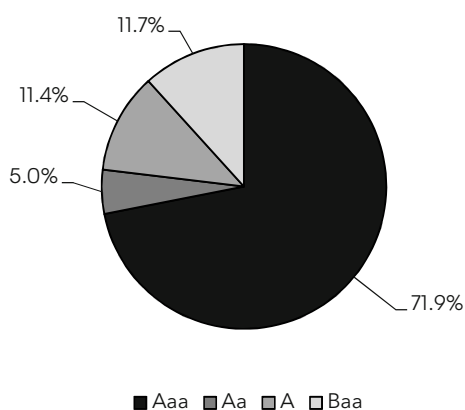


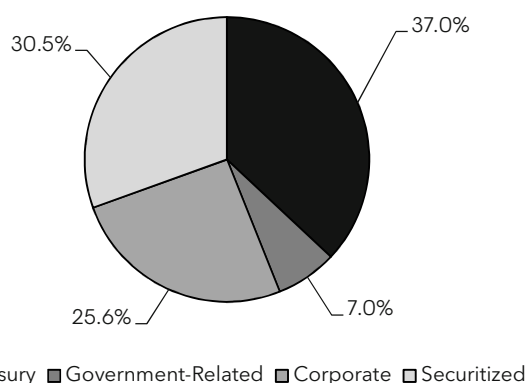
# Bloomberg Barclays MSCI US Aggregate ESG Select Index

The Bloomberg Barclays MSCI US Aggregate ESG Select Index is a fixed-rate, investment grade bond benchmark that follows the rules of the Bloomberg Barclays US Aggregate Index and applies additional sector and ESG criteria for security eligibility. In addition, treasury, securitized, and class 2 government-related (agency, local authority, sovereign, supranational) and corporate (industrial, utility, and financial) sectors are weighted to match the individual sector exposures of the Bloomberg Barclays US Aggregate Index. The index was launched in September 2017, with history available back to January 2008.

Composition by Quality (MV %) - September 29, 2017



Composition by Sector (MV %) - September 29, 2017



## Fixed Income Rules for Inclusion

<b>Sector</b>	Treasury, government-related, corporate, and securitized issuers are eligible except for: <ul style="list-style-type: none"> <li>• All issuers classified as Independent or Integrated Energy.</li> <li>• All issuers classified as Metals and Mining.</li> </ul>
<b>Eligible Currencies</b>	Principal and interest must be denominated in USD.
<b>Quality</b>	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: <ul style="list-style-type: none"> <li>• Local currency treasury and hard currency sovereign issues are classified using the middle issuer level rating from each agency for all outstanding bonds, even if bond level ratings are available.</li> <li>• Expected ratings at issuance may be used to ensure timely index inclusion or to properly classify split-rated issuers.</li> <li>• 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.</li> </ul>
<b>Coupon</b>	<ul style="list-style-type: none"> <li>• Fixed-rate coupon.</li> <li>• Callable fixed-to-floating rate bonds are eligible during their fixed-rate term only.</li> <li>• Bonds with a step-up coupon that changes according to a predetermined schedule are eligible.</li> </ul>
<b>Amount Outstanding</b>	<ul style="list-style-type: none"> <li>• For Treasury, government-related and corporate securities, USD300mn minimum par amount outstanding.</li> </ul>

## Fixed Income Rules for Inclusion

- For MBS pass-throughs, pool aggregates must have USD 1bn par amount outstanding.
- For ABS, USD500mn minimum deal size and USD25mn minimum tranche size.
- For CMBS, USD500mn minimum deal size with at least USD300mn amount outstanding remaining in the deal and USD25mn tranche size.
- US Treasuries held in the Federal Reserve SOMA account (both purchases at issuance and net secondary market transactions) are deducted from the total amount outstanding. New issuance bought at auction by the Federal Reserve does not enter the index. Net secondary market purchases/sales are adjusted at each month-end with a one-month lag.

### Maturity

- At least one year until final maturity, regardless of optionality.
- MBS must have a weighted average maturity of at least one 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 perpetuals, will exit the index one year prior to conversion to floating-rate. Fixed-rate perpetuals 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

- SEC-registered securities, bonds exempt from registration at the time of issuance and SEC Rule 144A securities with registration rights are eligible. A security with both SEC Regulation-S (Reg-S) and SEC Rule 144A tranches is treated as one security for index purposes. The 144A tranche is used to prevent double-counting and represents the combined amount outstanding of the 144A and Reg-S tranches.
- Global bonds are included.
- Bonds that were previously SEC-registered or 144A with registration rights but later deregistered by the issuer remain index eligible.

### Seniority of Debt

Senior and subordinated issues are included.

