Markit iBoxx Documentation

# markit

# Markit iBoxx ADBI™ Index Guide

January 2016

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Changes to the Markit iBoxx ADBI Index Family

20 January 2016 Launch of the Markit iBoxx ADBI index family

# 1 iBoxx ADBI Indices

The Markit iBoxx Asian USD Bond Index family ("iBoxx ABDI") is designed to reflect the performance of USD bonds from Asian based issuers. The index offers a broad coverage of the universe of Asian USD bonds across all ratings and sectors. As of 31 December 2015, the indices tracks close more than 750 bonds with an aggregate market value of USD 540 bn. The indices are an integral part of the global Markit iBoxx index families, which provide the marketplace with accurate and objective benchmarks by which to assess the performance of bond markets and investments.

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.

All iBoxx indices are priced based on multiple data inputs. The iBoxx ADBI indices use multi-source prices as described in the document "Markit iBoxx Pricing Rules" publically available on the Methodology page of http://www.markit.com/Documentation/Product/IBoxx.

The index rules and their application will be governed by the Asian iBoxx Oversight Committee. This document covers the index family structure, rules and calculation methodology.

# 1.1 Index family structure

Markit iBoxx Asian Dollar Bond Index family				
iBoxx ADBI/iBoxx AHBI	iBoxx ADBI Country Indices	iBoxx ADBI Sector Indices		
<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)</li> <li>Markit iBoxx AHBI Corporates ex-Banks</li> </ul>	<ul> <li>China</li> <li>Hong Kong</li> <li>India</li> <li>Indonesia</li> <li>Malaysia</li> <li>Mongolia</li> <li>Philippines</li> <li>Singapore</li> <li>South Korea</li> <li>Sri Lanka</li> <li>Taiwan</li> <li>Thailand</li> <li>Vietnam</li> </ul>	<ul> <li>Sovereigns</li> <li>Sub-sovereigns</li> <li>Covered</li> <li>Corporates</li> <li>Financials</li> <li>Banks</li> <li>Financials Services</li> <li>Real Estate</li> <li>Insurance</li> <li>Financials ex-Real Estate</li> <li>Non-Financials</li> <li>Basic Materials</li> <li>Consumer Goods</li> <li>Consumer Services</li> <li>Health Care</li> <li>Industrials</li> <li>Oil &amp; gas</li> <li>Technology</li> <li>Telecommunications</li> <li>Utilities</li> </ul>		

The figure below provides an overview of the index family structure:

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 iBoxx ADBI Indices

For all indices, end-of-day closing values are calculated and distributed twice daily after the close of trading in the Asian market and at the close of the US market. 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. The indices are calculated every day except on recommended SIFMA holidays. In addition, the indices are calculated with the previous trading day's close on the last calendar day of each month if that day is not a trading day. Markit publishes an index calculation calendar which is available in the indices section on http://www.markit.com/Documentation/Product/IBoxx under *Calendar*.

Bond and index analytical values are calculated each trading day using the daily closing prices. Closing index values and key statistics are published at the end of each business day in the indices section on <u>www.markit.com/indices</u> for registered users.

Index data is also available from the main information vendors, including Bloomberg and Thomson Reuters. Please refer to chapter 4.10 for details.

# 2 iBoxx ADBI bond selection rules

iBoxx ADBI 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 in chapter 2.8.

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

Only bonds with predetermined cash flows are eligible for the indices.

In particular, bonds with the following characteristics are included:

Fixed coupon bonds

Bonds with any of the following attributes are excluded from the indices:

- Bonds with embedded call or put options (except make-whole, tax changes calls and poision puts)
- Zero coupon and step coupon bonds
- Loan participation notes
- Certificates of Deposit
- Callable dated and undated hybrid capital including contingent convertibles
- Undated bonds
- Floating rate notes and fixed-to-floater bonds
- Sinking funds and amortizing bonds
- 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.

