US Aggregate Index

The Bloomberg US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollardenominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, fixedrate agency MBS, ABS and CMBS (agency and non-agency). Provided the necessary inclusion rules are met, US Aggregate-eligible securities also contribute to the multi-currency Global Aggregate Index and the US Universal Index. The US Aggregate Index was created in 1986, with history backfilled to January 1, 1976.

Rules for Inclusion

Eligible Currencies	Principal and interest must be denominated in USD.	
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 rating 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 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.	
Amount Outstanding	 For Treasury, government-related and corporate securities, USD300mn minimum par amount outstanding. 	
	• For MBS pass-throughs, pool aggregates must have USD1bn 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 minimum 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 in the Projected Universe of the index weekly, typically on Fridays, and in the Returns Universe once a month, based on the amount outstanding in the Projected Universe at prior month-end. ¹	
Coupon	• Fixed-rate coupon.	
	• Callable fixed-to-floating rate bonds are eligible during their fixed-rate term only.	

¹ All float adjustment updates to the US Treasury amount outstanding in the Projected Universe are made on or prior to T-3 (3 business days before monthend using the U.S. calendar). Further details about indices' treatment of SOMA holdings of US Treasuries can be found in this <u>note</u>.

	 Bonds with a step-up coupon that changes acceleration eligible. 	cording to a predetermined schedule are
Maturity	• At least one year until final maturity, regardles	s of optionality.
-	 MBS must have a weighted average maturity or remaining average life of at least one year. 	of at least one year. CMBS and ABS must have a
	 Bonds that convert from fixed to floating rate, one year prior to conversion to floating-rate. F 	including fixed-to-float perpetuals, will exit the index Fixed-rate perpetuals are not included.
		lower bounds. Intermediate maturity bands include g maturity bands include maturities of 10 years or
Taxability	• Only fully taxable issues are eligible.	
	 Build America Bonds (BAB) with the tax credit issued to investors are considered tax exempt 	to the issuer are eligible; those with tax credits
	 Dividend Received Deduction (DRD) and Qua excluded. 	lified Dividend Income (QDI) eligible securities are
Market of Issue	144A securities with registration rights are elig and SEC Rule 144A tranches is treated as one	registration at the time of issuance and SEC Rule ible. A security with both SEC Regulation-S (Reg-S) security for index purposes. The 144A tranche is used e combined amount outstanding of the 144A and
	Global bonds are included.	
	• Bonds that were previously SEC-registered or by the issuer remain index eligible.	144A with registration rights but later deregistered
Seniority of Debt	Senior and subordinated issues are included.	
Security Types	Included	Excluded
	 Bullet, putable, sinkable/amortizing and callable bonds 	 Contingent capital securities, including traditional CoCos and contingent write-down
	 Taxable municipal securities, including Build America Bonds (BAB) 	Bonds with equity type features (eg, warrants,
	 Original issue zero coupon and underwritten MTN 	convertibles, preferreds, DRD/QDI-eligible issues)
	• Enhanced equipment trust certificates (EETC)	• Tax-exempt municipal securities
	Certificates of deposit	 Inflation-linked bonds, floating-rate issues
	• Fixed-rate and fixed-to-float (including fixed-	 Private placements, retail bonds
	to-variable) capital securities	 USD25/USD50 par bonds
	• Covered bonds (as of January 1, 2011)	• Structured notes, pass-through certificates
	• US agency CMBS (as of July 1, 2014)	Non-ERISA eligible CMBS issues
		• CMBS A1A tranches (as of January 1, 2011)
		• Illiquid securities with no available internal or

third-party pricing source

Pricing and Related Issues

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 monthend 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

Sources & Frequency	• Index-eligible bonds are priced on a daily basis by Bloomberg's evaluated pricing service, BVAL.
	• MBS generics are priced daily based on a weighted average price of underlying pools. The pools are priced by BVAL on a same-day settlement basis.
Pricing Quotes	Bonds are quoted as a percentage of par.
Timing	• Bonds are priced at 4 p.m. (Eastern time). On early close days, prices are taken as of 1 p.m. unless otherwise noted.
	 Historically, prior to January 14, 2021, bonds were priced at 3 p.m.; and on early market closes, bonds were priced at 1 p.m. (Eastern time). On early closes days between January 14, 2021 through November 25, 2021, 2 p.m. prices were used.
	• If the last business day of the month is a public holiday, prices from the previous business day are used.
Bid or Offer Side	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.
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.
Currency Hedging	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.
Calendar	The US Aggregate Index follows the US bond market holiday schedule.