### 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.

### Security Types

Included	Excluded
<ul style="list-style-type: none"> <li>• Bullet, puttable, sinkable/amortizing and callable bonds</li> <li>• Taxable municipal securities, including Build America Bonds (BAB)</li> <li>• Original issue zero coupon and underwritten MTN</li> <li>• Enhanced equipment trust certificates (EETC)</li> <li>• Certificates of deposit</li> <li>• Fixed-rate and fixed-to-float (including fixed-to-variable) capital securities</li> <li>• Covered bonds (as of January 1, 2011)</li> <li>• US agency CMBS (as of July 1, 2014)</li> </ul>	<ul style="list-style-type: none"> <li>• Independent or Integrated Energy issuers</li> <li>• Metals and Mining issuers</li> <li>• Contingent capital securities, including traditional CoCos and contingent write-down securities</li> <li>• Bonds with equity type features (e.g., warrants, convertibles, preferreds, DRD/QDI-eligible issues)</li> <li>• Tax-exempt municipal securities • Inflation-linked bonds, floating-rate issues</li> <li>• Private placements, retail bonds</li> <li>• USD25/USD50 par bonds</li> <li>• Structured notes, pass-through certificates</li> <li>• Non-ERISA eligible CMBS issues</li> <li>• CMBS A1A tranches (as of January 1, 2011)</li> <li>• Illiquid securities with no available internal or third-party pricing source</li> </ul>

## Environment, Social, and Governance (ESG) Rules

### MSCI ESG Rating

- Securities must have an MSCI ESG Rating of BBB or higher (see the one exception in the section below).
- Unrated issuers from sectors with ratings are excluded.
- Ratings are applied at the ticker level. Every bond with the same ticker will have the same MSCI ESG Rating.
- MSCI ESG Ratings are generally updated annually, but may be reviewed more frequently as needed.

### MSCI ESG Controversy

- Securities must not have an MSCI ESG Controversy assessment of very severe (score 0, red category).
- Securities with an MSCI ESG Controversy assessment of severe (score 1, orange category), must not have both an MSCI ESG Rating of BBB and a neutral or negative ESG Ratings Momentum trend.

### MSCI ESG Business Involvement Screening Research (BISR)

The index excludes issuers involved in the following business lines/activities:

- All companies classified as an "Alcohol Producer" that earn either 50% or more revenue or more than \$1bn in revenue from alcohol-related activities.
- All companies classified as a "Tobacco Producer" that earn either 50% or more revenue from tobacco-related activities.
- All companies classified as "Gambling Operations" or "Gambling Support" that earn either 50% or more revenue or more than \$1bn in revenue from gambling-related activities.
- All companies classified as "Nuclear Power Utility" that earn 50% or more revenue from nuclear power-related activities or involved in at least one of the following:
  - enrichment of fuel for nuclear reactors
  - uranium mining
  - designing nuclear reactors.
- All companies involved in manufacturing "Conventional Weapon Systems" or "Conventional Weapon Components" that earn 50% or more revenue from these activities.
- All companies classified as a "Cluster Bomb Manufacturer".
- All companies classified as a "Landmine Manufacturer".
- All companies classified as a manufacturer of "Depleted Uranium Weapons".
- All companies involved in manufacturing "Nuclear Weapons", or "Nuclear Weapons Components".
- All companies involved in manufacturing "Chemical and Biological Weapons" or "Chemical and Biological Weapons Components".
- All companies classified as a "Civilian Firearm Producer" that earn 50% or more revenue from civilian firearms.

## 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

## Rebalancing Rules

available.

---

<b>Sector Neutrality</b>	The application of screens based on Bloomberg Barclays Class 4 sectors, MSCI ESG Ratings, MSCI ESG Controversies, and MSCI ESG Business Involvement Screening Research (BISR) will alter the sector composition of the index versus the standard US Aggregate index. Sector weights are therefore adjusted to match the Treasury, Agency, Local Authority, Sovereign, Supranational, Industrial, Utility, Financial, and Securitized weights of the broad US Aggregate index. These sector weights are fixed as of month end, and may drift intra-month as prices change and bonds are called or tendered.
--------------------------	--

---

## Pricing and Related Issues

---

<b>Sources &amp; Frequency</b>	<ul style="list-style-type: none"><li>• All bonds in the index are priced daily using Bloomberg's evaluated pricing service, BVAL.</li><li>• MBS generics are priced daily based on a weighted average of underlying pools. The pools are priced by BVAL on a same-day settlement basis.</li></ul>
<b>Pricing Quotes</b>	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 or treasury) and/or changes in the quoted spread. Prices from third-party sources are quoted as a percentage of par.
<b>Timing</b>	<ul style="list-style-type: none"><li>• 3pm (New York time) for all securities except taxable municipal bonds which use 4pm (New York time).</li><li>• On early market closes, prices are taken as of 1pm (New York time), unless otherwise noted.</li><li>• If the last business day of the month is a public holiday, prices from the previous business day are used.</li></ul>
<b>Bid or Offer Side</b>	Bonds in the index are priced on the bid side. The initial price for new corporate issues entering the index is the offer side; after the first month, the bid price is used.
<b>Settlement Assumptions</b>	T+1 calendar day settlement basis for all bonds except MBS, which uses 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.
<b>Verification</b>	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.
<b>Currency Hedging</b>	Returns hedged to various non-USD currencies are published for the US Aggregate 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.
<b>Calendar</b>	The US Aggregate ESG Select Index follows the US bond market holiday schedule.

