

iBoxx[®] ChinaBond | 中债 iBoxx

Asian High Yield Index Guide

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**S&P Dow Jones
Indices**

A Division of **S&P Global**



中央国债登记结算有限责任公司
CHINA CENTRAL DEPOSITORY & CLEARING CO., LTD.



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1 iBoxx ChinaBond Asian High Yield Index

Administered by IMBA UK (IHS Markit Benchmark Administration UK, a fully owned subsidiary of S&P Dow Jones Indices – S&P DJI), the iBoxx ChinaBond Asian High Yield 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 has been created as part of the partnership between ChinaBond Pricing Center Co., Ltd. (“CBPC”) and S&P DJI. The partnership provides investors with accurate and objective indices to assess the performance of the Chinese bond market and investments. CBPC acts as a partner as well as a third-party data provider for this index. The index rules are consistent with other global iBoxx index families and aim to offer a broad coverage of the universe of rated and unrated high yield SGD and USD denominated bonds from Asian High Yield issuers and internationally rated high yield CNY-denominated bonds issued in the China Interbank Bond Market, whilst upholding minimum standards of investability and liquidity.

All iBoxx indices are priced based on multiple data inputs. The iBoxx ChinaBond Asian High Yield Index uses the valuation and reference data provided by CBPC for CNY denominated bonds and valuation and reference data from S&P Global for the SGD and USD denominated bonds.

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 ChinaBond Asian High Yield 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 in the indices section on <https://www.spglobal.com/spdji/en/> under Calendar for data subscribers. 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.

Closing index values and key statistics are published at the end of each business day in the indices section on:

- <https://www.spglobal.com/spdji/en/> for registered users
- https://yield.chinabond.com.cn/cbweb-mn/indices/single_index_query?locale=en_US (English version)
- https://yield.chinabond.com.cn/cbweb-mn/indices/single_index_query?locale=zh_CN (Chinese version)

2 Bond selection rules

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

- Issuer domicile
- Currency
- Issuer type
- Bond type
- Investability
- Time to maturity
- Credit rating
- Amount outstanding
- Market of issue/clearing
- Issuer cap

2.1 Issuer domicile

Only bonds from issuers based in Asia are eligible for the index. Bonds are assigned to a territory based on the territory of risk concept.

2.2 Currency

Bonds issued in CNY (from 31 December 2016), SGD (from 31 December 2016) or USD are eligible for the index.

2.3 Issuer type

Following issuers are eligible for the index:

- Sovereign issuers
- Sub-sovereign issuers
- Corporate issuers

Panda bonds are also eligible for the index, subject to meeting all other eligibility criteria.

2.4 Bond type

In particular, the following bond types are eligible:

- Fixed coupon bonds
- Zero coupon bonds
- Callable and puttable bonds
- Covered 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 1 capital (T1, bank AT1, insurance RT1)
- Bank and insurance regulatory tier 2 capital

SGD-denominated covered bonds and zero coupon bonds are excluded from the index.

The following bond types are specifically excluded:

- Floating Rates Notes
- 144As
- Inflation and other index-linked bonds
- Structured notes
- 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
- Extended bonds as defined under section 'Maturity extension' in this document

In instances where a new bond type is not specifically excluded or included according to the published index rules, S&P DJI will analyze the features of such securities in line with the principles set out in section 2.4 of this guide. S&P DJI may enquire with CBPC for further clarifications. Any decision as to the eligibility or ineligibility of a new bond type will be published and the index rules will be updated accordingly.

2.5 Investability

Retail bonds and private placements are not eligible for the indices. 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 enquire with CBPC for further clarifications.

In addition, bonds that are not available or with limited accessibility to international investors are also not eligible for the indices.

A list of bonds excluded from the index due to the provisions of 2.5 is published on <https://www.spglobal.com/spdji/en/> under News & Information for reference.

2.6 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.

2.7 Credit rating

Bonds must be rated high yield by one or more of the following 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 minimum of the provided ratings. Therefore, split rated bonds qualify for the index¹. Defaulted bonds are ineligible for the index. Bonds that are in default or that trade flat of accrued are removed from the index at the first rebalancing following the default/start of trading flat of accrued.

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

Unrated CNY denominated bonds are excluded from the index. Unrated SGD and USD bonds are assigned an implied credit quality based on their yield spreads. Unrated SGD and USD bonds with an implied credit quality of BBB or lower are eligible for the index. The implied credit quality methodology is available in a separate document on <https://www.spglobal.com/spdji/en/>.

Bonds with a rating downgrade to RD/SD will remain eligible in the iBoxx ChinaBond Asian High Yield Index until the second rebalancing after the downgrade. If such bonds have not been upgraded by T-3 of the second rebalance following the initial downgrade, they will be removed from the indices. This means RD/SD rated bonds remain eligible in the iBoxx ChinaBond Asian High Yield Index for the first rebalancing after their downgrade to allow for sufficient time to complete a distressed debt exchange or change of terms (assuming they meet all other criteria).

