

# **iBoxx AUD Large Cap Index Guide**

## ***May 2023***

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# 1) iBoxx AUD Large Cap Index

The iBoxx AUD Large Cap index family is designed to reflect the performance of AUD denominated bonds with an iBoxx average rating of investment grade. The index rules aim to offer a broad coverage of the AUD bond universe from domestic Australian investor's perspective whilst maintaining a basic liquidity in the underlying bonds comprising the index. The index is an integral part of the global iBoxx index families, which provide the marketplace with accurate and objective indices by which to assess the performance of bond markets and investments.

All iBoxx indices are priced based on multiple data inputs. The iBoxx AUD Large Cap index uses multi-source prices as described in the document Markit iBoxx Pricing Rules publically available on [www.ihsmarkit.com](http://www.ihsmarkit.com).

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

## 2) Bonds selection rules

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

- Issuer Type
- Bond Type
- Credit Rating
- Time to Maturity
- Amount Outstanding
- Market of Issue

### 2.1) Issuer Type

Bonds issued by Australian commonwealth government, semi-government and corporate issuers are eligible for the indices. The bond classification criteria are detailed in Section 3 of this document.

### 2.2) Bond type

The iBoxx AUD Large Cap indices include only AUD denominated bonds. The following bond types are eligible for the index:

- Fixed coupon bonds (“plain vanilla bonds”)
- Step-ups
- Event-driven bonds, such as rating- or tax-driven bonds, with a maximum of one coupon change per period
- Covered bonds
- Callable and puttable bonds
- Certificates of Deposit (CD)

The following bond types are specifically excluded from the indices:

- Zero coupon bonds
- Sinking funds and amortizing bonds
- Floating rate notes and other fixed-to-floater bonds
- Perpetuals
- Optionally and mandatory convertible bonds
- Subordinated bank or insurance debt with mandatory contingent conversion features or with any conversion options before the first call date is ineligible for the index.
- Collateralized Debt Obligations (CDOs) and bonds collateralized by CDOs
- Retail bonds. The list of retail bonds is updated every month and published on [www.ihsmarkit.com](http://www.ihsmarkit.com) under News & Information
- Private placements. The list of private placements is updated every month and published on [www.ihsmarkit.com](http://www.ihsmarkit.com) under News & Information. Partial private placements where information on the specific amounts publicly placed and privately placed can be ascertained are included in the indices with the amount publicly placed. If the amount publicly placed is below the cut-off, the bond is not included in the indices.
- Bonds with differences between accrual and coupon payment periods and monthly-paying bonds.

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.ihsmarkit.com](http://www.ihsmarkit.com) under *Indices News* for future reference and to ensure decision's consistency.

### **2.3) Credit rating**

All bonds in the iBoxx AUD Large Cap Index must have an iBoxx Rating of investment grade. Ratings from the following three credit rating agencies are considered for the calculation of the iBoxx Rating:

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

Investment grade is defined as BBB- or higher from Fitch Ratings and S&P Global Ratings and Baa3 or higher from Moody's Investor Service.

If a bond is rated by more than one of the above agencies, then the iBoxx rating is the average of the provided ratings. The rating is consolidated to the nearest rating grade. Rating notches are not used. For more information on how the average rating is determined, please refer to the *iBoxx Rating Methodology* document. The methodology can be found on [www.ihsmarkit.com](http://www.ihsmarkit.com) under *Methodology*.

### **2.4) Time to Maturity**

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

The expected remaining life is expressed in years and calculated as follows:

- For plain vanilla bonds, the expected remaining life of the bond is its time to maturity, calculated as the number of days between the last calendar day of the current month and its maturity
- 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 remaining life of the bond is its time to the expected maturity and not to its final maturity date

### **2.5) Amount Outstanding**

The minimum amount outstanding cut-off for the bond included into iBoxx AUD Large Cap Index is:

- Australian Government Securities: AUD 2 billion
- Non-Government: AUD 200 million

### **2.6) Market of Issue**

Only bonds issued in the Australian domestic market and clearable through Austraclear are eligible for 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, a 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 IHS 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 [www.ihsmarkit.com](http://www.ihsmarkit.com) for registered users.

## 3.1) Government

Bonds issued by the Commonwealth of Australia and denominated in AUD.

## 3.2) Sovereigns

Bonds issued by a central government other than the Australian Commonwealth government and denominated in AUD.

## 3.3) Semi-Governments

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 semi-government 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. Kreditanstalt fuer Wiederaufbau). Often, such business scope is defined by a specific law, or the issuer is explicitly backed by the government. Agencies could be AU agencies or Non-AU agencies according to the domicile of issuer.
- **Public Banks:** Bonds issued by publicly owned and backed banks that provide regular commercial banking services (e.g. NV Bank Nederlandse Gemeenten).
- **Regions:** Bonds issued by local governments
  - > AU Regions: Bonds issued by state governments or special territories of Australia, including New South Wales Treasury Corporation, Queensland Treasury Corporation, South Australian Government Financing Authority, Treasury Corporation of Victoria, Western Australian Treasury

Corporation, Tasmanian Public Finance Corporation; as well as the Australian Capital Territory and Northern Territory Treasury Corporations.

