

# **iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened Index Guide**

***October 2023***

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# 1) iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened Index

The iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened 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 investment grade rated bonds with a remaining time to maturity of more than 1 year and a notional of at least USD 300m to screen out issuers that breach ESG standards and product involvement screens on Small Arms, Controversial Weapons, Thermal Coal, Oil Sands and Tobacco as captured by Sustainalytics. Additionally, issuers in breach of the UN Global Compact or with notable controversies related to their operations and/or products with a severe social or environmental impact are also not eligible for the index.

The bonds in the iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened 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 with a cap on each issuer of 4%. 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 USD Asia ex-Japan Corporates Investment Grade ESG Screened Index uses multi-source prices as described in the document *iBoxx Pricing Methodology* publicly available on <https://www.spglobal.com/spdji/en/> under *Methodology*.

This document covers the index selection rules and calculation methodology.

## 1.1) Publication of the index

The index is calculated each Monday - Friday and on the last calendar day of each month. The index is 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 USD Asia ex-Japan Corporates Investment Grade ESG Screened Index calculation calendar. For non-trading days, the index is calculated with the previous trading day's closing prices.

The index calculation calendar is available on <https://www.spglobal.com/spdji/en/> under *iBoxx Indices Calendars* 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)

## 2) Bond selection rules

The iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened 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 March 2021, the following countries/territories are represented in the index:

Country / Territory		
<ul style="list-style-type: none"><li>• Mainland China</li><li>• Indonesia</li><li>• Philippines</li><li>• Taiwan</li></ul>	<ul style="list-style-type: none"><li>• Hong Kong SAR</li><li>• Macao SAR</li><li>• Singapore</li><li>• Thailand</li></ul>	<ul style="list-style-type: none"><li>• India</li><li>• Malaysia</li><li>• South Korea</li></ul>

#### 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 Investors Service or S&P Global Ratings 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 Investors Service and D or SD from S&P Global Ratings.

In addition, a country/territory is considered to be in default in case one of the six 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, S&P DJI will assess the likely impact on international bondholders. S&P DJI may consult with the specific Index Committees 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](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
- Bank and insurance regulatory tier 2 capital with point of non-viability triggers

The following bond types are specifically excluded:

- Floating Rate Notes
- 144As and private placements
- Retail bonds
- Municipal 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
- Bank and insurance regulatory tier 1 capital (T1, bank AT1, insurance RT1)
- Bank and insurance regulatory tier 2 capital with mandatory conversion/write-down with pre-specified objective trigger
- 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. S&P DJI may consult with the specific Index 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://www.spglobal.com/spdji/en/> 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, S&P DJI will analyse the features of such securities in line with the principles set out in 2.2.2 of this guide. S&P DJI may consult the specific Index Committees. Any decision as to the eligibility or ineligibility of a new bond type will be published and the index rules will be updated accordingly.

### **2.2.3) 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

Dated and undated fixed-to-floater bonds are removed from the index on the last rebalancing prior to the reset date unless they have already been called.

#### **2.2.4) Credit rating**

Bonds must be rated investment grade 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 <https://www.spglobal.com/spdji/en/> 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.

Bonds with an RD/SD rating are excluded from the iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened Index.

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.

#### **2.2.5) Amount outstanding**

All eligible bonds must be denominated in USD and the minimum outstanding amount required is USD 300m.

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) International clearability**

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

- Clearstream
- Euroclear
- Hong Kong CMU

#### **2.2.7) 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.



### **2.2.8) Issuer cap**

Issuers are subject to a maximum weight of 4% in the index on the index rebalance date.

### **2.3) ESG screens**

The iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened Index screens out constituents based on the following ESG-related criteria.

#### **2.3.1) Sustainalytics Global Standards screening**

All companies assessed as Non-Compliant with the UN Global Compact Principles and its associated standards, conventions and treaties are excluded.

#### **2.3.2) Sustainalytics Controversies screening**

All companies involved in incidents with severe negative environmental, social and governance (ESG) implications are excluded. In particular, companies with a Controversy Rating of 5 are excluded.