Index History

November 10, 2022	For US MBS, specified cohorts enter the projected universe and will contribute to index returns starting on December 1, 2022.
November 26, 2021	For early close days, prices are taken as of 1 p.m. (Eastern time).
January 14, 2021	Pricing time moved from 3 p.m. to 4 p.m. EST for USD prices. For early close days, prices are snapped at 2 p.m. EST.
June 1, 2017	Hybrid ARMs removed from the index.
April 1, 2017	Liquidity constraint raised to USD300mn from USD250m for Treasury, Government-Related and Corporate securities.
July 1, 2014	US agency CMBS added to the index.
June 1, 2014	Global classification scheme modified to incorporate new sectors, sector name changes and sector retirements.
April 1, 2014	Minimum liquidity for US MBS Index constituents raised from USD250mn to USD1bn.
April 1, 2013	Loan participation notes (LPNs) eligible for the index.
May 1, 2012	Issuer eligibility for fixed-rate ABS no longer based on a predefined list of "eligible" issuers.
January 1, 2011	Covered bonds become eligible. AIA tranches are removed from the CMBS portion of the index.
October 1, 2009	US ABS home equity sector removed from the index.
January 1, 2008	Fixed-to-floating rate perpetual securities without a coupon step-up on their first call date eligible for inclusion.
	US MBS fixed-rate balloons and US ABS manufactured housing removed.
April 1, 2007	Agency Hybrid Adjustable Rate Mortgage (ARM) securities added to the index, but not eligible for the Global Aggregate.
July 1, 2005	Fitch ratings added to Moody's and S&P to determine index eligibility based on the middle rating from each agency.
July 1, 2004	Liquidity constraint raised to USD250mn/USD25mn CMBS tranche size from USD200mn.

October 1, 2003	Liquidity constraint raised to USD200mn from USD150mn.
	Capital and senior unsecured securities with fixed-to-variable coupons added to the index.
	Lower of Moody's and S&P rating used to determine index eligibility; previously, Moody's was used as the primary rating with S&P rating used in cases where a Moody's rating was unavailable.
July 1, 2000	ABS liquidity constraint raised to USD500mn for deal size and USD25mn for tranche size. Absorbed all Yankee corporates into their respective industry and sector classification.
July 1, 1999	Liquidity constraint raised to USD150mn from USD100mn. ERISA-eligible CMBS issues added to the index.
January 1, 1998	Removed US TIPS from US Aggregate Index.
January 1, 1994	Liquidity constraint raised to USD100mn from USD50mn for non-government securities.
January 1, 1992	ABS and MBS balloon issues added to the index. Liquidity constraint increased to USD50mn from USD25mn for non-government securities.
January 1, 1990	Liquidity constraint raised to USD100mn from USD25mn for government issues.
August 1, 1988	Liquidity constraint raised to USD25mn from USD1mn for corporate issues.
January 1, 1986	US Aggregate Index introduced, with historical data backfilled to January 1976.

Sub-indices and Index Customizations

Bloomberg publishes numerous sub-indices of flagship indices and bespoke benchmarks created for specific index users. Several types of bespoke indices are available to select or customize the most appropriate benchmark for specific portfolio needs:

Sub-Index Type	Description	Examples
Enhanced Constraint	Applies a more or less stringent set of constraints to any existing index.	US Aggregate ex BaaUS Aggregate 1-3 Year
Composites	Investors assign their own weights to sectors or other index sub-components within an overall index.	 50% US Aggregate; 50% Euro Aggregate 30% US Government-Related; 70% US MBS
Issuer Constrained	Indices that cap issuer exposure to a fixed percentage. Options available for applying issuer caps and redistributing excess MV to other issuers.	• US Credit 2% Issuer Capped
Float Adjusted	Adjusts par amount outstanding of bonds for holdings of central governments that are publicly available.	 US Aggregate Float Adjusted
ESG Screened/Weighted	Applies Environmental, Social and Governance filters and/or tilts to a standard index.	US Aggregate Socially Responsible IndexUS Aggregate ESG Weighted
Mirror Futures Index (MFI)	An index consisting of 14 funded futures contracts weighted to match closely the beginning-of-month OAD of the index.	 US Aggregate Mirror Futures Index

Duration Hedged	Indices constructed to reflect the underlying return of • US Aggregate Duration Hedged Index an index with its duration fully or partially hedged using its MFI.
Accessing Index Dat	a
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	 INP<go> - The Bloomberg Indices Publications page, which includes methodologies, factsheets, monthly reports, announcements and technical notes. A user may also subscribe to index publications via the "Actions" button.</go>
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