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 Markit's discretion based on the information available at the time of determination. 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 <a href="http://www.markit.com/NewsInformation/GetNews/IBoxx">http://www.markit.com/NewsInformation/GetNews/IBoxx</a> for future reference and to ensure consistency of treatment over time.

In instances where a new bond type is not specifically excluded or included according to the published index rules, Markit will analyse the features of such securities in line with the principles set out in 2.1 of this guide. Markit may consult the relevant 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 International clearability

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

- Clearstream
- Euroclear
- Hong Kong CMU

#### 2.3 Issuer type

Sovereign, sub-sovereign and corporate debt is 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 Section 3 of this document.

## 2.4 Issuer domicile

Issuers from the following economies are eligible for the index:

- China
- Hong Kong SAR and Macau SAR
- India
- Indonesia
- Malaysia
- Mongolia
- Philippines

- Singapore
- South Korea
- Sri Lanka
- Taiwan
- Thailand
- Vietnam

Issuers from Bangladesh, Pakistan and 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. The following rating methodology applies:

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

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

The rating process is predominately based on bond ratings. If no rating agency provides a bond rating then issuer ratings are considered for otherwise unrated senior bonds. Subordinated bonds without bond ratings or senior bonds without any bond or issuer rating are assigned an implied rating based on the iBoxx Implied Credit Quality Methodology.

If more than one agency rates a bond then the index rating is determined as follows:

- For bonds where all ratings are investment grade or all ratings are high yield, the average rating determines the index rating
- For newly issued split rated subordinated debt or covered bonds, and for split rated senior bonds from issuers not represented in ADBI or AHBI, the average rating is assigned to the bond.
  - For split-rated bonds already included in the index and for newly issued senior bonds from existing issuers, the rating methodology depends on whether the bond/issuer is currently classified as investment grade or high yield:

- For bonds/issuers currently classified as investment grade, the maximum rating is attached to the bond, i.e. bonds are only downgraded to high yield once all rating agencies rate the bond as high yield
- For bonds/issuers currently classified as high yield, the minimum rating is attached to the bond, i.e. the bonds are only upgraded to the investment grade once all rating agencies have upgraded the bond

Bonds without bond and issuer ratings are assigned an implied rating for the purpose of identifying investment grade and high yield. The implied rating is determined on the issuer level for senior bonds and for each individual subordinated or covered bond. The implied rating is calculated according to the iBoxx Implied Credit Quality Methodology available in the Documentation section of http://www.markit.com/Documentation/Product/iBoxx.

## 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

The minimum amount outstanding for all bonds is USD 250m.

# 2.8 Special bond selection rules for iBoxx AHBI

The iBoxx AHBI follows the main selection rules for the iBoxx ADBI except for the two items below:

- Bond type
- Amount outstanding

#### 2.8.1 Bond types 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 funds

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

- Zero coupon bonds
- Floating rate notes and fixed-to-floater bonds who turn into a floating rate note before the first call date
- Amortizing bonds
- Loan participation notes
- 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.

#### 2.8.2 Amount outstanding for iBoxx AHBI

The minimum amount outstanding for all bonds is USD 200m.

# 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 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, a decision will be made at Markit's discretion. Markit will assign the Markit classification according to its evaluation of the business risk presented in the security prospectus and annual reports, if available. Markit will also compare the classification to peers in the potential sectors. Markit may consult with the Index Advisory Committees. Membership lists including bond classifications are published on the FTP server and in the indices section of products.markit.com for registered users.

The main sector classifications within the iBoxx ADBI 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 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).
- Public Banks: Bonds issued by publicly owned and backed banks that provide regular commercial banking services (e.g. Bank Nederlandse Gemeenten).
- Regions: 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 Guaranteed & 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 or through a letter of credit from a non-affiliated bank. The sector overview is shown in the table below.