#### **2.3.3) Sustainalytics Product Involvement screening**

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

- Small Arms
  - > Civilian customers (assault weapons) – all companies that manufacture and sell assault weapons to civilian customers are excluded
  - > Civilian customers (non-assault weapons) – all companies that manufacture and sell small arms (non-assault weapons) to civilian customers are excluded
  - > Key components – all companies that manufacture and sell key components of small arms are excluded
  - > Retail / distribution (assault weapons) – all companies deriving 5% or more of their total revenue from the retail and/or distribution of assault weapons are excluded
  - > Retail / distribution (non-assault weapons) – all companies deriving 5% or more of their total revenue from the retail and/or distribution of small arms (non-assault weapons) are excluded
- Thermal Coal
  - > Extraction – all companies deriving 5% or more of their total revenue from thermal coal extraction are excluded
  - > Power generation – all companies deriving 5% or more of their total revenue from thermal coal-based power generation are excluded
- Oil Sands
  - > All companies deriving 5% or more of their total revenue from oil sands extraction are excluded
- Tobacco
  - > Production – all companies that manufacture tobacco products are excluded
  - > Retail – all companies that derive 5% or more of their total revenues from the distribution and/or retail sale of tobacco products are excluded
  - > Related products / services – all companies that derive 5% or more of their revenues from supplying tobacco-related products/services are excluded

#### 2.3.4) Sustainalytics Controversial Weapons Radar screening

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

- Anti-Personnel Mines
  - > All companies with direct involvement in anti-personnel mines are excluded
  - > All companies with indirect involvement in anti-personnel mines and ownership higher than 20% are excluded
- Biological and Chemical Weapons
  - > All companies with direct involvement in biological and chemical weapons are excluded
  - > All companies with indirect involvement in biological and chemical weapons and ownership higher than 20% are excluded
- Cluster Weapons
  - > All companies with direct involvement in cluster weapons are excluded
  - > All companies with indirect involvement in cluster weapons and ownership higher than 20% are excluded
- Depleted Uranium
  - > All companies with direct involvement in depleted uranium are excluded
  - > All companies with indirect involvement in depleted uranium and ownership higher than 20% are excluded
- Nuclear Weapons
  - > All companies with direct involvement in nuclear weapons are excluded
  - > All companies with indirect involvement in nuclear weapons and ownership higher than 20% are excluded
- White Phosphorus
  - > All companies with direct involvement in white phosphorus are excluded
  - > All companies with indirect involvement in white phosphorus and ownership higher than 20% are excluded

Significant ownership in an involved company is applicable in one-direction for all screens except for Controversial Weapons Radar.

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

#### 2.3.5) ESG screens application for index history

In addition to the above, the following applies for the index history prior to 30 September 2020:

- **Sustainalytics Product Involvement screening** – Issuers not covered under this screen are considered eligible as long as they do not breach any of the other selection criteria
- **Sustainalytics Global Standards screening** – Issuers not covered under this screen are considered eligible as long as they do not breach any of the other selection criteria
- **Sustainalytics Controversial Weapons Radar screening** – Issuers not covered under this screen are considered eligible as long as they do not breach any of the other selection criteria

### 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 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 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. 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 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.

*Table 1: 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
		Guaranteed & Wrapped	*
	Real Estate	Real Estate	Real Estate Investment & Services
			Real Estate Investment Trusts
Non-Financials	Energy	Oil & Gas	Oil & Gas Producers
			Oil Equipment / Services & Distribution
		Renewable Energy	Renewable Energy
	Basic Materials	Chemicals	Chemicals

		Basic Resources	Industrial Metals
			Mining
			Forestry & Paper
	Industrials	Construction & Materials	Construction & Materials
		Industrial Goods & Services	Aerospace & Defense
			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
		Education	Academic & Educational Services
	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. The table below displays the seniority classification of debt issued by both financial and non-financial sectors.

*Table 2: 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 *iBoxx Pricing Methodology* document, available in the *Methodology* section of the webpage at <https://www.spglobal.com/spdji/en/>.

### 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 before 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 10th 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, 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.

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 US 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.

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

#### **4.5) 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*.

#### **4.6) 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, S&P DJI will estimate the approximate value based on the available data at the time of calculation.

##### **4.6.1) Index and analytics weights**

The iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened 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 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 funged 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 funged 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.

#### 4.6.7) Maturity extension

##### 4.6.7.1) 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

#### 4.6.7.2) 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.

#### 4.7) Index history

The Index history starts on 30 November 2015. 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

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 in a given year.

#### 4.10) Data publication and access

The table below summarizes the publication of iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened Index in the *Indices* section of the website for registered users and on the FTP server.