¹ Prior to the 31 December 2019 index rebalance, iBoxx rating applied in the index is the average of the three rating agencies.

2.8 Amount outstanding

The minimum size for bonds to be eligible is:

- For bonds denominated in CNY: CNY 1 billion
- For bonds denominated in SGD: SGD 300 million
- For bonds denominated in USD: USD 250 million

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.

2.9 Market of issue/clearing

CNY-denominated bonds need to trade in the China Interbank Market (CIBM). Bonds trading in multiple venues are eligible for the index only if CIBM is one of the trading venues. Bonds that are exclusively traded on the Shanghai and/or Shenzhen Stock Exchanges, the Shanghai Free-trade Zone or in the OTC market are not eligible for the index. Bonds settled and traded in Hong Kong, Macao or outside the People's Republic of China are also not eligible.

USD-denominated bonds need to be clearable via one of the following three clearing venues:

- Clearstream
- Euroclear
- Hong Kong CMU

2.10 Issuer cap

The aggregate weight of all bonds from an issuer in a single non-USD currency must not exceed 0.5% of the index. In addition, issuers are subject to a cap of 2%.

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 Sovereigns

Bonds issued by a central government or the government of a Special Administrative Region of China.

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 the issuer's business. The issuer requires a strong central government ownership/relationship if its bonds are not explicitly guaranteed by the central government.

The four main sub-sovereign sectors are:

- **Agencies:** Bonds issued by entities with a major focus on government-sponsored, public, non-competitive services. The issuers are financial in nature and carry out government policies through special development programs, often explicitly government-backed or with a business scope defined by a specific law. This category includes the three Chinese policy banks - Agricultural Development Bank of China, China Development Bank and Export-Import Bank of China established in 1994.
- **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, classified into the following three main categories:
 - > **Non-Financials:** Bonds issued by entities from the non-financial sector with an explicit or strong implicit debt guarantee from the state. The issuer's credit rating is closely correlated to the sovereign rating and expresses a strong credit uplift based on a high level of government support. S&P DJI expects the issuer's credit rating to be no worse than on par or two notches below the sovereign rating. A 'strong implicit guarantee' means the issuer is 100% owned by the state or public sector with its debt consolidated into state public debt, or the issuer has preexisting access to government financing or funding derived from tax revenues. State-owned issuers that are profit

oriented, provide competitive services, and operate under a regulatory framework are considered Corporates.

- > *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 programs 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 Collateralized

3.3.1 Covered bonds

Bonds which are secured by a general pool of assets in case the issuer becomes insolvent, 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 market 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 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

	Economic Sector	Market Sector	Market Sub-Sector
		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

3.5 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, 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 ≥ 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

The CNY bond reference information used in the index calculation is provided by ChinaBond Pricing Center Co., Ltd. The USD and SGD bond reference information is sourced from offering circulars and checked against standard data provided by S&P Global.

FX spot and forward rates are sourced from WM Company. The daily index calculation uses the FX rates from 4pm London time.

4.2 Bond prices

The CNY bond valuation data used in the index calculation is provided by ChinaBond Pricing Center Co., Ltd. and the USD and SGD bond valuation data is provided by S&P Global. For more details please refer to the *Markit iBoxx Pricing Rules* document, available in the *Methodology* section of the iBoxx Documentation page at <https://www.spglobal.com/spdji/en/>.

4.3 Rebalancing process

The iBoxx ChinaBond Asian High Yield 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 6th 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.

4.4 Index data

The calculation of the index is based on the respective prices for the individual markets, hedged in USD. For the CNY and SGD portion of the index, the calculation is based on the closing prices. For the USD portion of the index the calculation is based on the Asian end-of day bid prices. New USD and SGD securities are included in the index at their respective ask prices when they enter the index.

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.

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 ChinaBond Asian High Yield 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 Cash

Cash from coupon payments and redemptions is held as cash in the index and reinvested into the index at the month end. During the month the cash component is not earning any interest.

4.6.5 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).

4.6.6 Maturity extension

4.6.6.1 Maturity extension for perpetual bonds without a reset date

Maturity	Coupon/call structure	Workout date at issuance	Updated Workout date if not called
Perpetual	Fixed/ Callable	Assume first call date as workout date	Extend workout date until the assumed next call date - 5 years from first call date*.

*Assumes the terms allow for a redemption at the new assumed maturity date.

4.6.6.2 Maturity extension for perpetuals & dated fixed-to-fixed bonds with a reset date

Maturity	Coupon/Call structure	Workout Date at issuance	Updated Workout date if not called
Perpetual	Reset*/Callable	Assume first call date as workout date	Extend workout date until the end of the next reset date*
Dated	Reset/Callable	Assume reset date as workout date	Extend workout date until the end of the next reset date or final maturity date*

*Assumes the bond terms allow for a redemption at the new assumed maturity date

4.6.7 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.

