

# Markit iBoxx ADBI Index

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## 1 Markit iBoxx ADBI

The Markit iBoxx Asian USD Bond Index family ("iBoxx ADBI") is designed to reflect the performance of USD denominated bonds from Asian based issuers. The index offers a broad coverage of the universe of Asian USD bonds across all ratings and sectors. The iBoxx ADBI contains an overall index as well as sub-indices by country and sector and an index covering the investment grade portion of the Asian USD bond market. The high yield segment of the Asian USD bond universe is covered by the Markit iBoxx Asian USD High Yield Bond Index ("iBoxx AHBI") and includes a sub-index covering the corporate section of the high yield market excluding banks. iBoxx AHBI has slightly different bond inclusion rules reflecting different issuance conventions in the high yield market.

The indices are an integral part of the global Markit iBoxx index families, which provide the marketplace with accurate and objective reference indices by which to assess the performance of bond markets and investments.

All iBoxx indices are priced based on multiple data inputs. The Markit iBoxx ADBI Index uses multisource prices as described in the document *Markit iBoxx Pricing Rules* publically available under methodology on *www.markit.com/Documentation/Product/IBoxx*. Additionally, the index rules and their application are governed by two Index Advisory Committees.

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

## 1.1 Index Family Structure

The table below shows the Markit iBoxx Asian USD Bond Index structure:

The Corporates Index is divided into indices for financial and non-financial issues. In addition, sector indices are calculated for financials and non-financials. Industry, super sector and sector indices are also calculated. The financial sector indices, including banks, insurance and financial services are also split into senior and subordinated debt.

<ul> <li>Markit iBoxx Asian USD Dollar Bond Index</li> <li>Markit iBoxx ADBI High Grade Index</li> <li>Markit iBoxx Asian USD High Yield Bond Index</li> <li>Markit iBoxx AHBI Corporate ex- Banks</li> <li>Markit iBoxx AHBI Corporate ex- Banks</li> <li>Markit iBoxx AHBI Corporate ex- Banks</li> <li>Mongolia</li> <li>Pakistan</li> <li>Real Es</li> <li>Philippines</li> <li>Insuran</li> <li>Singapore</li> <li>Financials e</li> <li>South Korea</li> <li>Non-Financi</li> <li>Sri Lanka</li> <li>Consun</li> <li>Thailand</li> <li>Consun</li> <li>Vietnam</li> <li>Health O</li> <li>Industri</li> <li>Oil &amp; Ga</li> <li>Telecon</li> <li>Utilities</li> </ul>	gns al Services state ce x- Real Estate ials faterials ner Goods ner Services Care als as logy nmunications

#### Markit iBoxx Asian Dollar bond Index Family

Bonds issued by Macau-based issuers are part of the iBoxx ADBI Hong Kong Index

#### 1.2 Index governance

In order to ensure the independence and the objectivity of the iBoxx ADBI Index family, the index rules and their enforcement will be governed by the Asian iBoxx Oversight Committee, in line with the governance structure for the main Markit iBoxx index families.

The Oversight Committee is comprised of representatives from a broad range of asset managers, consultants and industry bodies. The purpose of this committee is to review the recommendations made by Markit and also to provide consultation on any market developments which may warrant rule changes.

## 1.3 Publication of the Index

All indices are calculated at the end of each business day and re-balanced at the end of each month. The indices are calculated on the basis of end-of-day prices on each trading day defined in the iBoxx ADBI Index calculation calendar. The index calculation calendar is available in the indices section on *www.markit.com/indices* under Calendar for data subscribers. The approximate publication time for the Asian end-of-day is 7 pm HKT/SGT and for the US end-of-day at 6 pm EST. 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 and the US end-of-day indices are rebalanced using the corresponding US end-of-day prices.

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 Markit iBoxx ADBI Index covers the market of USD bonds from Asia ex-Japan issuers across all sectors and ratings. The bond selection rules between iBoxx ADBI and iBoxx AHBI are slightly different; the rules specific to the iBoxx AHBI are described further in the guide.

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

- Bond type
- International clearability
- Issuer type
- Issuer domicile
- Credit rating
- Time to maturity
- Amount Outstanding

### 2.1 Bond type

General inclusion criteria:

Bonds with known cash-flows are eligible for the indices

In particular, the following bond types are eligible:

- Fixed coupon bonds
- Callable bonds, who are only callable 1 year or less prior to maturity
- Covered bonds

The following bond types are specifically excluded:

- Other callable and putable bonds (except make-whole, tax changes calls & poison puts)
- Step coupon bonds
- Certificates of deposit
- Undated bonds
- Floating Rate Notes
- Fixed to floaters bonds
- 144As and private placements
- Retail bonds
- Inflation and other index-linked bonds
- Structured notes
- Other collateralized bonds (excl. covered)
- Brady bonds
- Catastrophe bonds