*Table 3: Data publication frequency, file types and access*

Frequency	File Type	Access
Daily	Underlying file – Bond level	FTP Server
	Indices files – Index level	FTP Server / website / Bloomberg (index levels only)
Daily from the 6th calendar day of the month (or the next index publication day if the 6th calendar day falls on a non-business day)	Forwards files	FTP Server / website
Monthly	End of month components	FTP Server / website

The index identifiers for the publication channels are:

Index Name iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened Index		
Return Type	TRi	CPi
ISIN	GB00BL0B0X25	GB00BL0B0W18
Ticker	IBXXAEJT	IBXXAEJP
RIC	.IBXXAEJT	.IBXXAEJP

#### 4.11) 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) Summary of key ESG factors

Explanation of how ESG factors are reflected in the key elements of the benchmark methodology	
Item 1: Benchmark administrator	IHS Markit Benchmark Administration Ltd. ('IMBA UK')
Item 2: Type of benchmark	Fixed Income
Item 3: Name of benchmark or family of benchmarks	iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened
Item 4: Does the benchmark methodology take into account ESG factors	Yes
Item 5a: List of environmental factors considered	<p>Exclusion is driven by exposure to the following factors:</p> <ul style="list-style-type: none"> <li>• Thermal coal</li> <li>• Oil sands</li> </ul> <p>See section 'ESG screens' of this guide for details</p>
Item 5b: List of social factors considered	<p>Exclusion is driven by exposure to the following factors:</p> <ul style="list-style-type: none"> <li>• Tobacco</li> <li>• Small arms</li> <li>• Anti-personnel mines</li> <li>• Biological and chemical weapons</li> <li>• Cluster weapons</li> <li>• Depleted uranium</li> <li>• Nuclear weapons</li> <li>• White phosphorus</li> </ul> <p>See section 'ESG screens' of this guide for details</p>
Item 5c: List of governance factors considered	<p>Exclusion is driven by exposure to the following factors:</p> <p>N/A</p>
Item 5d: List of any other overall ESG factors	<p>Exclusion driven by additional factors:</p> <ul style="list-style-type: none"> <li>• United Nations Global Compact (UNGC)</li> <li>• Controversies</li> </ul> <p>See section 'ESG screens' of this guide for details</p>
Item 6: Hyperlink to ESG factors information	<a href="#">iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened Index</a>
Item 7a(i): Source of input	Data is sourced externally from Sustainalytics ESG Research
Item 7a(ii): Data input	<p>Sustainalytics is a leading independent ESG and corporate governance research, ratings and analytics firm that supports investors around the world with the development and implementation of responsible investment strategies.</p> <p>In particular, this index uses the following ESG Products: Sustainalytics Controversies, Global Standards Screening, Product Involvement and Controversial Weapons Involvement.</p> <p>For details on Sustainalytics ESG Research's full suite of ESG products, please refer to: <a href="http://www.sustainalytics.com">http://www.sustainalytics.com</a></p> <p>Sustainalytics' research process involves the collection and analysis of information made available by third parties, including civil society, corporate, government, industry association, investor, media and regulatory sources. Sustainalytics also uses</p>

	3rd party data providers about which information is available at <a href="https://www.sustainalytics.com/legal-disclaimers/">https://www.sustainalytics.com/legal-disclaimers/</a>
Item 7b: Verification and quality of data	<p>Sustainalytics Quality Approach to:</p> <p>A. Controversies</p> <p>Company Research</p> <ul style="list-style-type: none"> <li>• Continuous improvement and maintenance of quality and research standards</li> <li>• Continuous refinement of methodologies and guidance to adjust to emerging societal ESG developments</li> <li>• Continuous screening and curation of news and NGO sources</li> <li>• Screening of corporate reporting and web disclosure</li> <li>• Senior sector lead quality reviews of controversy assessments before publication</li> <li>• For high scoring controversy ratings (Categories 4 and 5), companies are contacted to verify allegations that are relevant in the controversy ratings methodology and their response is taken into consideration, and whenever relevant included</li> <li>• For high scoring controversy ratings (Category 4 and 5), proposals for assessment changes are reviewed by an internal oversight body. If the proposal is approved, a written indicator assessment is drafted according to Sustainalytics Controversy guidelines. Before such assessment is published, a quality and editorial review is conducted</li> </ul> <p>Data and deliverable management</p> <ul style="list-style-type: none"> <li>• Quality and reliability of Covered Company and identifier data through automated quality assurance</li> <li>• Quality and reliability of Sustainalytics proprietary (i.e. research) data through automated quality assurance, prior to publication</li> <li>• Senior sector lead quality reviews of controversy assessments before publication</li> <li>• Quality and reliability of biweekly client deliverables through end-of-gate quality assurance processes (automated and manual)</li> <li>• Monitoring and investigating ESG score fluctuations and their root causes using manual and automated tools</li> </ul> <p>Update cycle</p> <ul style="list-style-type: none"> <li>• Continuous daily news monitoring is conducted as incidents occur and feed into updates of controversy indicators</li> <li>• Quarterly reviews of high scoring cases regardless the occurrence of incidents</li> <li>• Three year back controversy screen for entities added to the research universe after every quarterly rebalance</li> <li>• Annual review of all company's controversy ratings when the overall Risk Rating of a company is annually updated</li> <li>• Analyst discretion to react to relevant developments at any time, regardless the above scheduled reviews</li> </ul> <p>B. Controversial Weapons Radar (CWR)</p>

