



**FIXED INCOME**

**A Bloomberg Professional Service Offering**

# **INDEX METHODOLOGY**

**Global Fixed Income**

**Bloomberg**

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# INDEX METHODOLOGY

**Bloomberg global bond indices offer a fresh perspective on the traditional world of bond indexing. Global, independent and broadly available, the indices meet the varied needs of investors and product issuers. The indices leverage Bloomberg’s market-leading data, technology and distribution to provide the first truly dealer-independent benchmarks for the global bond markets.**

The index family is guided by a common set of principles: independence, transparency and representativeness.

**Independence** – Independence is the bedrock of Bloomberg’s bond index family. In contrast to other index families where selection and pricing are done by a single dealer or where a single dealer uses a small number of contributors to arrive at a composite price, the composition of each Bloomberg index is independently selected and priced. Index constituents are priced by BVAL, Bloomberg’s securities valuation service, which draws on market data sourced from more than 4,000 market participants

**Transparency** – All criteria for index construction are publicly available, including the criteria for index membership, the rebalancing frequency and all data required for the computation of index returns and statistics. Index constituents and weights are available via Bloomberg’s public website, bloomberg.com, under Markets » Rates and Bonds, without the restrictions often imposed by single-dealer providers and at no additional cost via the Bloomberg Terminal.

**Representativeness** – The indices use a consistent, systematic process to represent the fixed income markets by geographies, sectors, currencies, and maturities. To fairly represent certain sectors, fixed income indices apply the Bloomberg Industry Classification Systems (BICS), an industry classification system developed and maintained by Bloomberg independent of the index business that classifies securities based on business, economic function, and other characteristics. Other constraints are also applied such as minimum liquidity (amount outstanding for fixed income indices) to exclude illiquid markets.

The index family covers the largest and most widely followed markets, as shown in Table 1 (see appendix). More markets will be covered over time.

**Index Oversight and Governance** – All Bloomberg Indices are governed by an internal Index Oversight Committee (IOC). The committee consists of senior representatives from various Bloomberg business units. The purpose of the IOC is to discuss, review and challenge all aspects of the benchmark process. Additionally, an external Index Advisory Committee (IAC) will convene annually to provide Bloomberg with guidance and feedback from the investment community on index products and processes. The IAC helps set index priorities, discusses potential rules changes and provides ideas for new index products. This concept of shared ownership enables Bloomberg to produce relevant benchmarks that are responsive to user requirements.

On each day, the Bloomberg Global Fixed Income Indices are published by a team of Index Managers, with knowledge of fixed income instruments. Index managers reviews inputs to the index calculations such as pricing and market data and outputs (including error reports) before they are disseminated to clients. This ensures the quality of the indices and provides a final sign-off of all data by an index manager before it reaches our clients.

## METHODOLOGY OVERVIEW

### Daily Index Calculation

Bloomberg index returns and statistics are calculated every weekday, regardless of local holidays. Adhering to the principle of incorporating the most accurate and recent data available, when a local holiday precludes employing same-day pricing, then the index will use the previous day's pricing but maintain same-day settlement.

### Returns and Statistics

Index levels and related portfolio characteristics reported on Bloomberg bond indices are drawn from two different versions of the index—the “Returns Universe” and the “Statistics Universe.”

**Returns Universe –** The Returns Universe is designed to mimic a strict buy-and-hold portfolio with a monthly rebalancing. The Returns Universe membership is defined by applying the security eligibility rules at each monthly rebalancing date and holding the resulting list of securities constant over the month. Starting weights for the constituents are based on closing prices on the rebalancing date. All published return measures are calculated against the Returns Universe and include corporate actions that occur during the month such as principal paydowns and coupon payments.

**Statistics Universe –** The Statistics Universe represents the changing risk profile of the market the index is designed to represent. The Statistics Universe membership is defined by applying the security eligibility rules daily and setting constituent weights based on daily closing prices. The Statistics Universe captures new issuance, removes securities that are no longer eligible and incorporates bond revaluations that impact relative weights. The Statistics Universe is used as a projection of the next rebalancing as the Statistics Universe membership on the Lockout Date becomes the Returns Universe membership for the following month.

### Weighting

All Bloomberg index returns and most statistics are market capitalization-weighted unless otherwise noted. Performance measurements are proportionally weighted by the beginning market capitalization of each bond. Statistics are drawn from the Statistics Universe and, therefore, reflect most recent market capitalization. Exceptions to the market-capitalization weighting are the measures of average price and average coupon, which are par-weighted averages. Market capitalization is calculated by multiplying the bond's Dirty Price (price plus Accrued Interest) by the current total amount outstanding.

