

US CMBS Investment Grade Index

The Bloomberg US CMBS Investment Grade Index measures the market of US Agency and US Non-Agency conduit and fusion CMBS deals with a minimum current deal size of \$300mn. The index is divided into two subcomponents: the US Aggregate-eligible component, which contains bonds that are ERISA eligible under the underwriter's exemption, and the non-US Aggregate-eligible component, which consists of bonds that are not ERISA eligible. The US CMBS Investment Grade Index was launched on January 1, 1997.

Rules for Inclusion

Eligible US Agency CMBS Programs

- Freddie Mac K-Certificates: Senior (ticker: FHMS) and Mezzanine (ticker: FREMF).
- Fannie Mae GeMS/ACES: Senior tranches (ticker: FNA).

Vintage (applicable to US Agency CMBS only)

Deals issued after January 2009.

Minimum Deal and Issue Size

- USD500mn minimum deal size at issuance with at least USD 300mn amount outstanding remaining in the deal; no minimum tranche size requirement.
- For the US Aggregate-eligible portion of the CMBS Index, USD500mn minimum original deal size with at least USD300mn amount outstanding remaining in the deal; USD 25mn minimum tranche size.

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.
- Securities that do not carry an explicit bond level rating, but are guaranteed by Freddie Mac or Fannie Mae are assigned the US government rating. Non-guaranteed deals that are not rated at the bond level are excluded from the index.

Currency

Principal and interest must be denominated in USD.

Coupon

Must be fixed-rate, weighted average coupon (WAC), or capped WAC securities.

Maturity

Securities must have a remaining average life of at least one year.

Market of Issue

- Publicly issued and US Rule 144A/private placements are eligible.
- SEC-registered securities, SEC Rule 144A securities with or without registration rights are index eligible.
- For the US Aggregate-eligible portion of the CMBS Index, securities must be publicly issued or US Rule 144A with registration rights.

Security Types	Included	Excluded
	<ul style="list-style-type: none"> ● Public and Rule 144A/private placements ● Conduit and fusion deals ● Private label transactions ● US Agency CMBS (as of July 1, 2014) ● Freddie Mac K-Certificates ● Fannie Mae GeMS/ACES ● Senior and mezzanine tranches (Freddie Mac only) 	<ul style="list-style-type: none"> ● Single-borrower, single-asset deals ● Floating-rate issues ● Illiquid securities with no available internal or third-party price source ● Collateral not originated specifically for securitization ● A1A tranches (as of January 1, 2011) ● Fannie Mae DUS deals ● Ginnie Mae project loans ● US Agency CMBS deals issued before January 2009 ● Non-guaranteed deals without an explicit bond level rating

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 by Bloomberg's evaluated pricing service, BVAL.

Pricing Quotes Bonds are quoted as a percentage of par.

Timing	<ul style="list-style-type: none"> • Prior to January 14, 2021, bonds are priced at 3 p.m. (New York time). On early market closes, prices are taken as of 1 p.m. (New York time), unless otherwise noted. • From January 14, 2021, and onwards, bonds are priced at 4 p.m. (New York time). On early market closes, prices are taken as of 2 p.m. (New York time), unless otherwise noted. • 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.
Settlement Assumptions	<ul style="list-style-type: none"> • T+1 calendar day settlement basis. • On month-end, settlement is assumed to be the first 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.
Calendar	The US CMBS Index follows the US bond market holiday schedule.

CMBS-specific Return Calculations

In addition to the price, coupon, and paydown returns calculated for all securities, two additional return types are calculated for CMBS securities:

- **Writedown Return:** Return related to the reduction in the outstanding class balance due to a loss of principal. The principal loss is valued at the ending price of the bond.
- **Prepayment Premium Return:** Return due to additional penalty premiums paid in connection with certain prepayments. The premiums are generally distributed as excess interest on the certificates.