---

### Monthly Returns in USD, 2008-2017(%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2008	1.68	0.12	0.32	-0.21	-0.74	-0.07	-0.05	0.94	-1.46	-2.33	3.27	3.83	5.27
2009	-0.78	-0.33	1.42	0.49	0.64	0.53	1.59	1.03	1.01	0.49	1.31	-1.59	5.91
2010	1.51	0.37	-0.13	1.00	0.86	1.59	1.04	1.25	0.09	0.37	-0.56	-1.06	6.46
2011	0.11	0.21	0.04	1.23	1.29	-0.27	1.53	1.48	0.71	0.07	0.00	1.09	7.72
2012	0.79	-0.04	-0.52	1.08	0.95	0.01	1.32	0.07	0.11	0.15	0.14	-0.17	3.94
2013	-0.69	0.47	0.08	0.99	-1.73	-1.46	0.12	-0.51	0.94	0.78	-0.37	-0.57	-1.97
2014	1.47	0.51	-0.18	0.83	1.12	0.04	-0.26	1.10	-0.63	0.96	0.70	0.09	5.88
2015	2.07	-0.97	0.51	-0.33	-0.23	-1.05	0.72	-0.08	0.75	-0.04	-0.23	-0.22	0.86
2016	1.51	0.65	0.75	0.31	0.04	1.71	0.59	-0.14	-0.03	-0.75	-2.31	0.09	2.38
2017	0.19	0.63	-0.04	0.76	0.74	-0.11	0.42	0.89	-0.51	-	-	-	3.01

### Accessing Index Data

<b>Bloomberg Professional® service</b>	<p>Bloomberg benchmarks are the global standard for capital markets investors.</p> <ul style="list-style-type: none"> <li>INDEX&lt;Go&gt; – 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.</li> <li>IN&lt;Go&gt; – 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.</li> <li>PORT&lt;Go&gt; – Bloomberg's Portfolio &amp; 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.</li> <li>DES&lt;Go&gt; – The index description page provides transparency into an individual index including membership information, aggregated characteristics and returns, and historical performance.</li> </ul>
<b>Bloomberg Indices Website (www.bloombergindeces.com)</b>	<p>The index website makes available limited index information including:</p> <ul style="list-style-type: none"> <li>Index methodology and factsheets</li> <li>Current performance numbers for select indices</li> </ul>
<b>Data Distribution</b>	<p>Index subscribers may choose to receive index data in files. Files may include:</p> <ul style="list-style-type: none"> <li>Index level and/or constituent level returns and characteristics for any indices</li> <li>Automatic delivery of files via email or SFTP following the completion of the index production process after market close</li> <li>Clients may receive standard files or may customize file contents</li> <li>Index data is also available via authorized redistributors</li> </ul>

October 3, 2017

## Bloomberg Total Return Index Value Tickers: US Aggregate ESG Select Index and Related Indices

Ticker (USD Unhedged)	Index	Ticker (USD Unhedged)	Index
I33432US	US Aggregate ESG Select Index	I33432	US Aggregate ESG Select Statistics Index
LBUSTRUU	US Aggregate Index	UAEWTRUU	US Aggregate ESG-Weighted Index
RUARTRUU	US Aggregate SRI Index	SUAMTRUU	US Aggregate Sustainability Index
UAW1TRUU	US Aggregate ESG-Weighted: Sector Neutral Class 1 Index	RUANTRUU	US Aggregate SRI: Sector Neutral 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.