- > **Non-AU Regions:** Bonds issued by regional government other than Australian region governments. E.g. Province of Manitoba Canada
- **Supranationals:** Bonds issued by supranational entities, i.e. entities that are owned by more than one central government (e.g. International Bank for Reconstruction and Development)
- **Other Semi-Governments:** All remaining bonds considered semi-government. 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.**

### 3.4) 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 iBoxx covered bond indices.

### 3.5) 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. The sector overview is shown in the tables below.

*Table 1: Overview of Markit iBoxx Corporate Sectors*

	Economic Sector	Market Sector	Market Sub-Sector
Financials	Core Financials	Banks	Banks
		Insurance	Life Insurance
			Nonlife Insurance
	Financial Services	Financial Services	General Financial
			Equity Investment Instruments
			Nonequity Investment Instruments
		Insurance wrapped	*
		Guaranteed & Wrapped	*
	Real Estate	Real Estate	Real Estate Investment & Services
			Real Estate Investment Trusts
Non-Financials	Oil & Gas	Oil & Gas	Oil & Gas Producers



	Economic Sector	Market Sector	Market Sub-Sector
	Basic Materials	Chemicals	Oil Equipment / Services & Distribution
			Chemicals
			Industrial Metals
			Mining
	Industrials	Construction & Materials	Forestry & Paper
			Construction & Materials
			Aerospace & Defense
			Electronic & Electrical Equipment
			General Industrials
			Industrial Engineering
			Industrial Transportation
			Support Services
	Consumer Goods	Automobiles & Parts	Automobiles & Parts
			Beverages
		Food & Beverage	Food Producers
			Household Goods
		Personal & Household Goods	Leisure Goods
			Personal Goods
			Tobacco
	Health Care	Health Care	Pharmaceuticals & Biotechnology
			Health Care Equipment & Services
	Consumer Services	Education	Academic & Educational Services
		Retail	Food & Drug Retailers
			General Retailers
		Media	Media
		Travel & Leisure	Travel & Leisure
	Telecommunications	Telecommunications	Integrated Telecommunications
			Wireless Telecommunications
	Utilities	Utilities	Electricity
			Gas / Water & Multiutilities
	Technology	Technology	Software & Computer Services
			Technology Hardware & Equipment

	Economic Sector	Market Sector	Market Sub-Sector
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### 3.6) Additional classification

Corporate debt is further classified into senior and subordinated debt.

Hybrid capital issued by banking and insurance institutions is further detailed into the respective tiers of subordination.

The market information on the tier of subordination for insurance capital is often less standardized and clear than the equivalent issues by banks. In these cases, the classification is based on the maturity, coupon payment and deferral provisions of the bond from the offering circulars of the bonds. Table below displays the seniority classification of debt issued by both financial and non-financial sectors.

**Table 2: Overview of seniority levels for iBoxx Senior & Subordinated indices**

Market Sector	Seniority Level 1	Seniority Level 2	Seniority Level 3
Banks	SEN	*	*
	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	T1	*
		T2 perpetual	*
		T2 dated	T2 dated callable
		T2 dated	T2 dated non-callable
Non-Financial Sectors	SEN	*	*
	SUB	Other	Hybrid
			Non-Hybrid

### 3.7) Classification review procedure

The issuer classification is reviewed regularly and status changes are included in the indices at the next rebalancing.

## 4) Index calculation

### 4.1) Static data

Information used in the index calculation is sourced from offering circulars and checked against standard data providers.

FX spot and forward rates are sourced from WM Company. The daily index calculation uses the FX rates from 8am London time.

### 4.2) Bond prices

For more details please refer to the *Markit iBoxx Pricing Rules* document, available in the *Methodology* section of the iBoxx Documentation page on [www.ihsmarkit.com](http://www.ihsmarkit.com).

### 4.3) Rebalancing process

The iBoxx AUD Large Cap Index is rebalanced monthly on the last business day of the month after the close of business. Changes to outstanding amounts are only taken into account if they are publicly known three business days before the end of the month. Changes in ratings are only taken into account if they are publicly known two business days before the end of the 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 has become known at least three trading days before the end of the month.

Preview lists of eligible bonds are published ten (T-10), four (T-4), and three (T-3) trading days before end of the month. The preview membership list is published on the FTP server and in the indices section on [www.ihsmarkit.com](http://www.ihsmarkit.com) under *Data/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.

