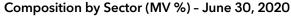
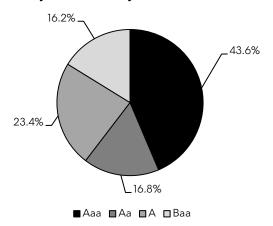
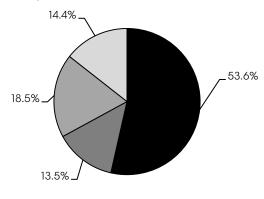
Bloomberg Barclays MSCI Global Aggregate SRI Exclusions Float-Adjusted Index

The Bloomberg Barclays MSCI Global Aggregate SRI Exclusions Float-Adjusted Index is a multi-currency benchmark that includes investment grade treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers. The index follows the same general criteria as the Bloomberg Barclays Global Aggregate Float-Adjusted and Scaled Bond Index, but removes issuers with ties to thermal coal, oil and gas or are involved in certain controversial business lines. The index also excludes issuers with very severe ESG Controversies or Red Flags. There are four regional aggregate benchmarks that largely comprise the index: the US Aggregate, the Pan-European Aggregate, the Asian-Pacific Aggregate, and the Canadian Aggregate Indices. The Global Aggregate SRI Exclusions Float-Adjusted Index was launched in April 2018.

Composition by Credit Quality (MV %) - June 30, 2020







■ Treasury ■ Government-Related ■ Corporate ■ Securitized

Rules for Inclusion

Sector

Treasury, government-related, corporate, and securitized bonds are included.

Eligible Currencies

• Principal and interest must be denominated in one of the following eligible currencies:

Americas: USD, CAD, CLP, MXN

 $Asian-Pacific:\ AUD,\ CNY^{\star},\ HKD,\ IDR,\ JPY,\ KRW,\ MYR,\ NZD,\ SGD,\ THB$

EMEA: EUR, GBP, CHF, CZK, DKK, HUF, ILS, NOK, PLN, RUB, SEK

- *CNY-denominated treasury and policy bank debt became index eligible starting on April 1, 2019
 Eligible currencies will not necessarily have debt included in the index if no securities satisfy the inclusion rules.
- New currency inclusion is reviewed annually through the index governance process. To be considered for inclusion, new currency candidates must be rated investment grade and sufficiently tradable, convertible and hedgeable for international investors.

Amount Outstanding

Fixed minimum issue sizes are set for all local currency markets:

- 25mn: USD ABS and CMBS (as of April 1, 2017)
- 300mn: USD* (excluding ABS, CMBS and MBS), EUR, CHF, AUD
- 200mn: GBP*
- 150mn: CAD







Rules for Inclusion

5bn: CNY**35bn: JPY*

1bn: USD MBS pass-throughs (as of April 1, 2014)

2bn: DKK, NOK, PLN, ZAR*, ILS, HKD, MYR

2.5bn: SEK

10bn: MXN, CZK, THB

20bn: RUB

500mn: NZD, SGD

100bn: CLP200bn: HUF500bn: KRW2tn: IDR

* Amount outstanding values for USD, GBP, and JPY securities are net of US Treasuries, US agencies, and fixed-rate MBS passthroughs held in Federal Reserve SOMA accounts, as well as Sterling Gilts and Japanese Government Bonds (JGBs) held by the Bank of England and the Bank of Japan, respectively.

** The minimum amount outstanding required for CNY-denominated treasury and policy bank debt will be CNY 5bn when they become index eligible starting on April 1, 2019. The total amount of index-eligible CNY-denominated debt will then be scaled down to 5% to comprise the CNY portion of the index.

Adjustments to Amount Outstanding

- Federal Reserve purchases of nominal US Treasuries in open market operations are adjusted using data made publicly available on the Federal Reserve Bank of New York website.
- Adjustments to each security's amount outstanding are made on a monthly basis in the Projected Universe for government purchases and sales for the Federal Reserve SOMA account conducted in the previous month.
- The adjustments are reflected in the Returns Universe in the following month.
- When US Treasury bonds are issued or reopened, the initial par amount outstanding that enters the Projected Universe is reduced for any issuance bought by the Federal Reserve at auction.
- Further amount outstanding adjustments are made for Bank of England and Bank of Japan purchases of Gilts and JGBs, respectively.
- The amount outstanding of Index-eligible CNY-denominated treasury and policy banks are scaled down to 5% of each issue and included in the index.

