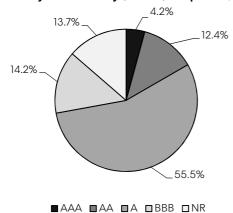
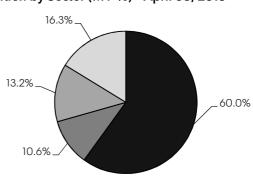
Bloomberg Barclays MSCI Global Aggregate Sustainability Index

The Bloomberg Barclays MSCI Global Aggregate Sustainability Index is a multi-currency benchmark that includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers with strong positive environmental, social and governance (ESG) ratings. The index follows the same general criteria as the Bloomberg Barclays Global Aggregate Index, but only includes issuers with a ESG Rating greater than or equal to BBB and a ESG Controversy Score greater than 0. 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 Sustainability Index was launched in June 2013, with index history backfilled to January 1, 2008.

Composition by ESG Quality (MV %) - April 30, 2018



Composition by Sector (MV %) - April 30, 2018



■ Treasury ■ Government-Related ■ Corporate ■ Securitized

Rules for Inclusion

Sector	Treasury, government-related, corporate, and securitized bonds are included. Only issuers with ESG Ratings greater than or equal to BBB are included. Excludes all issuers involved in one or more very severe ESG Controversies (MSCI ESG Controversy Score < 1).								
ESG Rating									
ESG Controversy									
Eligible Currencies	 Principal and interest must be denominated in one of the following currencies: Americas: USD, CAD, CLP, MXN EMEA: EUR,GBP,CHF, CZK, DKK, HUF, ILS, NOK, PLN, RUB, SEK, ZAR*, IDR** Asian-Pacific: JPY, AUD, HKD, KRW, NZD, SGD, MYR, THB 								
	 Eligible currencies will not necessarily have debt included in the index if no securities satisfy the inclusion rules. 								
	*Note: On May 1, 2018, ZAR-denominated debt will no longer be eligible for the Global Aggregate Indices. **Note: On June 1, 2018, IDR-denominated debt will become eligible for Global Aggregate Indices.								
Quality	Securities must be rated investment grade (Baa3/BBB-/BBB-or higher) using the middle rating of Moods								

- 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.







Rules for Inclusion

- Expected ratings at issuance may be used to ensure timely index inclusion or to properly classify split-rated issuers.
- 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.

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 MBS, ABS and CMBS), CAD, EUR, CHF, AUD
- 200mn: GBF35bn: JPY
- 1bn: USD MBS pass-throughs (as of April 1, 2014)
- 2bn: DKK, NOK, PLN, ZAR*, ILS, HKD, MYR, TRY
- 2.5bn: SEK
- 10bn: MXN, CZK, THB
- 20bn: RUB
- 500mn: NZD, SGD
- 100bn: CLP500bn: KRW200bn: HUF2trn: IDR**

*Note: On May 1, 2018, ZAR-denominated debt will no longer be eligible for the Global Aggregate Indices.

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.
- MBS must have a weighted average maturity of at least 1 year. 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.
- Sub-indices based on maturity are inclusive of lower bounds. Intermediate maturity bands include bonds with maturities of 1 to 9.999 years. Long maturity bands include maturities of 10 years or greater.

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-

Excluded

- Issuers with ESG Ratings below BBB
- Bonds with very severe ESG Controversies
- 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

^{**}Note: On June 1, 2018, IDR-denominated debt will become eligible for Global Aggregate Indices.

Rules for Inclusion

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)
- 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)

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 not reinvested at a short-term reinvestment rate between rebalance dates. At each rebalancing, cash is effectively 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. Pricing sources by region:

- US Aggregate Index: Priced on a daily basis by Bloomberg's evaluated pricing service, BVAL.
- Pan-European Aggregate Index: Priced by BVAL except for CHF-denominated bonds, sourced from the Swiss stock exchange.
- Asian-Pacific Aggregate Index: Priced by BVAL except for JPY corporates, priced by JSDA on a daily basis.
- 144A/Eurodollar Indices: Priced on a daily basis by BVAL.
- Canadian Index: Priced on a daily basis by BVAL.
- Other local currency markets: Priced on a daily basis by BVAL.

Pricing Quotes

Bonds are quoted as a percentage of par.

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.

Pricing and Related Issues

- 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 use 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

Bloomberg Barclays' 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.

Calendar

The Bloomberg Barclays MSCI Global Aggregate Sustainability 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.

Monthly Returns in USD, 2008-2018(%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2008	2.83	1.67	2.06	-1.97	-1.12	0.09	0.16	-1.51	-2.13	-3.20	2.97	6.17	5.75
2009	.												
2009	-3.19	-2.29	2.32	0.86	3.31	0.34	2.10	1.72	2.10	0.43	2.64	-3.82	6.37
2010	0.52	0.10	-0.86	0.16	-1.35	1.67	3.34	1.45	2.25	1.29	-3.82	1.34	6.06
2011	0.14	0.53	0.43	3.08	-0.05	0.11	2.08	1.45	-2.12	1.09	-1.56	0.76	5.97
2012	1.52	-0.29	-0.80	1.23	-0.83	0.33	1.11	0.80	1.16	-0.27	-0.05	-0.44	3.48
2013	-1.01	-1.02	-0.26	1.26	-3.00	-1.01	1.24	-0.47	2.06	0.93	-0.89	-0.67	-2.89
2014	1.13	1.35	-0.10	1.13	0.53	0.76	-0.93	0.50	-2.85	-0.09	-0.46	-0.63	0.23
2015	-0.28	-0.84	-0.98	1.15	-1.91	-0.33	0.23	0.24	0.60	0.12	-1.75	0.67	-3.10
2016	0.97	2.38	2.59	1.31	-1.38	3.04	0.67	-0.59	0.64	-2.93	-4.04	-0.56	1.85
2017	1.15	0.41	0.13	1.13	1.54	-0.16	1.70	1.00	-0.98	-0.41	1.17	0.33	7.20
2018	1.25	-0.81	1.12	-1.64	-	_	_	-	_	-	_	-	-0.11

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Bloomberg Professional® service

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 terminal. Find daily and monthly index returns for key indices from each index family as well as index
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- Index data is also available via authorized redistributors

Index Ticker

129756

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