### Treatment of Cash

Cash generated from constituent bonds' Coupons, paydowns or calls is assumed to be reinvested in the index portfolio upon receipt.

### Settlement

All bonds are assumed to have settled for cash regardless of individual settlement conventions. That is, the settlement date is the same as trade date (same day settlement) for purposes of calculating Accrued Interest and market capitalization.

### Currency

For indices in which all instruments are denominated in a single currency, the base currency of that index is the local currency. For indices that include securities denominated in multiple currencies, the base currency of the index is the U.S. dollar. Securities denominated in other currencies are converted to U.S. dollars using BFIX currency rates.

Bloomberg's indices use the BFIX fixings for translation of currencies. BFIX provides Bloomberg's daily currency fixing rates, which are generated throughout the trading day at fixed, half-hourly intervals. The BFIX prices are created by taking a short-term time-weighted average price (TWAP) of the geometric mid-rates of Bloomberg generic (BGN) prices leading up to and following the fixing time. Using a short-term TWAP to create the fixing ensures that BFIX rates are not susceptible to spikes and manipulations at the market fixing time. For translation of end-of-day index levels, the London 4:00 pm snapshot is used for most currencies; where appropriate, another snapshot time may be used.

### Rebalancing

All indices are rebalanced monthly unless otherwise noted. The actual day for the rebalancing is universal for all indices regardless of geographic region and is governed by the U.S. Holiday Schedule. The rebalancing day is the last calendar day of the month unless a weekend or U.S. Holiday. The returns and statistics reported for any given month reflect those values from, and on, actual rebalancing dates as opposed to calendar dates.

For example: The last calendar day of August 2003 was a Sunday, making Friday the 29th the last non-holiday business day and, therefore, the rebalancing day. Statistics reported for August 2003 would be as of August 29, 2003, not August 31, 2003. Similarly, returns would reflect performance from July 31, 2003 to August 29, 2003.

**Lockout Date –** The “Lockout” Date is two business days before the rebalancing date. Bonds issued after the Lockout Date are not considered for inclusion in the index. Similarly, changes to other criteria or characteristics normally taken into account which occur after the Lockout Date are not taken into consideration. For example, an issue losing its investment-grade status subsequent to the Lockout Date would remain in investment-grade indices until the following month's rebalancing.

**Reporting –** The Statistics Universe reflects Bloomberg's best estimate of the subsequent month's index constituents and is publicly available daily. The final membership is made available end-of-day on the Lockout Date.

## ELIGIBILITY OF SECURITIES

Index membership is defined by multiple criteria. The primary criteria for Bloomberg Indices include, but are not limited to: market sector, rating, currency, maturity, amount outstanding and market of issue. See Table 2 for specific criteria used for each primary index.

### Amount Outstanding

The principal amount outstanding of a bond is a primary criterion for determining bond index membership. It offers the most efficient way to ensure that index bonds have a sufficient degree of liquidity—which is a main pillar of investability.

### Maturity

In general, only bonds with at least 12 months remaining time to maturity are eligible. Time to maturity is based on the stated final maturity of a security, regardless of call or put option clauses.

### Ratings

Multiple rating agencies provide credit opinions on individual bonds and bond issuers. Bloomberg indices employ a composite of four ratings agencies—DBRS, Fitch, Moody's and Standard & Poor's. See the Ratings section for more details.

### Currency

Both single-currency indices and multi-currency indices are included in the Bloomberg Index family. Currency refers to a security's denomination and is independent of the country of the issuer.

### Sector Classification

Bloomberg's indices use the Bloomberg Industry Classification System for Fixed Income (BICS FI <GO>). This is a hierarchical system that classifies fixed income security issuers. See the Sector Classification section for more details.

For corporate bond indices, issuers belonging to all Level 1 sectors except Government are eligible. For government bond indices, Level 2 of BICS FI defines eligibility.

## MORTGAGE-BACKED SECURITIES

The Bloomberg U.S. Mortgage Pass-Through Securities Index captures mortgage-backed securities issued by Fannie Mae (FNMA), Freddie Mac (FHLMC) and Ginnie Mae (GNMA). The index includes only fixed-rate 30-year, 20-year and 15-year maturities from FNMA and FHLMC and 30-year and 20-year maturities from GNMA.