	Economic Sector	Market Sector	Market Sub-Sector
Financials	Financials	Banks	Banks
		Insurance	Life Insurance
			Nonlife Insurance
		Financial Services	General Financial
		Real Estate	Real Estate
		Guaranteed & Wrapped	*
Non-Financials	Oil & Gas	Oil & Gas	Oil & Gas Producers
			Oil Equipment / Services & Distribution
	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
	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 & Multiutilities
Technology	Technology	Software & Computer Services
		Technology Hardware & Equipment

# 3.5 Additional classifications

Corporate debt is further classified into senior and subordinated debt. Hybrid capital issued by financial institutions is further detailed into the respective tiers of subordination:

- Tier I
- Upper Tier 2
- Lower Tier 2
- AT1
- Other

# 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 on the Methodology page of <a href="http://www.markit.com/Documentation/Product/iBoxx">http://www.markit.com/Documentation/Product/iBoxx</a>.

# 4.3 Rebalancing process

All iBoxx ADBI indices are re-balanced monthly on the last calendar day of the month after the close of business. Changes to static data, such as ratings, amounts outstanding, etc. are only taken into account if they are publicly known three business days before the end of the month. Changes in rating or amount outstanding on the last two trading days of the month are accounted for at the next re-balancing. New bonds issued must settle before the end of the month and all relevant information must be known at least three trading days before the end of the month.

The classification of existing bonds is also reviewed at each monthly re-balancing, and resulting classification changes are implemented at the re-balancing.

Four business days before the end of each month, a preliminary membership list is published on the FTP server and in the indices section on <u>www.markit.com/indices</u> under *Data*  $\rightarrow$  *Bond List Preview* for registered users.

Three business days before the end of each month, a membership list with final amount outstanding for each bond is published. This list contains the constituents for the next month.

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

The rebalancing calculations are carried out after the calculation of the US end-of-day index values and are based on the prices as at the close of the US trading.

# 4.4 Index data

A sub-index of the iBoxx ADBI index family is calculated if at least one bond matches all inclusion criteria. If no more bonds qualify for an index, then its level will remain constant. If at least one bond becomes available again, the index calculation will be resumed and 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.

Calculation occurs on a twice-daily basis as soon as the prices become available. All indices are calculated at close of business for Asia and the end of the US trading day. The indices are calculated

on each trading day (Monday to Friday), unless this day is a recommended SIFMA holiday. 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 in one of the countries, 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 calculation of the indices is based on bid prices. New bonds are included in the indices at their respective ask prices when they enter the index family. In the event that no price can be established for a particular bond, 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, Markit may consult the specific Index Advisory Committees at the following rebalancing date. To ensure consistency, decisions taken are made publicly available on a timely basis and Markit has the ability to refer back to previous cases.

On the last trading day of a month, the rebalancing takes place after the daily index calculation for the current month's list, including the calculation of the last calendar day's indices, has been performed.

### 4.5 Index calculus

For specific index formulae refer to *Markit iBoxx Bond Calculus* document, available on the Markit iBoxx Methodology page of http://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, Markit will estimate the approximate value based on the available data at the time of calculation.

#### 4.6.1 Index and analytics weightings

The iBoxx ADBI indices are volume-weighted indices, with a bond's base market value as the weighting factor. The base market value and amount outstanding of a bond are only adjusted within 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 when they occur, as they are affecting the index return and analytical values. In addition, bonds that are fully redeemed intramonth are also taken into account immediately. Therefore, the indices are calculated using the amount outstanding adjusted for increases as well as repurchases that took place during the month.

Definitions:

- Sinking funds: Bonds, where 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 (sometimes) may be 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 have been 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 are taken into account to arrive at a suitable basis for the index and the analytics calculation. Consequently, all calculations are based on the adjusted amount outstanding.

#### 4.6.2 Scheduled partial redemptions: sinking funds and amortizing bonds

#### Price and accrued interest:

Are quoted and calculated to the actual amount outstanding (par)  $\rightarrow$  scheduled redemptions within the period are taken into account immediately.

#### Coupon payments:

Refer to the scheduled amount outstanding over the last coupon period  $\rightarrow$  scheduled redemptions within the month are not taken into account.