	<p>Company Research</p> <ul style="list-style-type: none"> <li>• Continuous improvement and maintenance of quality and research standards</li> <li>• Continuous refinement of methodologies and guidance to adjust to emerging societal ESG developments</li> <li>• Continuous screening and curation of news and NGO sources</li> <li>• Screening of corporate reporting and web disclosure</li> <li>• All involved companies are contacted for fact checking relevant in the methodology and their response is taken into consideration, and whenever relevant included</li> <li>• Before CWR assessment is published, a quality and editorial review is conducted and the CWR Committee signs off on entire research</li> </ul> <p>Data and deliverable management</p> <ul style="list-style-type: none"> <li>• Quality and reliability of Covered Company and identifier data</li> <li>• Quality and reliability of Sustainalytics proprietary (i.e. research) data prior to publication</li> <li>• Quality and reliability of quarterly client deliverables through end-of-gate quality assurance processes (automated and manual).</li> </ul> <p>Update cycle</p> <ul style="list-style-type: none"> <li>• Continuous daily news monitoring is conducted as incidents occur and feed into updates of controversy indicators</li> </ul> <p>C. Global Standards Screening (GSS)</p> <p>Company Research</p> <ul style="list-style-type: none"> <li>• Continuous improvement and maintenance of quality and research standards</li> <li>• Companies are contacted to verify allegations that are relevant in the Global Standards Screening methodology and their response is taken into consideration, and whenever relevant included</li> <li>• Quality reviews of ESG assessments before publication</li> <li>• For the Global Standards Screening, proposals for assessment changes are reviewed by an internal oversight body. If the proposal is approved, a written report is drafted according to the GSS guidelines. Before a Watchlist or Non-Compliant status for an issue is published, a quality and editorial review is conducted on the report and the sources used therein</li> </ul> <p>Data and deliverable management</p> <ul style="list-style-type: none"> <li>• Quality and reliability of Covered Company and identifier data through automated quality assurance</li> <li>• Quality and reliability of Sustainalytics proprietary (i.e. research) data through automated quality assurance, prior to publication</li> <li>• Quality and reliability of standard deliverables through end-of-gate quality assurance process</li> <li>• Quality and reliability of custom client deliverables through end-of-gate quality assurance processes (automated and manual)</li> <li>• Monitoring and investigating ESG score fluctuations and their root causes using automated tools</li> </ul>
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	<p>Update cycle</p> <ul style="list-style-type: none"> <li>• Continuous monitoring is conducted as incidents occur and feed into updates of Global Standards Screening reports</li> <li>• Quarterly updates to Global Standards Screening reports</li> <li>• New companies added to the universe as a result of rebalancing are researched and updated in client systems quarterly</li> <li>• Corporate actions are processed in client systems on a quarterly basis in order to capture any involvement changes arising from mergers, acquisitions or other corporate actions.</li> </ul> <p>D. Product Involvement</p> <p>Company Research</p> <ul style="list-style-type: none"> <li>• Continuous improvement and maintenance of quality and research standards</li> <li>• All Product Involvement research is reviewed by senior analysts. The review comprises checking the accuracy of the involvement analysis by studying the original source as well as consistency with the research methodology and framework</li> <li>• Final validation of the research before publication is done by the Research Manager. Assessment changes are additionally reviewed by an internal oversight body</li> </ul> <p>Data and deliverable management</p> <ul style="list-style-type: none"> <li>• Quality and reliability of Covered Company and identifier data through automated quality assurance</li> <li>• Quality and reliability of Sustainalytics proprietary (i.e. research) data through automated quality assurance, prior to publication</li> <li>• Quality and reliability of standard deliverables through end-of-gate quality assurance process</li> <li>• Quality and reliability of custom client deliverables through end-of-gate quality assurance processes (automated and manual)</li> <li>• Monitoring and investigating ESG score fluctuations and their root causes using automated tools</li> </ul> <p>Update cycle</p> <ul style="list-style-type: none"> <li>• Product Involvement Research is updated annually</li> <li>• New companies added to the universe as a result of rebalancing are researched and updated in client systems quarterly</li> <li>• Corporate actions are processed in client systems on a quarterly basis in order to capture any involvement changes arising from mergers, acquisitions or other corporate actions</li> </ul>
Item 7c: International reference standards	<p>The methodology behind Sustainalytics Global Standards Screening is based on the following international standards:</p> <ul style="list-style-type: none"> <li>• UN Global Compact Principles</li> <li>• OECD</li> <li>• World Governance Indicators</li> <li>• On top of these international (convention-based) standards we also look at industry specific standards or initiatives. Examples are the Round Table on Sustainable Palm Oil, the standards for Systemically Important Banks, local Corporate Governance codes, and many others</li> <li>• Said industry specific standards are incorporated in the assessments of companies' management of ESG issues in the ESG Risk Rating</li> </ul>