The constituents of the index are aggregate generic securities created by the grouping of TBA deliverable pools. The aggregates are defined by the agency program, coupon and year of origination. Aggregates are created in half-percent coupon increments. The amount outstanding of each aggregate is the sum of the amount outstanding of all underlying pools. The production year is determined by the pool issue data. To be included in the index, the aggregate amount outstanding must be at least \$250 million and the weighted-average maturity greater than one year.

## PRICING OF INDEX CONSTITUENTS

Independent and transparent pricing is a key difference of Bloomberg's index family versus other index families, which rely on single-dealer pricing or composite pricing across a small number of dealers. Prices of index bonds in Bloomberg's indices are gathered from BVAL, Bloomberg's securities valuation services. BVAL provides credible, transparent and defensible valuations across a broad spectrum of financial instruments, including fixed income, derivatives and structured notes.

These prices are completely independent, drawing on market data contributed from more than 4,000 market participants. This broad global dataset of market observations is combined with market-leading analytics and Bloomberg's terms and conditions databases to produce objective third-party pricing with deep transparency into how the prices are derived.

### Country of Risk

The indices subscribe to Bloomberg's internal definition of a bond's market status. That is, if an issue's country of risk or country of incorporation is considered to be an emerging market, then the issue will be labeled emerging. The full list of countries denoted by Bloomberg as emerging market countries can be found at the function EMWH <GO>.

### Exclusions

The following bond types are excluded:

- » Private placements (except for emerging markets and high-yield indices, privates were included in USD high yield starting in June 2013)
- » Convertible
- » Perpetuals
- » Bonds with non-fixed coupon (except Greece since March 2012)
- » Inflation-linked bonds
- » Survivor puts

## INDEX METHODOLOGY

All indices are marked with NY 4:00 pm BVAL prices and all prices are assigned on the bid side regardless of whether the bond is new to or is leaving an index.

For bonds that are traded on Dirty Price by convention, the index follows this convention and displays the Dirty Price. When dirty-priced bonds pay a coupon, an adjustment to the price must be made to accommodate the receipt of a cash coupon. This adjustment is made in accordance with the settlement convention of the bond.

An important feature of BVAL as it relates to indexing is the BVAL Score, which measures the amount and consistency of data used to produce the final BVAL prices. These scores are used by regulators, auditors and repo desks and can potentially be used as index criteria for customized solutions. For example, using BVAL Scores as a screen in constituent selection rules could potentially improve tradability for enhanced or dynamic indices.

METHOD	DESCRIPTION	MAXIMUM SCORE
Direct Observations	Direct market observations sourced from the Bloomberg Trading System, TRACE, MSRC, and other permissioned contributions.	10
Observed Comps	When direct observations on the target bond are insufficient observed comparables users direct observations on comparable bonds to derive a relative value price on the target bond.	5

### BLOOMBERG INDEX RATINGS

Bloomberg indices employ a composite of four Ratings agencies—DBRS, Fitch, Moody's and Standard & Poor's. Issue, or bond-level, ratings are used except for sovereigns. For sovereigns, the index uses the issuer's long-term local or long-term foreign currency rating. The generic mortgage pass-through securities that make up the MBS Index are not rated by the agencies and are assigned an index rating of AAA.

#### Algorithm

The algorithm used to derive index ratings gives all four agencies equal weight. Each rating gradation is assigned a numeric value as seen below. The algorithm generates an integer from which a corresponding index rating is assigned. Consideration is given to circumstance of having 1, 2, 3 or 4 ratings available in the following fashion, after a ranking of highest to lowest:

#### Number of Ratings Available/Index Rating Assignment

1. Assign that rating
2. Assign the lower rating
3. Assign the middle rating
4. Assign the lower rating of the middle two

#### Timing of Rating Assignment

The Bloomberg Index Rating is updated immediately upon a ratings change from any of the four agencies and is reflected in subsequent index-level reporting. A change in a bond's Bloomberg Index Rating does not affect its inclusion in an index until the next rebalancing; the rating on the Lockout Date determines eligibility.

#### Index-Level Rating Calculation

The algorithm for individual bonds results in an integer and is reported as the corresponding Bloomberg Index Rating. The rating for an index is calculated by taking the market capitalization—weighted average of the constituents' Bloomberg Index Ratings. The average is then rounded to an integer and the corresponding rating is reported as the index rating. For example, an index average weighting of 7.6 will result in reporting BBB+.

