ratings momentum factor is applied on the weight of the underlying bonds according to the following table.

ESG Rating Momentum	Momentum Factor
Positive	2
Neutral	1
Negative	0.5

A 12-month lookback period is used in the momentum strategy.

- If a bond's ESG rating has improved over the period, it is considered to be showing positive momentum
- If the bond's ESG rating stays the same over the period, it is considered neutral
- If a bond's ESG rating has dropped over the period, it is considered to be showing negative momentum
- If a bond does not have an ESG rating in the lookback window and gets assigned an ESG rating, it is considered neutral

3 Bond classification

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

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

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

3.1 Corporates

Bonds issued by public or private corporations. Bonds secured by a 'floating charge' over some or all assets of the issuer are considered corporate bonds. 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 Services for corporate bonds whose timely coupon and/or principal payments are guaranteed by a special monoline insurer such as AMBAC or MBIA. The category Guaranteed & Wrapped is added under Financials for corporate bonds whose timely coupon and/or principal payments are guaranteed by a non-affiliated insurer or through a letter of credit from a non-affiliated bank. Each bond in the index is assigned to one of the following sectors.

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	General Financial
			Equity Investment Instruments
			Nonequity Investment Instruments
			Insurance wrapped
		Guaranteed & Wrapped	*
Real Estate	Real Estate	Real Estate Investment & Services	

			Real Estate Investment Trusts
Non-Financials	Oil & Gas	Oil & Gas	Oil & Gas Producers
			Oil Equipment / Services & Distribution
			Alternative Energy
	Basic Materials	Chemicals	Chemicals
			Basic Resources
			Mining
			Forestry & Paper
	Industrials	Construction & Materials	Construction & Materials
			Industrial Goods & Services
			Electronic & Electrical Equipment
			General Industrials
			Industrial Engineering
			Industrial Transportation
			Support Services
	Consumer Goods	Automobiles & Parts	Automobiles & Parts
		Food & Beverage	Beverages
			Food Producers
		Personal & Household Goods	Household Goods
			Personal Goods
		Tobacco	
	Leisure Goods		
Health Care	Health Care	Pharmaceuticals & Biotechnology	
		Health Care Equipment & Services	
Consumer Services	Retail	Food & Drug Retailers	
		General Retailers	
	Media	Media	
	Travel & Leisure	Travel & Leisure	
Telecommunications	Telecommunications	Integrated Telecommunications	
		Wireless Telecommunications	
Utilities	Utilities	Electricity	
		Gas / Water & Multiutilities	
Technology	Technology	Software & IT Services	
		Technology Hardware & Equipment	

3.2 Additional classification

Corporate debt is further classified into senior and subordinated debt. 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. Table 2 below displays the seniority classification of debt issued by both financial and non-financial sectors.

Table 1: 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	*	*	
	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 *Markit iBoxx Pricing Rules* document, available in the *Methodology* section of the iBoxx Documentation page on www.ihsmarkit.com.

4.3 Rebalancing process

The index is rebalanced monthly on the last business day of the month. Any inclusion after the index cut-off day (t-3) will not be considered in the rebalancing process, but will become effective at the end of the following 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 and amount outstanding has become known at least three trading days before the end of the month.

A preliminary membership list is published on 12th calendar day of the month (or the next business day in case of holiday/weekend).

Two business days before the end of each month, the rating and amount information for the constituents is updated and the list is adjusted for all rating and amount changes which are known to have taken place three business days before the end of the month which could also result in exclusion of the bond. However, if bonds which are part of broader USD indices become eligible into the index two business days prior to rebalancing because of rating and/or amount changes, will be included in the index.

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

4.3.1 Weekly Previews

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 based on information available on such Fridays. First weekly preview will be published on the Friday that is three business days after the previous month-end rebalance.

4.4 Index data

The calculation of the index is based on bid prices. New securities are included in the index at their respective ask prices when they enter the index family. In the event that no price can be established for a particular security, the index continues to be calculated based on the last available price. This might be the case in periods of market stress, or disruption as well as in illiquid or fragmented markets. If the required inputs become impossible to obtain, IHS Markit may consult market participants prior to the next rebalancing date. Decisions are made publicly available on a timely basis and IHS Markit may refer back to previous cases.