Quality

Securities must be rated investment grade (Baa3/BBB-/BBB-or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used; when only one agency rates a bond, that rating is used. In cases where explicit bond level ratings may not be available, other sources may be used to classify securities by credit quality:

- Local currency treasury and hard currency sovereign issues are classified using the middle issuer-level local currency and hard currency debt ratings from each agency for all outstanding bonds, even if bond-level ratings are available.
- · Expected ratings at issuance may be used to ensure timely index inclusion or to properly classify split-rated is
- Unrated securities may use an issuer rating for index classification purposes if available. Unrated subordinated securities are included if a subordinated issuer rating is available.
- German Pfandbriefe are assigned ratings that are one full rating category above the issuer's unsecured debt.

Coupon

- Fixed-rate coupon.
- Original zero coupon bonds are included.
- Callable fixed-to-floating rate bonds are eligible during their fixed-rate term only.
- Bonds with a step-up coupon that changes according to a predetermined schedule are eligible.

Maturity

- At least one year until final maturity, regardless of optionality.
- CMBS and ABS must have a remaining average life of at least one year.
- Bonds that convert from fixed to floating rate, including fixed-to-float perpetual, will exit the index one year prior to conversion to floating-rate. Fixed-rate perpetual bonds are not included.

Rules for Inclusion

Taxability

- Only fully taxable issues are eligible.
- Build America Bonds (BAB) with the tax credit to the issuer are eligible; those with tax credits issued to investors are considered tax exempt.
- Dividend Received Deduction (DRD) and Qualified Dividend Income (QDI) eligible securities are excluded.

Market of Issue

 Fully taxable, publicly issued in the global and regional markets. Private placements and retail issues are not eligible.

Security Types

Included

- Bullet, putable, sinkable/amortizing and callable bonds
- Taxable municipal securities, including Build America Bonds (BAB)
- Senior and subordinated issues
- Original issue zero coupon and underwritten MTN
- Enhanced equipment trust certificates (EETC)
- Certificates of deposit
- Fixed-rate and fixed-to-float (including fixed-to-variable) capital securities
- Covered bonds (as of January 1, 2011)
- Loan participation notes (as of April 1, 2013)
- US agency CMBS (as of July 1, 2014)
- Malaysian Government Sukuk (as of April 1, 2015)
- IDR-denominated debt (as of June 1, 2018)

Excluded

- Contingent capital securities, including traditional CoCos and contingent write-down securities
 - Bonds with equity type features (e.g., warrants, convertibles, preferreds, DRD/QDI-eligible issues)
- Tax-exempt municipal securities
- Inflation-linked bonds, floating-rate issues
- Private placements, retail bonds
- Sinkable Russian OFZ bonds issues prior to 2009
- USD25/USD50 par bonds
- Structured notes, pass-through certificates
- Non-ERISA eligible CMBS issues
- US Agency MBS Hybrid ARMs
- CMBS A1A tranches (as of January 1, 2011)
- Structured notes, pass-through certificates
- Formosa Bonds (as of April 1, 2017)
- Illiquid securities with no available internal or thirdparty pricing source
- ZAR-denominated debt (as of May 1, 2018)

Environment, Social, and Governance (ESG) Rules

Business Involvement Screening

Adult Entertainment

- All companies that produce, direct, or publish adult entertainment materials that fall into the following categories: Producer of X-rated films, Pay-per-view programming or channels, sexually explicit video games, books or magazines with adult content, Live entertainment of an adult nature, adults-only material on the internet.
- All companies deriving 5% or more aggregate revenue from the production, distribution and retail of adult entertainment materials.

Alcohol

- All companies classified as a "Producer" that derive 5% or more in revenue from manufacturing, distributing, retailing, licensing, and supplying alcoholic products
- All companies classified as a "Producer" that derive USD 500 million or more in revenue from manufacturing, distributing, retailing, licensing, and supplying alcoholic products.

Gambling

- All companies classified as involved in "Operations" or "Support" that derive 5% or more in revenue from ownership or operation of gambling facilities, provision of key products or services fundamental to gambling operations, and licensing of gambling products.
- All companies classified as involved in "Operations" or "Support" that derive USD 500 million or more in revenue from ownership or operation of gambling facilities, provision of key products or services fundamental to gambling operations, and licensing of gambling products.

Tobacco

- All companies that manufacture tobacco products, such as cigars, blunts, cigarettes, ecigarettes, inhalers, beedis, kreteks, smokeless tobacco, snuff, snus, dissolvable and chewing tobacco. It includes companies that grow or process raw tobacco leaves.