### SECTOR CLASSIFICATION

BICS FI classifies companies by tracking their primary business as measured first by source of revenue and second by operating income, assets and market perception. Members of groupings should exhibit similar behavior in market cycles and companies in a grouping should be correlated. Issuing subsidiaries are classified by their principal business. Special purpose vehicles (SPVs) are classified by their parent company's industry.

"Sector" is the broadest classification and represents general business activities. Each Sector is further broken down into "Industry Groups," which are classified by more narrowly defined business activities. BICS FI contains 11 Sectors (Level 1) and 65 Industry Groups (Level 2). Issuers are assigned to a particular Industry Group based on their principal business activity. An Industry Group can only be a member of one Sector.

Consistent history and deep coverage across Bloomberg's bond universe enable BICS FI to provide a rich framework for analyzing the sector risk exposures of indices. The framework also provides a tool set to build customized indices that constrain the weight of single issuers (for example, per UCITS in Europe or IRS limits in the U.S.) or sectors in enhanced or dynamic indices.

The full list of Sectors and Industry Groups is in Table 3 (see appendix).

**Stress Events** In the event of an unforeseen market event whereby the market is unexpectedly closed, bonds in the Bloomberg Global Fixed Income Indices will be priced by using prior day's values.

### RESTATEMENT POLICY

If a material error in index values is uncovered following its publication and dissemination, a notification will be sent to index clients with the details of the error and the expected date of any revised publication justified under the totality of the circumstances. Revisions will be promptly published to the market and disseminated to all clients.

### EXPERT JUDGMENT

Bloomberg may use expert judgment with regards to the following:

- » Index restatements
- » Extraordinary circumstances during a market emergency
- » Pricing or other data interruptions, issues, and closures

When expert judgment is required, Bloomberg undertakes to be consistent in its application, with recourse to written procedures outlined in this methodology and internal procedures manuals. These procedures detail the steps in decision making and the hierarchy of data to be used. Material exercises of expert judgment are reviewed by senior members of the Bloomberg index and compliance teams. Bloomberg also maintains and

enforces a code of ethics to prevent conflicts of interest from inappropriately influencing index construction, production, and distribution, including the use of expert judgment.

### METHODOLOGY CHANGES

This index methodology undergoes a formal review process at least once each year to ensure its design still promotes a representative and accurate measure of the markets the index measures. Material changes are reviewed and approved by the IOC.

### RISKS ASSOCIATED WITH THE BLOOMBERG GLOBAL FIXED INCOME INDICES

The following is a summary of certain risks associated with the Bloomberg Global Fixed Income Indices but is not meant to be an exhaustive list of all risks associated with the Index or an investment in fixed income indices, the Australian debt market or index-linked products generally.

As with all fixed income investing, the Bloomberg Global Fixed Income Indices are exposed to interest rate risk. The value of bonds fluctuates with the changes in the interest rate policies established by central banks and the natural movement of rates over time. Bonds with optionality will also be impacted by interest rate volatilities.

Most fixed income securities often trade at a spread to the base interest rate curve. The level of the spread reflects the additional premium an investor requires for taking the additional credit risk, liquidity risk, and other risks. The change of the spread, which reflects primarily the change in perceived risk of a security, comes from both common forces, affecting all bonds with similar characteristics, and information specific to a particular issuer.

Though the index and its subindices are designed to be representative of the markets they measure, they may not be representative of every use case. There is inherent, though transparent, judgment in their construction, as outlined in this methodology. They are also designed for general applicability and not to address the individual needs of users.

### CUSTOM INDICES

The technology and deep dataset underlying Bloomberg's global index family provide a rich foundation for custom index creation. Variables for customization include:

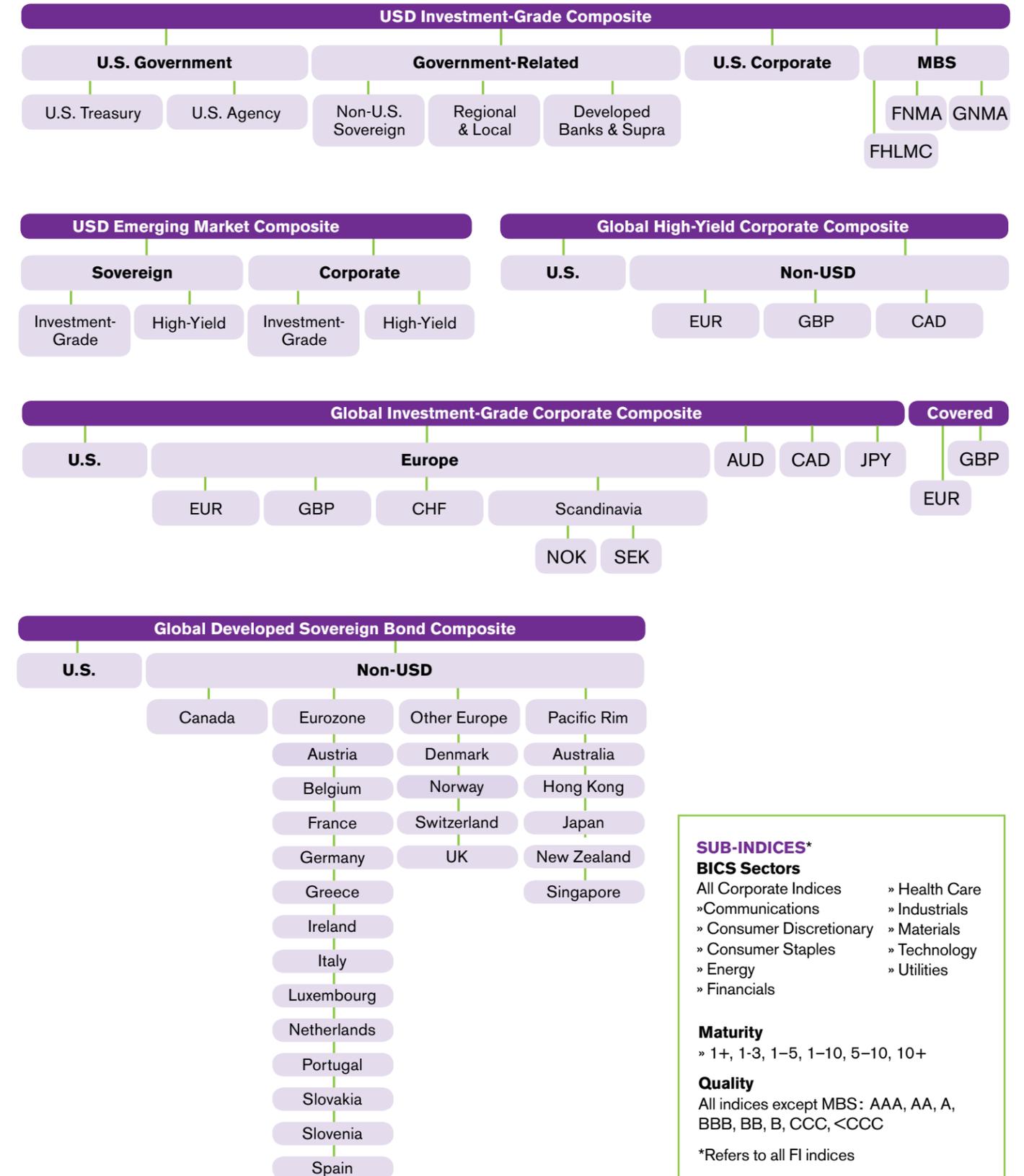
- » Traditional selection criteria such as currency, country of risk, sectors, ratings or amount outstanding.
- » Bloomberg's proprietary variables such as BVAL scores related to pricing quality and depth or calculated variables such as option-adjusted spreads.
- » Caps on issuers or sectors to satisfy diversification or regulatory requirements such as those of the UCITS or IRS.
- » Enhanced index weighting based on issuer-specific or algorithmic variables.

GLOSSARY OF KEY TERMS

- » **Accrued Interest:** The interest that has accumulated on a bond since the last interest payment up to, but not including, the settlement date.
- » **Amount Outstanding:** The total current amount of the bond issue that is outstanding in the market.
- » **BGN:** Bloomberg Generic Price. This is Bloomberg's market consensus price for corporate and government bond. Bloomberg Generic Prices are calculated by using prices contributed to Bloomberg and any other information considered relevant. More information on BGN, including methodologies and functionality, can be found on the Bloomberg Terminal.
- » **BFIX:** BFIX provides a snapshot of the Bloomberg Generic Price (BGN) at 30-minute intervals throughout the day, so one can analyze the fixing rate of a currency pair based on current data. The benchmarks are generated every half hour, within 15-seconds of the fixing time. More information on BFIX, including methodologies and functionality, can be found on the Bloomberg Terminal.
- » **BVAL:** The BVAL service algorithmically combines a wealth of market data, sophisticated analytics and asset class specific relative value models to produce credible and defensible valuations.
- » **BVAL Score:** All BVAL evaluated securities receive BVAL Score, a proprietary measure on a scale of 1–10 of the amount and consistency of the market inputs used to calculate each price.
- » **Country of Risk:** The International Organization for Standardization (ISO) country code of the issuer's country of risk.