	<p>The methodology used by Sustainalytics for Controversial Weapon Radar is relying on the following international conventions for the controversial weapon definition:</p> <ul style="list-style-type: none"> <li>• Anti-Personnel Mines - Sustainalytics utilises the definition applied by the 1997 Ottawa (Mine-Ban) Treaty</li> <li>• Biological Weapons - Sustainalytics utilises the definition outlined in the 1972 Biological and Toxin Weapons Convention (BTWC)</li> <li>• Chemical Weapons - Sustainalytics utilises the definitions outlined in the 1993 Chemical Weapons Convention (CWC)</li> <li>• Cluster Weapons - Sustainalytics utilises the definition applied by the 2008 Convention on Cluster Munitions (CCM), which outlines seven criteria to define a cluster weapon, besides weight and submunition quantity</li> <li>• Nuclear Weapons - Sustainalytics bases its definition of a nuclear weapon on the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Tlatelolco)</li> </ul> <p>In addition, international legislation is covered by the Controversial Weapons Radar through the following data points:</p> <p>a) Conventions Overview (Company Level): Offers information on the country of domicile's convention signatory status</p> <ul style="list-style-type: none"> <li>• Anti-personnel mines: Anti-Personnel Mine Ban Convention, 1999</li> <li>• Biological weapons: Biological and Toxin Weapons Convention (BTWC), 1972</li> <li>• Chemical weapons: The Chemical Weapons Convention (CWC), 1997</li> <li>• Cluster weapons: Convention on Cluster Munitions, 2008</li> <li>• Nuclear weapons: Non-proliferation Treaty (NPT), 1968</li> </ul> <p>b) Nuclear Weapons-NPT Conventions Overview (Supported Program Level): Offers an overview of the national nuclear program(s) a company contributes to, and their countries' NPT status</p> <p>Controversies research tracks incidents through various media and NGO sources and is not a comprehensive screening product. The following standards are included in the framework for analysis for the Controversies research, however reference to the exact standards or norms breaches is not described, given that Sustainalytics does not assess the issuer's compliance with such conventions, but only provides an indication of the expected impact the reported allegations may have for businesses and stakeholders</p> <ul style="list-style-type: none"> <li>• UN Global Compact Principles</li> <li>• OECD</li> <li>• On top of these international (convention-based) standards we also look at industry specific standards, initiatives or principles as further elaborated in underlying conventions and authoritative guidelines</li> </ul> <p>For Product Involvement Sustainalytics does not rely on international standards or conventions.</p>
Item 8a: Information updated on	31 July 2021
Item 8b: Reason for update	

## 6) 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](#).

## 7) Changes to iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened Index

30 Jun 2023	<ul style="list-style-type: none"><li>• Introduction of 'Maturity extension' section</li><li>• Index eligibility of bonds with extended workout dates</li><li>• Creation of 'Renewable Energy Sector' within the 'Corporates' classification</li></ul>
31 Jul 2022	Monthly forward start date updated from 10th calendar day to 6th calendar day
2 Aug 2021	Launch of iBoxx USD Asia ex-Japan Corporates Investment Grade ESG Screened Index

## 8) Further information

### Client support

For client support please contact:

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

### Formal complaints

Formal complaints should be emailed to [spdji\\_compliance@spglobal.com](mailto:spdji_compliance@spglobal.com).

Please note: [spdji\\_compliance@spglobal.com](mailto:spdji_compliance@spglobal.com) should only be used to log formal complaints.

### General index inquiries

For general index inquiries, please contact [indices@ihsmarkit.com](mailto:indices@ihsmarkit.com).

# Disclaimer

## Performance Disclosure/Back-Tested Data

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

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

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

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

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

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