Index History

July 1, 2014	US agency CMBS added to the index.
January 1, 2011	A1A tranches removed from the index
July 1, 2005	Fitch ratings added to Moody's and S&P to determine index eligibility
July 1, 2004	Liquidity constraint raised to USD 250mn/USD 25mn CMBS tranche size from USD 200mn
October 1, 2003	Started using the most conservative rating of Moody's and S&P to determine index eligibility instead of Moody's only for split-rated securities
July 1, 1999	Liquidity constraint raised to USD 150mn from USD 100mn. ERISA-eligible CMBS issues added to the index
January 1, 1997	Inception date of the US CMBS Investment Grade Index

Accessing Index Data

- Bloomberg Terminal®** Bloomberg benchmarks are the global standard for capital markets investors.
- INDE<GO> - The Bloomberg Indices dashboard page, which contains daily, monthly, and year-to-date index returns for key indices from each index family as well as a link to index publications.
 - 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.
 - DES<GO> - The index description page provides transparency into an individual index including membership information, aggregated characteristics and returns, and historical performance.
 - 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.
 - 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.

- Bloomberg Indices Website**
(www.bloomberg.com/indices)
- The index website makes available limited index information including:
- Index methodology and factsheets
 - Current performance numbers for select indices

- Data Distribution**
- Index subscribers may choose to receive index data in files. Files may include:
- Index level and/or constituent level returns and characteristics for any indices
 - 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

- Index Ticker** LC09TRUU: Total Return USD Unhedged

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
- Separately Managed Accounts (SMAs)

Disclaimer

BLOOMBERG, BLOOMBERG INDICES and Bloomberg Fixed Income Indices (the "Indices") are trademarks or service marks of Bloomberg Finance L.P. Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited, the administrator of the Indices (collectively, "Bloomberg") or Bloomberg's licensors own all proprietary rights in the Indices. Bloomberg does not guarantee the timeliness, accuracy or completeness of any data or information relating to the Indices. Bloomberg makes no warranty, express or implied, as to the Indices or any data or values relating thereto or results to be obtained therefrom, and expressly disclaims all warranties of merchantability and fitness for a particular purpose with respect thereto. It is not possible to invest directly in an Index. Back-tested performance is not actual performance. Past performance is not an indication of future results. To the maximum extent allowed by law, Bloomberg, its licensors, and its and their respective employees, contractors, agents, suppliers and vendors shall have no liability or responsibility whatsoever for any injury or damages - whether direct, indirect, consequential, incidental, punitive or otherwise - arising in connection with the Indices or any data or values relating thereto - whether arising from their negligence or otherwise. This document constitutes the provision of factual information, rather than financial product advice. Nothing in the Indices shall constitute or be construed as an offering of financial instruments or as investment advice or investment recommendations (i.e., recommendations as to whether or not to "buy", "sell", "hold", or to enter or not to enter into any other transaction involving any specific interest or interests) by Bloomberg or a recommendation as to an investment or other strategy by Bloomberg. Data and other information available via the Indices should not be considered as information sufficient upon which to base an investment decision. All information provided by the Indices is impersonal and not tailored to the needs of any person, entity or group of persons. Bloomberg does not express an opinion on the future or expected value of any security or other interest and do not explicitly or implicitly recommend or suggest an investment strategy of any kind. Customers should consider obtaining independent advice before making any financial decisions. © 2021 Bloomberg. All rights reserved. This document and its contents may not be forwarded or redistributed without the prior consent of Bloomberg.

The BLOOMBERG TERMINAL service and Bloomberg data products (the "Services") are owned and distributed by Bloomberg Finance L.P. ("BFLP") except (i) in Argentina, Australia and certain jurisdictions in the Pacific islands, Bermuda, China, India, Japan, Korea and New Zealand, where Bloomberg L.P. and its subsidiaries distribute these products, and (ii) in Singapore and the jurisdictions serviced by Bloomberg's Singapore office, where a subsidiary of BFLP distributes these products.

Take the next step.

For additional information,
email indexhelp@bloomberg.net
or press the <HELP> key twice
on the Bloomberg Terminal*

[bloomberg.com/indices](https://www.bloomberg.com/indices)

Beijing +86 10 6649 7500	Hong Kong +852 2977 6000	New York +1 212 318 2000	Singapore +65 6212 1000
Dubai +971 4 364 1000	London +44 20 7330 7500	San Francisco +1 415 912 2960	Sydney +61 2 9777 8600
Frankfurt +49 69 9204 1210	Mumbai +91 22 6120 3600	São Paulo +55 11 2395 9000	Tokyo +81 3 4565 8900