- » **Coupon:** The interest rate stated on a bond when it's issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate." For fixed-income indices, this is the par-weighted average coupon of the index members.
- » **Currency:** A security's currency of denomination as described in the prospectus.
- » **Dirty Price:** price of a given bond plus Accrued Interest.
- » **Maturity Date:** This is the date on which the principal amount of the bond becomes due and is repaid to the investor.
- » **Ratings:** A grade given by a Ratings agency to bonds that indicates their credit quality.
- » **Returns Universe:** The Returns Universe membership is defined by applying the security eligibility rules at each monthly rebalancing date and holding the resulting list of securities constant over the month.
- » **Statistics Universe:** The Statistics Universe membership is defined by applying the security eligibility rules daily and setting constituent weights based on daily closing prices.
- » **Sector Classification:** This is a categorization of a bond by its industry, government affiliation, or related characteristic of its issuer. Bloomberg Industry Classification System for Fixed Income (BICS) is a hierarchical system that classifies fixed income security issuers.
- » **TWAP:** Time weighted average price of a given bond
- » **U.S. Holiday or U.S. Holiday Schedule:** Refers to the holidays [observed by the New York Stock Exchange].

TABLE 1 – BLOOMBERG GLOBAL BOND INDEX FAMILY



**SUB-INDICES\***

**BICS Sectors**

- All Corporate Indices
- » Communications
- » Consumer Discretionary
- » Consumer Staples
- » Energy
- » Financials
- » Health Care
- » Industrials
- » Materials
- » Technology
- » Utilities