- Payment-In-Kinds (PIKs)
- Optional and mandatory convertible bonds
- Bonds cum- or ex-warrant
- New bonds entering the index that have already been called prior to rebalancing
- Dual currency bonds: bonds that are denominated in one currency but pay either the coupon or the principal in a different currency

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 *www.markit.com/NewsInformation/GetNews/IBoxx* 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 International clearability

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

- Clearstream
- Euroclear
- Hong Kong CMU

#### 2.3 Issuer type

- Sovereigns, Sub-sovereigns, Corporate debt are eligible for the index.
- Covered bonds are also eligible for the indices, but other collateralized bonds such as ABS and MBS are not eligible.
- The bond classification criteria are detailed in further sections in this guide.

#### 2.4 Issuer domicile

Issuers from the following economies are eligible for the index:

- Bangaldesh
- China
- Hong Kong SAR and Macau SAR
- India

- Indonesia
- Malaysia
- Mongolia
- Pakistan
- Philippines
- Singapore
- South Korea
- Sri Lanka
- Taiwan
- Thailand
- Vietnam

Issuers from other countries are not eligible for the index.

Issuers are assigned to an economy according to the country of risk principle.

## 2.5 Credit rating

There is no rating requirement for inclusion in the iBoxx ADBI indices. Unrated bonds also qualify for the index. Bonds are assigned a rating for the purpose of identifying investment grade and high yield issuers.

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. Ratings from the following three credit rating agencies are considered for the calculation of the Markit iBoxx Rating for rated bonds:

- Fitch Ratings
- Moody's Investor Service
- Standard & Poor's Rating Services

If a bond is rated by more than one of the above agencies, then the Markit 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 Rules. The Rules can be found on *https://ihsmarkit.com/products/indices.html* under *Documentation – iBoxx – Methodology*.

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 are applied to bonds issued by foreign issuers and long-term local currency issuer ratings are applied to bonds issued by domestic entities.

Unrated bonds are assigned an implied credit quality based on their yield spreads. The implied credit quality is used to differentiate bonds into investment grade and high yield as well ass to assign them

to individual rating indices. The implied credit quality methodology is available in a separate document on *https://ihsmarkit.com/products/indices.html* under *Documentation – iBoxx \rightarrow Methodology*.

## 2.6 Time to Maturity

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

For sinking funds and bonds with embedded options which are eligible for the iBoxx AHBI indices, the time to maturity is calculated as follows:

- For bonds with embedded options, including hybrid capital, the final maturity date is used to calculate the time to maturity
- For sinking funds, the time to maturity is calculated from the rebalancing date to the average life date

## 2.7 Amount Outstanding

All the bonds require minimum amount outstanding of 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.

### 2.8 Special bond selection rules for iBoxx AHBI

The iBoxx AHBI follows the main selection rules for the iBoxx ADBI except the bonds types as mentioned in below section

#### 2.8.1 Bond type for iBoxx AHBI

In addition to fixed coupon bonds, the following bond types are eligible for iBoxx AHBI"

- Step coupon bonds
- Bonds with embedded call or put options
- Dated hybrid capital including fixed-to-floater bonds and contingent convertibles
- Undated bonds (perpetuals)
- Sinking fund bonds

Bonds with any of the following attributes remain excluded from iBoxx AHBI:

- Floating rate notes and fixed to float bond who turn into a floating rate note before the first call date
- Amortizing bonds
- Certificates of deposit
- Bonds with warrants

- Convertibles
- Index-linked and credit linked notes
- Dual currency bonds: bonds that are denominated in one currency but pay either the coupon or the principal in a different currency
- Retail bonds
- Private placements

For bonds issued in both 144A and RegS versions, the RegS version is included in the index.

## 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 indices at the next rebalancing if necessary.

Where the sector classification of a specific entity is not very clear due to the diversified business of the entity, decision will be made at 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.markit.com/indices* for registered users.

The main sectors classifications with the Markit iBoxx ADBI Index family are described below

## 3.1 Sovereigns

Bonds issued by a central government and denominated in USD.

### 3.2 Sub-sovereigns

Bonds issued by entities with explicit or implicit government backing due to legal provision, letters of comfort or the public service nature of their business. The issuer requires a strong central government ownership/relationship if its bonds are not explicitly guaranteed by the central government.