## Index Licensing

Bloomberg requires index data licenses for services and products linked to the Indices

- Index or Constituent-Level Redistribution
- Exchange Traded Notes (ETNs)
- OTC Derivative Products
- Bond Pricing Service
- Index-Linked Insurance Products
- Custom Index Solutions
- Exchange Traded Funds (ETFs)
- Mutual Funds

October 3, 2017

## Bloomberg Barclays Indices

### New York

+1-212-617-5020

### London

+44-20-3525-9976

### Singapore

+65-6212-1449

### Hong Kong

+852-2293-1346

### Tokyo

+81-3-3201-7024

### Sydney

+61-2-9777-7208

For further information on  
Bloomberg Barclays Indices:  
[indexhelp@bloomberg.net](mailto:indexhelp@bloomberg.net)  
[www.bloombergindices.com](http://www.bloombergindices.com)

## MSCI ESG Client Service

### Asia Pacific

+612 9033 9339

### Americas

+1 212 804 5299

### Europe, Middle East and Africa

+44 207 618 2510

For further information on MSCI  
ESG Research:  
[esgclientservice@msci.com](mailto:esgclientservice@msci.com)  
[www.msci.com/esg](http://www.msci.com/esg)

## Disclaimer

This document and the information contained in it, including without limitation all text, data, graphs and charts (collectively, the "Information") is the property of MSCI Inc. and/or its subsidiaries (collectively, "MSCI"), Bloomberg Finance L.P. and/or its affiliates (collectively, "Bloomberg"), Barclays Bank PLC. and/or its affiliates (collectively, "Barclays"), or their licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (MSCI, Bloomberg and Barclays, collectively, the "Information Providers") and is provided for informational purposes only. The Information may not be reproduced or disseminated in whole or in part without prior written permission from the authorized Information Provider(s). All rights in the Bloomberg Barclays MSCI Environmental, Social & Governance (ESG) fixed income indices (the "ESG Indices") vest in MSCI, Bloomberg and Barclays.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indices, databases, risk models, analytics or software, or in connection with issuing, offering, sponsoring, managing or marketing securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information.

The user of the Information assumes the entire risk of any use it makes or permits to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF) AND, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS OR MERCHANTABILITY).

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information including with respect to any direct, indirect, special, punitive, consequential (including lost profits) or other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit liability that may not by applicable law be excluded or limited, including without limitation (as applicable), for death or personal injury to the extent such injury results from the negligence or willful default of itself or its servants, agents or sub-contractors.

Information containing historical information, data or analysis should not be taken as an indication or guarantee of future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

MSCI's wholly-owned subsidiary, MSCI ESG Research Inc., is a Registered Investment Adviser under the Investment Advisers Act of 1940. Except with respect to any applicable products or services from MSCI ESG Research Inc., none of MSCI's products or services recommends, endorses, approves or otherwise expresses any opinion regarding issuers, securities, financial products or instruments or trading strategies and none of MSCI's products or services is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and no such products or services may be relied on as such.

Barclays regularly trades, generally deals as principal and generally provides liquidity (as market maker or otherwise) in the securities, commodities, currencies, derivatives and other financial instruments that may be included in the ESG Indices, as well as other financial products linked to such indices. Barclays trading desks may have either long and/or short positions in such securities, commodities, currencies, derivatives and index-linked products, which may pose a conflict with the interests of investing customers and/or index users. All levels, prices and spreads are historical and do not represent current market levels, prices or spreads, some or all of which may have changed since the publication of this document. To the extent any historical pricing information was obtained from Barclays trading desks, the firm makes no representation that it is accurate or complete. Barclays has investment banking and other business relationships with many of the issuers of securities included in the ESG Indices, which may result in potential conflicts of interest. Barclays may from time to time perform commercial, investment banking or other advisory services for the issuers of securities included in the ESG Indices, including acting as manager, co-manager or underwriter of such securities.

The ESG Indices use ratings and other data, analysis and information from MSCI ESG Research. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI, or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in ESG Indices or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. ESG Indices are unmanaged indices that cannot be invested in directly. None of the ESG Indices recommend, endorse, approve or otherwise express any opinion regarding any issuer, securities, financial products or instruments or trading strategies and none of the ESG Indices are intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and they may not be relied on as such. Any funds, products or other securities or investment vehicles using or based on the ESG Indices are not sponsored, endorsed, or promoted by Bloomberg, Barclays or MSCI. Any use of or access to the ESG Indices requires a license from both MSCI and Bloomberg.

Any use of or access to other products, services or information of Bloomberg requires a license from Bloomberg. Any use of or access to other products, services or information of Barclays requires a license from Barclays. Any use of or access to other products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, MSCI ESG Research, FEA, and other MSCI brands and product names are the trademarks or service marks of MSCI. BLOOMBERG is a trademark and service mark of Bloomberg Finance L.P. BARCLAYS is a trademark and service mark of Barclays Bank Plc. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.

Barclays offers premier investment banking products and services to its clients through Barclays Bank PLC. Barclays Bank PLC is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority and is a member of the London Stock Exchange. Barclays Bank PLC is registered in England No. 1026167. Registered Office: 1 Churchill Place, London E14 5HP. Barclays undertakes its US securities and investment banking business in the name of its wholly-owned subsidiary Barclays Capital Inc.

©2017 Bloomberg Finance L.P. All rights reserved.

**Bloomberg**