**Maturity**

- » 1+, 1-3, 1-5, 1-10, 5-10, 10+

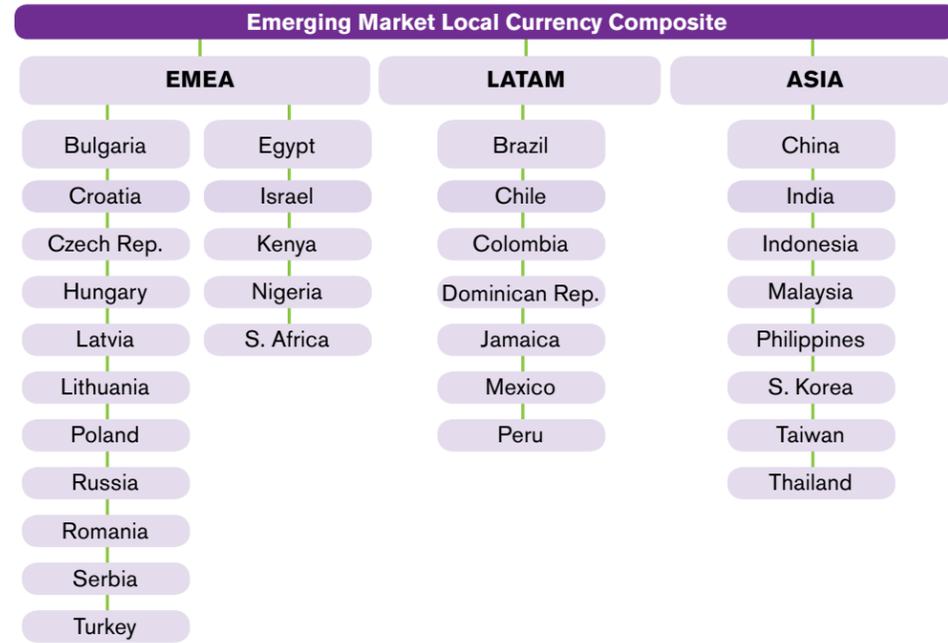
**Quality**

All indices except MBS: AAA, AA, A, BBB, BB, B, CCC, <CCC

\*Refers to all FI indices

# APPENDIX

**TABLE 1 – BLOOMBERG GLOBAL BOND INDEX FAMILY (CONT.)**



**TABLE 2 – SPECIFIC CRITERIA FOR PRIMARY INDICES**

PRIMARY INDICES	BASE CURRENCY	BOND CURRENCY	INDEX RATING	AMOUNT OUT (MM)
<b>USD IG COMPOSITE</b>	USD			
U.S. GOVERNMENT	USD			
U.S. TREASURY	USD	USD		1,000
U.S. AGENCY	USD	USD		250
GOVT RELATED	USD			
NON-U.S. SOV	USD	USD	BBB- & Higher	250
GOVT REG/LOC	USD	USD	BBB- & Higher	250
GOVT DEV BANKS + SUPRA	USD	USD	BBB- & Higher	250
U.S. CORP	USD	USD	BBB- & Higher	250
MBS	USD			250
<b>USD EM COMPOSITE</b>	USD			
USD EM SOV	USD			
USD IG EM SOV	USD	USD	BBB- & Higher	250
USD HY EM SOV	USD	USD	C to BB+	250
USD EM CORP	USD			
USD IG EM CORP	USD	USD	BBB- & Higher	100
USD HY EM CORP	USD	USD	C to BB+	100
<b>GLOBAL IG CORP</b>	USD			
U.S. CORP	USD	USD	BBB- & Higher	250
EUROPEAN CORP	USD			
GBP	GBP	GBP	BBB- & Higher	200
CHF	CHF	CHF	BBB- & Higher	100
EUR	EUR	EUR	BBB- & Higher	250

**TABLE 2 – SPECIFIC CRITERIA FOR PRIMARY INDICES (CONT.)**

PRIMARY INDICES	BASE CURRENCY	BOND CURRENCY	INDEX RATING	AMOUNT OUT (MM)
SCANDANAVIAN CORP	USD			
DKK CORP	DKK	DKK	BBB- & Higher	500
NOK CORP	NOK	NOK	BBB- & Higher	500
SEK CORP	SEK	SEK	BBB- & Higher	500
AUD CORP	AUD	AUD	BBB- & Higher	200
CAD CORP	CAD	CAD	BBB- & Higher	100
JPY CORP	JYP	JYP	BBB- & Higher	20,000
<b>GLOBAL IG COVERED</b>	USD			
EUR COVERED	EUR	EUR	BBB- & Higher	250
GBP COVERED	GBP	GBP	BBB- & Higher	200
<b>GLOBAL HY CORP</b>	USD			
USD HY CORP	USD	USD	C to BB+	250
NON-USD HY CORP	USD			
CAD HY CORP	CAD	CAD	C to BB+	200
EUR HY CORP	EUR	EUS	C to BB+	200
GBP HY CORP	GBP	GBP	C to BB+	200
<b>GLOBAL DEV SOV</b>	USD			
U.S. TREASURY	USD	USD		1,000
CANADA	CAD	CAD		1,000
EUROZONE	EUR	EUR		1,000
AUSTRIA	EUR	EUR		1,000
BELGIUM	EUR	EUR		1,000
FINLAND	EUR	EUR		1,000
FRANCE	EUR	EUR		1,000
GERMANY	EUR	EUR		1,000
GREECE	EUR	EUR		1,000
IRELAND	EUR	EUR		1,000
ITALY	EUR	EUR		1,000
LUXEMBOURG	EUR	EUR		1,000
NETHERLANDS	EUR	EUR		1,000
PORTUGAL	EUR	EUR		1,000
SLOVAKIA	EUR	EUR		1,000
SLOVENIA	EUR	EUR		1,000
SPAIN	EUR	EUR		1,000
OTHER EUROPE	MULTI			
DENMARK	DKK	DKK		5,000
NORWAY	NOK	NOL		5,000
SWEDEN	SEK	SEK		5,000
SWITZERLAND	CHF	CHF		500
UK	GBP	GBP		500