The five main sub-sovereign sectors are:

- **Agencies:** Bonds issued by entities whose major business is to fulfil a government-sponsored role to provide public, non-competitive services (e.g. Fannie Mae). Often, such business scope is defined by a specific law, or the issuer is explicitly backed by the government.
- **Supranationals:** Bonds issued by supranational entities, i.e. entities that are owned by more than one central government (e.g.World Bank, EIB).
- Local Government: Bonds issued by local governments (e.g. Province of Manitoba Canada).
- Other Sub-Sovereigns: All remaining bonds considered sub-sovereign. There are three main types of bonds and issuers falling into this category:
  - > Non-Financials: A government backed issuer from a non-financial sector such as public utilities.

- > Guaranteed Financials: A specific bond issued by a private sector financial institution that is irrevocably guaranteed by a government. Most of these bonds are issued under programmes set-up after the 2008 financial crisis.
- > Bonds issued by unguaranteed institutions with an irrevocable and explicit guarantee by a central government that covers amount and timeliness of all interest and principal payments until the maturity of the bond.

#### 3.3 Collateralised - covered bonds

Bonds secured by a general pool of mortgages, public sector debt, or a general pool of assets. In the event of issuer default, covered bond investors have preferential claim against the collateral pool. Covered bond include in particular bonds conforming to the criteria specified in UCITS 22.4 or similar directives, e.g. CAD III. In addition, bonds with a structure affording an equivalent risk and credit profile that are considered by the Markit as covered bonds are also included in the indices.

### 3.4 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 for corporate bonds whose timely coupon and/or principal payments are guaranteed by a special monoline insurer such as AMBAC or MBIA. Each bond in the index is assigned to one of the following sectors.

	Economic Sector	Market Sector	Market Sub-Sector
Financials	Financials	Banks	Banks
		Insurance	Life Insurance
			Nonlife Insurance
		Financial Services	General Financial
		Real Estate	Real Estate Investment & Services
			Real Estate Investment Trusts
		Guaranteed & Wrapped	*
Non-Financials	Oil & Gas	Oil & Gas	Oil & Gas Producers
			Oil Equipment / Services & Distribution
	Basic Materials	Chemicals	Chemicals
		Basic Resources	Industrial Metals

Table 1: Table 1: Overview of Markit iBoxx Corporates Sectors

		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
		Торассо
Health Care	Health Care	Pharmaceuticals & Biotechnology
Consumer Services	Retail	Food & Drug Retailers
		General Retailers
	Media	Media
	Travel & Leisure	Travel & Leisure
Telecommunications	Telecommunications	Fixed Line Telecommunications
		Mobile Telecommunications
Utilities	Utilities	Electricity
		Gas / Water & Multi utilities
Technology	Technology	Software & Computer Services
		Technology Hardware & Equipment

## 3.5 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.

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 standardised 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 2: Overview of seniority levels for Markit iBoxx Senior & Subordinated indices

Market Sector	Seniority Level 1	Seniority Level 2	
Bank	SEN	Preferred	
		Bail-in	
	SUB	Lower Tier 2	
		Upper Tier 2	
		Tier 1	
		AT1	
		Τ2	
Insurance	SEN	*	
	SUB	Other	
Other Sectors	SEN	*	
	SUB	*	

## 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 Markit iBoxx Documentation page on *www.markit.com/Documentation/Product/IBoxx*.

## 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 re-balancing 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.

Three business days before the end of each month one preliminary list of eligible bonds is published in addition to the weekly previews mentioned below.

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.

## 4.4 Index data

The calculation of the Markit iBoxx ADBI 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 the specific Index Advisory Committees at the following 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 toplevel 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.

On the last trading day of a month, the re-balancing takes place after the close of the 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.markit.com/Documentation/ Product/IBoxx*.

#### 4.6 Treatment of the special intra-month events

Data for the application of corporate actions in the indices may not be fully or timely available at all times, e.g. the final call prices for make-whole calls or the actual pay-in-kind percentage for PIK-payment options. In such cases, 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 Markit iBoxx ADBI indices are volume-weighted indices, with the bond's amount outstanding as the weighting factor. The amount outstanding of a bond is only adjusted at the monthly re-balancing process at the end of each month. However, scheduled redemption payments for amortising 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 summarised below.

Definitions:

- *Amortising 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 a bond (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 exdividend 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 2012. All indices have 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 Calendar* section of the iBoxx Documentation page on *www.markit.com/Documentation/Product/IBoxx*. 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 Markit iBoxx ADBI Index in the *Indices* section of the IHS Markit website *www.markit.com/indices* for registered users and on the FTP server.