#### Repayment of principal:

The sinking schedule refers to the (adjusted) amt. outstanding  $\rightarrow$  scheduled redemptions are not taken into account.

#### 4.6.3 Funged bonds

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

- 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 re-balancing and parent amount outstanding increases accordingly.
- Parent is an index constituent, but the new tranche is not
- No special intra-month treatment necessary
- Parent amount outstanding increases at the next re-balancing
- 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 re-balancing

#### 4.6.4 Unscheduled full redemption – 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 F<sub>i,t</sub>, Redemption R<sub>i,t</sub> and the Redemption Price RP<sub>i,t</sub> are used to account for these events in the index and analytics calculation. In addition, the clean price of the bond

is set to the redemption price, and the accrued interest until the redemption date is treated as an irregular coupon payment so that the accrued interest shown is set to 0 and the coupon payment contains the amounts paid in excess of the clean redemption price.

#### 4.6.5 Bonds trading flat of accrued

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

#### 4.6.4 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 predefined 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, e.g. register-driven bonds, or failure to complete a merger, e.g. 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 rating changes on 31 December 2003 from A- to BBB+, and the coupon steps up from 6% to 6.25% from 01 March 2004 onwards. The coupon dates are 01 October and 01 April each year. The correct coupon schedule for the bond and index calculations is now 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 01 April uses a 6.25% coupon.

#### 4.6.5 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 CP<sub>i,t</sub>. 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  $XD_{i,t}$  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 31/12/2012 with a base value of 100.

## 4.8 Settlement conventions

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

## 4.9 Calendar

Markit publishes an index calculation calendar which is available at http://www.markit.com/Documentation/Product/iBoxx. This calendar provides an overview of the index calculation times of the Markit iBoxx bond index families in a given year.

# 4.10 Data publication and access

The table below summarises the publication of ADI data on the Markit website <a href="http://indices.markit.com/">http://indices.markit.com/</a> and on the FTP server.

Daily Files	Access
— Underlying file – Bond level	Markit FTP Server
<ul> <li>Indices files – Index level</li> </ul>	Markit FTP Server/ Markit website/ Bloomberg for
<ul> <li>Some customized index files</li> </ul>	index levels only
Weekly Files	
<ul> <li>Previews_components</li> </ul>	Markit FTP Server/ Markit website
Monthly files	
— End of Month Components	Markit FTP Server/ Markit website
— XREF files	Markit FTP Server

Markit iBoxx indices are also published through a number information service providers including Bloomberg and Thomson Reuters. Please contact <u>iBoxx@markit.com</u> for a list of current service providers that carry the iBoxx ADBI.

The Bloomberg ticker and Reuters RIC code for the main iBoxx ADBI indices are:

		Total Return Index		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
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
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 *Index restatement policy* document, available on the Methodology page of http://www.markit.com/Documentation/Product/iBoxx.

## 4.12 Index review

The rules for the index are reviewed once a year during the annual index review to ensure that the index provides a balanced representation of the market for USD debt from Asian issuers. Decisions made following the annual index review will be published on Markit's website shortly after the relevant committee meetings have been held. The publication will contain a detailed overview and timelines for implementation of any rules changes resulting from the review.

# 5 Further information

- Glossary of key terms is available in the *Glossary* document, available on the Methodology page of http://www.markit.com/Documentation/Product/iBoxx.
- For contractual or content issues please refer to

Markit Indices Limited

Walther-von-Cronberg-Platz 6

60594 Frankfurt am Main

Germany

Tel	+49 (0)	69 299	868	100
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- Fax +49 (0) 69 299 868 149
- E-mail iBoxx@markit.com

internet: http://www.markit.com/product/iBoxx

- For technical issues and client support please contact iBoxx@markit.com or

Asia Pacific	Europe	USA
Japan: +81 3 6402 0127	General: +800 6275 4800	+1 877 762 7548
Singapore: +65 6922 4210	UK: +44 20 7260 2111	

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