Environment, Social, and Governance (ESG) Rules

Business Involvement Screening

Controversial Weapons

- All companies deriving 15% or more aggregate revenue from the manufacture, distribution, retailing, licensing, and supply of tobacco products.
- All companies that manufacture biological and chemical weapons, including weapons that use pathogens such as viruses, bacteria, and disease-causing biological agents, toxins, or chemical substances that have toxic properties to kill, injure, or incapacitate.
- All companies that manufacture key biological and chemical weapons components.
- All companies that manufacture cluster munitions whole weapons systems, components, or delivery platforms.
- All companies that manufacture landmines whole systems or components.
- All companies involved in the production of depleted uranium (DU) weapons, ammunition, and armor, including companies that manufacture armor piercing, fin stabilized, discarding sabot tracing rounds (APFSDS-T); Kinetic Energy Missiles made with DU penetrators; and DU-enhanced armor, including composite tank armor.

Conventional Weapons

- $\,$ All companies deriving USD 500 million or more aggregate revenue from weapons systems, components, and support systems and services.
- All companies deriving 5% or more aggregate revenue from weapons systems, components, and support systems and services.

Nuclear Weapons

- All companies that manufacture nuclear warheads and/or whole nuclear missiles. It includes assembly and integration of warhead and missile body, as well as companies with contracts to operate/manage government-owned facilities that manufacture nuclear warheads and missiles.
- All companies that manufacture or assemble delivery platforms that were developed or significantly modified for the exclusive delivery of nuclear weapons
- All companies that manufacture or assemble delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons but have the capability to deliver nuclear weapons
- All companies that manufacture components for nuclear-exclusive delivery platforms
- All companies that manufacture components for dual-use delivery platforms.
- All companies that manufacture key nuclear weapons components.

Civilian Firearms

- All companies that manufacture firearms and small arms ammunitions for civilian markets.
 It does not include companies that cater to the military, government, and law enforcement markets.
- All companies deriving revenue from the distribution (wholesale or retail) of firearms or small arms ammunition intended for civilian use.

Nuclear Power

- All companies that own or operate nuclear power plants
- All companies that own or operate active uranium mines
- All companies that are involved in uranium enrichment and processing
- All companies that are involved in the design and engineering of nuclear power reactors
- All companies deriving 15% or more aggregate revenue from ownership or operation of nuclear power plants and supply of key nuclear-specific products or services.

Fossil Fuel

 All companies that have an industry tie to fossil fuels (thermal coal, oil and gas) - in particular, reserve ownership, related revenues and power generation. This list does not include companies providing evidence of owning metallurgical coal reserves.

Prior to July 1, 2020, only issuers with evidence of fossil fuel reserves were excluded.

ESG Controversy

Excludes all issuers involved in one or more very severe ESG Controversies (MSCI ESG Controversy Score= 0, Red Flags), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles. Only excluded starting from July 1, 2020.

Rebalancing Rules

Frequency	For each index, Bloomberg maintains two universes of securities: the Returns (Backward) and the Projected (Forward) Universes. The composition of the Returns Universe is rebalanced at each month-end and represents the fixed set of bonds on which index returns are calculated for the next month. The Projected Universe is a forward-looking projection that changes daily to reflect issues dropping out of and entering the index but is not used for return calculations. On the last business day of the month (the rebalancing date), the composition of the latest Projected Universe becomes the Returns Universe for the following month	
Index Changes	During the month, indicative changes to securities (credit rating change, sector reclassification, amount outstanding changes, corporate actions, and ticker changes) are reflected daily in the Projected and Returns Universe of the index. These changes may cause bonds to enter or fall out of the Projected Universe of the index on a daily basis, but will affect the composition of the Returns Universe at month-end only, when the index is next rebalanced.	
Reinvestment of Cash Flows	Intra-month cash flows from interest and principal payments contribute to monthly index returns but are no reinvested at a short-term reinvestment rate between rebalance dates. At each rebalancing, cash is effectivel reinvested into the Returns Universe for the following month so that index results over two or more months reflect monthly compounding.	
New Issues	Qualifying securities issued, but not necessarily settled on or before the month-end rebalancing date, qualify for inclusion in the following month's index if the required security reference information and pricing are readily available.	