Frequency	File Type	Access
Daily	Underlying file – Bond level	FTP Server
	Indices files – Index level	FTP Server / IHS Markit website / Bloomberg (index levels only)
Weekly	Preview components	FTP Server / IHS Markit website
Monthly	End of month components	FTP Server / IHS Markit website
	XREF files	FTP Server

Markit iBoxx indices are also published through number information service providers including Bloomberg and Thomson Reuters. Please contact IHS Markit for a list of current service providers that carry the iBoxx ADBI and AHBI Index data. The Bloomberg ticker and Reuters RIC code for the main iBoxx indices are:

		Total Return Index	1	Price Index	
ISIN	Markit Index Name	BBG Ticker	RIC code	BBG Ticker	RIC Code
GB00BYZW7309	Markit iBoxx Asian USD Dollar Bond Index	IBXXADBI	.IBXXADBI	IBXXADBC	.IBXXADBC
GB00BYQ9B830	Markit iBoxx ADBI High Grade Index	IBXXADDT	.IBXXADDT	IBXXADBE	.IBXXADBE
GB00BYQ9BY93	Markit iBoxx AHBI	IBXXAHBI	.IBXXAHBI	IBXXAHBC	.IBXXAHBC
GB00BF9QGH28	Markit iBoxx Bangladesh	IBXXDBDT	.IBXXDBDT	IBXXDBDP	.IBXXDBDP
GB00BYQ9B947	Markit iBoxx ADBI China	IBXXADCN	.IBXXADCN	IBXXADBG	.IBXXADBG
GB00BYQ9BB66	Markit iBoxx ADBI Hong Kong	IBXXADHK	.IBXXADHK	IBXXADHP	.IBXXADHP
GB00BYQ9BC73	Markit iBoxx ADBI India	IBXXADIN	.IBXXADIN	IBXXADIP	.IBXXADIP
GB00BYQ9BD80	Markit iBoxx ADBI Indonesia	IBXXADID	.IBXXADID	IBXXADIC	.IBXXADIC
GB00BYQ9BF05	Markit iBoxx ADBI Malaysia	IBXXADMY	.IBXXADMY	IBXXADMP	.IBXXADMP
GB00BYQ9BG12	Markit iBoxx ADBI Mongolia	IBXXADMN	.IBXXADMN	IBXXADMC	.IBXXADMC
GB00BF9QGF04	Markit iBoxx Pakistan	IBXXDPKT	.IBXXDPKT	IBXXDPKP	.IBXXDPKP
GB00BYQ9BH29	Markit iBoxx ADBI Philippines	IBXXADPH	.IBXXADPH	IBXXADPP	.IBXXADPP
GB00BYQ9BJ43	Markit iBoxx ADBI Singapore	IBXXADSI	.IBXXADSI	IBXXADSP	.IBXXADSP
GB00BYQ9BL64	Markit iBoxx ADBI South Korea	IBXXADKR	.IBXXADKR	IBXXADKP	.IBXXADKP
GB00BYQ9BK57	Markit iBoxx ADBI Sri Lanka	IBXXADSL	.IBXXADSL	IBXXADSC	.IBXXADSC
GB00BYQ9BM71	Markit iBoxx ADBI Taiwan	IBXXADTW	.IBXXADTW	IBXXADTP	.IBXXADTP
GB00BYQ9BN88	Markit iBoxx ADBI Thailand	IBXXADTH	.IBXXADTH	IBXXADTC	.IBXXADTC
GB00BYQ9BP03	Markit iBoxx ADBI Vietnam	IBXXADVN	.IBXXADVN	IBXXADVP	.IBXXADVP

## 4.11 Index Restatement

Index restatement follows the policy described in the *Markit iBoxx Index Restatement Policy* document, available in the *Methodology* section of the Markit iBoxx Documentation page on *www.markit.com/Documentation/Product/IBoxx*.

## 4.12 Index Review

Index methodology reviews for the index in this guide are performed on a periodic basis. Any material changes to the methodology governing the indices are published on the Markit website.

## 5 Changes to Markit iBoxx ADBI Index

31 Jan 2018	<ul> <li>Implementation of Annual Index Review 2017</li> <li>Unify amount outstanding criteria to USD 250m for all bonds</li> <li>Review of bond types fotr ADBI</li> <li>Inclusion of callable bonds with a call only 1 year or less prior to maturity</li> </ul>
	> Inlcusion of loan participation notes
	<ul> <li>Addition of Bangladesh and Pakistan to the list of eligible issuer domiciles</li> </ul>
	<ul> <li>Change of rating methodology for spilt-rated bonds to average rating</li> </ul>
21 Sep 2016	Clarification on amount outstanding of the exchanged bonds
1 Mar 2016	Clarification on the index holiday schedule
19 Feb 2016	Update to the Rebalancing process
20 Jan 2016	Launch of the Markit iBoxx ADBI Index Family

## 6 Further Information

#### **Glossary of key terms**

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

#### Contractual and content issues

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#### **Formal complaints**

Formal complaints can be sent electronically to our dedicated e-mail address *complaints\_indices@markit.com*.

For any general index enquiries, please contact iBoxx indices support group at *indices@ihsmarkit.com*.

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