Two business days before the end of each month, the rating information for the constituents is updated and the list is adjusted for all rating changes which are known to have taken place two trading days before the end of the month. Bonds which are known to have been upgraded to investment grade two trading days before the end of the month are not included in the membership, but bonds which are known to have been downgraded to sub-investment grade two trading days before the end of the month do get excluded from the membership. However, if any bonds which are part of the broader AUD universe become eligible two business days prior to rebalancing because of rating or amount changes, they will be included in the Index.

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

### 4.4) Index data

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

rebalancing date. Decisions are made publicly available on a timely basis and IHS Markit may refer back to previous cases.

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

The indices are transaction cost adjusted. For specific cost factor calculation formulae please refer to the Markit iBoxx Bond Index Calculus document, available in the Methodology section of the Markit iBoxx Documentation page on [www.ihsmarkit.com](http://www.ihsmarkit.com).

#### **4.5) Index calculus**

For specific index formulas please refer to the *Markit iBoxx Bond Index Calculus* document, available in the *Methodology* section of the iBoxx Documentation page on [www.ihsmarkit.com](http://www.ihsmarkit.com).

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

Data for the application of corporate actions in the index may not be fully or timely available at all times, e.g. the final call prices for make-whole calls or the actual pay-in-kind percentage for PIK-payment options. In such cases, IHS Markit will estimate the approximate value based on the available data at the time of calculation.

##### **4.6.1) 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 fungo 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 fungo date, the prices for both the securities are the same, because they constitute one uniform bond. This is reflected in the indices as follows:

##### **4.6.1.1) Parent and new tranche are both index constituents**

- After the fungo 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

##### **4.6.1.2) 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

##### **4.6.1.3) 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

##### **4.6.2) 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.

#### 4.6.3) 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).

#### 4.6.4) 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 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.

#### 4.6.5) 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 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 30 November 2011. The index has a base value of 100 on that date.

#### 4.8) Settlement conventions

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

#### 4.9) Publication of the index

The index is calculated as end-of-day and distributed once daily. The index is calculated every day of the week except on common Australian bank holidays. On Australian holidays the index is being calculated with prices from the previous business day. In addition, the index is calculated with the previous trading day's close on the last calendar day of each month if that day is not a trading day. Index data and bond price information is also available from main information vendors.

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 [www.ihsmarkit.com](http://www.ihsmarkit.com) for registered users.

#### 4.10) Data publication and access

The table below summarizes the publication of iBoxx AUD Large Cap Index in the *Indices* section of the IHS Markit website [www.ihsmarkit.com](http://www.ihsmarkit.com) for registered users and on the FTP server.

*Table 2: Data publication and access*

Frequency	File Type	Access
Daily	Underlying file – Bond level	IHS Markit FTP Server
	Indices files – Index level	IHS Markit FTP Server / IHS Markit website/ Bloomberg for index levels only
T-5, T-3 & T-2	Preview components	IHS Markit FTP Server / IHS Markit website
Weekly	Preview components	IHS Markit FTP Server / IHS Markit website
Monthly	End of month components	IHS Markit FTP Server / IHS Markit website
	XREF files	IHS Markit FTP Server

#### 4.11) Index review

The rules for the index are reviewed once per year during the annual index review process to ensure that the index provides a balanced representation of the local currency debt markets of the economies covered by the indices. Decisions made following the Annual Index Review will be published on [www.ihsmarkit.com](http://www.ihsmarkit.com) under *Indices News* shortly committee has been held. The publication will contain a detailed overview and timelines for implementation of the rules changes.

## 5) Governance and regulatory compliance

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

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

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

## 6) Changes to the iBoxx AUD Large Cap index

<b>31 March 2022</b>	<b>Annual Index Review 2021</b> <ul style="list-style-type: none"> <li>• Introduction of new market sector classification "Education" with market sub-sector classification "Academic &amp; Educational Services"</li> </ul>
<b>31 July 2020</b>	Implementation of Annual Index Review 2019 <ul style="list-style-type: none"> <li>• Introduction of updated corporate classification schema</li> <li>• Implementation of updated Tier Classification</li> <li>• Updates as part of the changes in definition and treatment of hybrid bonds</li> </ul>
<b>11 September 2017</b>	Introduction of the iBoxx AUD Large Cap index



## 7) Further information

### Glossary of key terms

The Markit iBoxx Glossary document of key terms is available in the *Methodology* section of the iBoxx *Documentation* page on [www.ihsmarkit.com](http://www.ihsmarkit.com).

### Contractual and content issues

For contractual or content issues please contact:

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### Technical issues and client support

For technical issues and client support please contact:

<b>E-mail:</b>	<a href="mailto:indices@ihsmarkit.com">indices@ihsmarkit.com</a>		
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### Ownership

Markit Indices GmbH is a wholly-owned subsidiary of IHS Markit Limited.

## 8) 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.	<a href="#">iBoxx Benchmark Statement</a>
4	Do any of the indices maintained by this methodology take into account ESG factors?	No
Appendix latest update:		May 2023
Appendix first publication		May 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

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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.

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