Pricing and Related Issues

Sources & Frequency	All index-eligible bonds are priced on a daily basis by Bloomberg's evaluated pricing service, BVAL, except (denominated bonds, which are priced by SIX.		
Pricing Quotes	Bonds can be quoted in a variety of ways, including nominal spreads over benchmark securities/treasuries, spreads over swap curves, or direct price quotes as a percentage of par. For securities quoted on a spread basis, daily security price changes will result from movements in the underlying curve (swap of treasury) and/or changes in the quoted spread.		
Timing	Prices are snapped at the following times:		
	 North American currency bonds: 3pm (New York time); 4pm (New York time) for taxable municipal bonds; 4pm (Toronto time) for CAD-denominated securities. 		
	• Pan European currency bonds: 4:15pm (London time); 4pm (London time) for CHF-denominated securities.		
	 Asian currency bonds: 5pm (Sydney time) for AUD-denominated and NZD-denominated securities; 3pm (Tokyo time) for JPY-denominated securities; 5pm (Tokyo time) for all other securities. 		
	If the last business day of the month is a public holiday in a major regional market, prices from the previous business day are used to price bonds in the particular market.		
Bid or Offer Side	Bonds in the index are priced on the bid side except for Japanese, Euro and Sterling treasury bonds which use mid prices. The initial price for new corporate issues entering the index is the offer side; after the first month, the bid price is used.		
Settlement Assumptions	T+1 calendar day settlement basis for all bonds except MBS, which are priced for Public Securities Association (PSA) settlement in the following month and discounted back to same-day settlement. At month-end, settlement is assumed to be the first calendar day of the following month, even if the last business day is not the last day of the month, to allow for one full month of accrued interest to be calculated.		
Verification	Daily price moves for each security are analyzed by the index pricing team to identify outliers. Index users may also challenge price levels, which are then reviewed and updated as needed using input from various sources.		
Currency Hedging	Returns hedged to various currencies are published for the Global Aggregate SRI Exclusions Float-Adjusted Index. The indices' FX hedging methodology takes rolling one-month forward contracts that are reset at the end of each month and hedges each non-reporting currency-denominated bond in the index into the reporting currency terms. No adjustment is made to the hedge during the month to account for price movements of constituent securities in the Returns Universe of the index.		

Pricing and Related Issues

Calendar

The Bloomberg Barclays MSCI Global Aggregate SRI Exclusion Float-Adjusted Index is a global, multi-currency index that is generated every business day of the year except for January 1, the only holiday common to all regional calendars. During holidays observed by local markets, the index will still be generated using prices from the previous business day. FX rates are updated daily using WM Reuters 4pm (London) rates. FX forwards are also sourced from WM Company.

Accessing Index Data

Bloomberg Terminal®

Bloomberg benchmarks are the global standard for capital markets investors.

- INDEX<Go> The Bloomberg Indices landing page is a dashboard for index-related information on the terminal. Find daily and monthly index returns for key indices from each index family as well as index publications including methodologies, factsheets, monthly reports, updates and alerts.
- IN<Go> The Bloomberg Index Browser displays the latest performance results and statistics for the indices
 as well as history. IN presents the indices that make up Bloomberg's global, multi-asset class index families
 into a hierarchical view, facilitating navigation and comparisons. The "My Indices" tab allows a user to focus
 on a set of favorite indices.
- PORT<Go> Bloomberg's Portfolio & Risk Analytics solution includes tools to analyze the risk, return, and current structure of indices. Analyze the performance of a portfolio versus a benchmark or use models for performance attribution, tracking error analysis, value-at-risk, scenario analysis, and optimization.
- DES<Go> The index description page provides transparency into an individual index including membership information, aggregated characteristics and returns, and historical performance.

Bloomberg Indices Website(www.bloomberg.com/ professional/product/indices)

The index website makes available limited index information including:

- Index methodology and factsheets
- Current performance numbers for select indices

Data Distribution

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- Automatic delivery of files via email or SFTP following the completion of the index production process after market close
- Clients may receive standard files or may customize file contents
- Index data is also available via authorized redistributors

Bloomberg Total Return Index Value Tickers

Ticker (AUD Unhedged)	Index	Ticker (AUD Unhedged)	Index
I33881AU	Global Aggregate SRI Exclusions Float-Adjusted Index	(134611AU	Global Aggregate Float-Adjusted and Scaled Index

Total Return Index Values are available in other currencies and on a hedged basis. Attributes such as yield and duration, are also available. Please refer to Accessing Bloomberg Barclays Index Data Using Bloomberg Tickers for a full list of tickers and attributes that are available.

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