A sub-index is calculated if at least one bond matches all inclusion criteria. If no 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. All bonds are assigned to sub-indices according to their classification. 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. All top-level indices are computed and disseminated Monday to Friday (except during common US trading holidays). They are based on Asia end of day prices. The indices are also calculated on the last calendar day of each month irrespective of holidays and weekends. If the indices are calculated on a day that is a non-business day, then the prices from the previous trading day will be carried forward and the index will be calculated using those prices and the current accrued interest and coupon payment data.

On the last trading day of a rebalancing month, the rebalancing takes place after close of market.

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 Treatment of the special intra-month events

Data for the application of corporate actions in the index 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, IHS Markit will estimate the approximate value based on the available data at the time of calculation.

4.6.1 Index and analytics weights

The iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index is market-value-weighted, with the bond's amount outstanding as the weighting factor. The amount outstanding of a bond is only adjusted at the monthly rebalancing process at the end of each month. However, scheduled redemption payments for amortizing bonds and sinking funds are taken into account from the date they occur, as they have a significant influence on index return and analytical values. In addition,

bonds that are fully redeemed intra-month are also taken into account immediately. Therefore, the indices are based on adjusted amount outstanding, derived from the amount issued and closely related to the amount outstanding of a bond. The concept is summarized below.

Definitions:

- *Amortizing bonds*: Bonds whose face value is redeemed according to a schedule at more than one redemption date. Interest payments are made on the basis of the remaining value of the bond.
- *Sinking funds*: Bonds, for which money is applied periodically to redeem part of the outstanding before maturity. At the redemption dates the appropriate amount of bonds may either be retired randomly from the outstanding bonds, or purchased on the open market and thus retired. Interest payments are made on the remaining outstanding bonds.
- *Fully redeemed bonds*: Bonds that are fully called or completely repurchased prior to or at the calculation date.

The amount issued of a bond does not change when coupons are paid and bonds are redeemed. However, additional tranches and unscheduled repurchases have to be taken into account to arrive at a suitable basis for index and analytics calculations. Therefore the adjusted amount outstanding is the common basis on which all calculations are based.

In addition, incoming bond prices are linked to the amount outstanding, rather than to the amount issued. This ensures a common basis (to the nominal value of 100), on which all bonds are priced and the indices are calculated.

4.6.2 Funged bonds

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

4.6.2.1 Parent and new tranche are both index constituents

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

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

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

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

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

4.6.3 Full redemptions: exercised calls, puts and buybacks

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

4.6.4 Bonds trading flat of accrued

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

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

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

4.6.5 Multi-coupon bonds

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

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

4.6.6 Ex-dividend conventions

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

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

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

4.7 Index history

The Index history starts on 31 December 2018. The index has a base value of 100 on that date.

4.8 Settlement conventions

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

4.9 Calendar

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

4.10 Data publication and access

The table below summarizes the publication of iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index in the *Indices* section of the IHS Markit website www.ihsmarkit.com for registered users and on the FTP server.

Table 2: Data publication frequency, file types and access

Frequency	File Type	Access
Daily	Underlying file – Bond level	FTP Server
	Indices files – Index level	FTP Server / IHS Markit website / Bloomberg (index levels only)
Daily from the 12 th calendar day of the month (or the next	Forwards files	FTP Server / IHS Markit website

Frequency	File Type	Access
index publication day if the 12th calendar day falls on a non-business day)		
Weekly (On Friday)**	Preview components	FTP Server / IHS Markit website
T - 4	Preview components	FTP Server / IHS Markit website
T - 3	Preview components	FTP Server / IHS Markit website
Monthly	End of month components	FTP Server / IHS Markit website
	XREF files	FTP Server

**Previews will be published on the first Friday that is three business days after the previous month-end rebalance.

4.11 Index review

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

5 Governance and Regulatory Compliance

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

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

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

6 Changes to iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index

XX Month 2021

Launch of iBoxx MSCI ESG USD Asia ex-Japan High Yield Capped Index

7 Further information

Glossary of key terms

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

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