## APPENDIX

**TABLE 2 – SPECIFIC CRITERIA FOR PRIMARY INDICES (CONT.)**

PRIMARY INDICES	BASE CURRENCY	BOND CURRENCY	INDEX RATING	AMOUNT OUT (MM)
PACIFIC RIM				
AUSTRALIA	AUD	AUD		1,000
HONG KONG	HKD	HKD		500
JAPAN	JPY	JPY		200,000
NEW ZEALAND	NZD	NZD		1,000
SINGAPORE	SGD	SGD		1,000
<b>EM LOCAL CURRENCY</b>	USD			
EMEA	EUR	EUR		1,000
BULGARIA	BGN	BGN		100
CROATIA	HRK	HRK		500
CZECH REP	CZK	CZK		10,000
EGYPT	EGP	EGP		1,000
HUNGARY	HUF	HUF		200,000
ISRAEL	ILS	ILS		2,000
KENYA	KES	KES		1,000
LATVIA	LVL	LVL		50
LITHUANIA	LTL	LTL		100
NIGERIA	NGN	NGN		50,000
POLAND	PLN	PLN		2,000
ROMANIA	RON	RON		1,000
RUSSIA	RUB	RUB		20,000
SERBIA	RSD	RSD		1,000
S. AFRICA	ZAR	ZAR		2,000
TURKEY	TRY	TRY		2,000
LATAM	MULTI			
BRAZIL	BRL	BRL		2,500
CHILE	CLP	CLP		100,000
COLOMBIA	COP	COP		1,500,000
DOMINICAN REP	DOP	DOP		100
JAMAICA	JMD	JMD		200
MEXICO	MXN	MXN		5,000
PERU	PEN	PEN		1,000
ASIA	MULTI			
CHINA	CNY	CNY		20,000
INDIA	INR	INR		30,000
INDONESIA	IDR	IDR		2,000,000
MALAYSIA	MYR	MYR		2,000
PHILIPPINES	PHP	PHP		20,000
S. KOREA	KRW	KRW		500,000
TAIWAN	TWD	TWD		10,000
THAILAND	THB	THB		10,000

**TABLE 3 – BICS CLASSIFICATION HIERARCHY**

SECTOR (LEVEL 1)	INDUSTRY GROUP (LEVEL 2)	SECTOR (LEVEL 1)	INDUSTRY GROUP (LEVEL 2)
Communications	Cable & Satellite	Health Care	Health Care Facilities & Services
	Entertainment		Managed Care
	Media Non-Cable		Medical Equipment & Devices
	Wireless Telecom Services		Pharmaceuticals
	Wireline Telecom Services	Industrials	Aerospace & Defense
Airlines	Electrical Equipment		
Apparel & Textile Products	Industrial Other		
Automotive	Machinery		
Casinos & Gaming	Manufactured Goods		
Consumer Services	Railroad		
Distributors	Transportation & Logistics		
Educational Services	Waste & Environment Services		
Entertainment Resources	Equipment & Facilities		
Home & Office Products	Materials		Chemicals
Home Builders			Construction Materials
Home Improvements		Construction & Packaging	
Leisure Products		Forest & Paper Products	
Restaurants		Metals & Mining	
Travel & Lodging	Technology	Communications Equipment	
Consumer Products		Hardware	
Food & Beverage		Software & Services	
Consumer Staples	Retail Staples Supermarkets	Utilities	Utilities
	Tobacco	Government	Sovereign
	Energy		Exploration & Production
Integrated Oils			Government Regional/Local
Oil & Gas Services			Supranational
Pipeline			Development Bank
Refining & Marketing			Winding Up Agency
Renewable Energy			
Financials	Banking		
	Commercial Finance		
	Consumer Finance		
	Financial Services		
	Life Insurance		
	Property & Casualty		
	Real Estate		

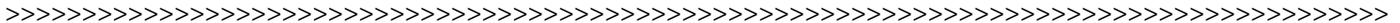
## APPENDIX

**TABLE 4 – BLOOMBERG INDEX RATINGS**

	INDEX RATING	MOODY'S	S&P	FITCH	DBRS
1	AAA	Aaa	AAA	AAA	AA
2	AA+	Aa1	AA+	AA+	AA high
3	AA	Aa2	AA	AA	AA
4	AA-	Aa3	AA-	AA-	AA low
5	A+	A1	A+	A+	A high
6	A	A2	A	A	A
7	A-	A3	A-	A-	A low
8	BBB+	Baa1	BBB+	BBB+	BBB high
9	BBB	Baa2	BBB	BBB	BBB
10	BBB-	Baa3	BBB-	BBB-	BBB low
11	BB+	Ba1	BB+	BB+	BB high
12	BB	Ba2	BB	BB	BB
13	BB-	Ba3	BB-	BB-	BB low
14	B+	B1	B+	B+	B high
15	B	B2	B	B	B
16	B-	B3	B-	B-	B low
17	CCC+	Caa1	CCC+	CCC+	CCC high
18	CCC	Caa2	CCC	CCC	CCC
19	CCC-	Caa3	CCC-	CCC-	CCC low
20	CC	Ca	CC	CC	CC
21	C	C	C	C	C
22	D	D			

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