4.6.8 Ex-dividend conventions

Some markets have ex-dividend conventions. Ex-dividend means that the next coupon is detached from the bond several days in advance of the coupon payment date. The date on which the next coupon is detached is the ex-dividend date and the period between the ex-dividend date and the coupon payment date is the ex-dividend period. If a bond is in the ex-dividend period, the next coupon payment will not be paid to a buyer of this bond, but will be paid to the original bond holder.

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

dividend period and 1 if not. The same treatment is also applied to all analytics calculation, i.e. the first cash flow is excluded from the calculations if the bond enters during the current ex-dividend period.

4.7 Index history

The Index history starts on 31 December 2012. The index has a base value of 100 on that date. Prior to 31 December 2016, only USD denominated bonds are eligible for the index.

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 each year.

4.10 Data publication and access

The iBoxx ChinaBond Asian High Yield Index is published in the indices section on the S&P Global website (<https://www.spglobal.com/spdji/en/>), CBPC website (www.chinabond.com.cn), S&P DJI and CBPC FTP servers, and made available through main information vendors. Below is a summary of the different file types and their respective publication channels:

Table 3: Data publication frequency, file types and access

Frequency	File Type	Access
Daily	Underlying files – Bond level	CBPC FTP Server FTP Server
	Indices files – Index level	CBPC FTP Server / FTP Server CBPC website / S&P Global 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	CBPC FTP Server FTP Server
Monthly	Components files	CBPC FTP Server FTP Server S&P Global website
	XREF files	CBPC FTP Server FTP Server

The index identifiers for the publication channels are:

Index Name		
iBoxx ChinaBond Asian High Yield Index		
Return Type	TRi	CPi
ISIN	GB00BQNB2R27	GB00BQNB2S34
Ticker	IBXXAP1T	IBXXAP1C
RIC	.IBXXAP1T	.IBXXAP1C

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 Governance and regulatory compliance

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

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

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

6 Changes to iBoxx ChinaBond Asian High Yield Index

01 May 2024	Annual Index Review 2023 <ul style="list-style-type: none"> • Update to Agencies' Classification Definition <ul style="list-style-type: none"> > Updated definition of 'Agencies' > Updated definition for 'Other Sub-Sovereigns'
30 Jun 2023	Annual Index Review 2022 <ul style="list-style-type: none"> • Introduction of 'Maturity extension' section • Index eligibility of bonds with extended workout dates • Creation of 'Renewable Energy Sector' within the 'Corporates' classification • Distressed Debt Exchanges – Rule Update
15 May 2023	Launch of iBoxx ChinaBond Asian High Yield Index

7 Further information

Client support

For client support please contact index_services@spglobal.com.

Formal complaints

Formal complaints should be emailed to spdji_compliance@spglobal.com.

Please note: spdji_compliance@spglobal.com should only be used to log formal complaints.

General index inquiries

For general index inquiries, please contact index_services@spglobal.com.

7.1 About ChinaBond Pricing Center Co., Ltd.

ChinaBond Pricing Center Co., Ltd. (hereinafter referred to as "ChinaBond Pricing Center" or "CBPC") was established in 2017 in Shanghai as a wholly-owned subsidiary of China Central Depository & Clearing Co., Ltd. (hereinafter referred to as "CCDC"). Benefit from CCDC's neutral status and rich professional experiences, CBPC has become an internationally-renowned benchmark pricing formation platform and the leading domestic financial information service provider. Starting with the publication of China's first RMB government bond yield curve by CCDC in 1999, CBPC's focus has been on improvement of benchmark pricing platform functionality and continuous enrichment of its product range. Currently, CBPC offers products and services in the fields of ChinaBond Pricing Data, ChinaBond Terminals and ChinaBond Solution & Advisory Services. ChinaBond Pricing Data has been developed into an authoritative pricing benchmark for China's bond market, reflecting fair value and risks of the RMB bond market and effectively promoting market transparency. ChinaBond Pricing Data applications have gradually expanded from bond market to other financial markets. It has become an important reference indicator for the implementation of national fiscal and monetary policies and a powerful tool for regulators to monitor the market. In addition, ChinaBond Pricing Data has effectively supported with national financial strategies implementation such as interest rate marketization and RMB internationalization.

Client support

Client support questions can be sent electronically to: wanghana@chinabond.com.cn

Index inquiries

Index inquiries can be sent electronically to: zhangxo@chinabond.com.cn and zhengsm@chinabond.com.cn

Formal complaints

Formal complaints can be sent electronically to: cbpc_complaints@chinabond.com.cn

A ESG Disclosures

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY [1]		
1	Name of the benchmark administrator.	IHS Markit Benchmark Administration Limited (IMBA)
2	Underlying asset class of the ESG benchmark. [2]	N/A
3	Name of the S&P Dow Jones Indices benchmark or family of benchmarks.	iBoxx Benchmark Statement
4	Do any of the indices maintained by this methodology take into account ESG factors?	No
Appendix latest update:		June 2023
Appendix first publication:		June 2023

[1] The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK (The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019).

[2] The 'underlying assets' are defined in European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

Disclaimer

Performance Disclosure/Back-Tested Data

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

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

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

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

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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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