<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>All-In</strong></td>
<td>The final price or yield cost to issuers after paying underwriting fees to the dealer.</td>
</tr>
<tr>
<td><strong>Alt-A</strong></td>
<td>Mortgage collateral that is superior to sub-prime pools, but inferior to prime pools; often as result of lack of documentation and perhaps a small credit-related blemish. Alt-A is often considered a gray area due to the lack of a definitive difference between these loans and prime or A-minus loans apart from the difference in documentation. As a rough guide, a prime loan might have a FICO score in the 700s; an A-minus loan’s FICO score might be in the 620-700 range, while sub-prime scores would be below A-minus.</td>
</tr>
<tr>
<td><strong>American Call</strong></td>
<td>An option type where the option buyer can exercise the option on any date on or after the first exercise date.</td>
</tr>
<tr>
<td><strong>Announcement Date</strong></td>
<td>The date that a company announces the size and maturity of their upcoming debt security issue.</td>
</tr>
<tr>
<td><strong>ARM (Adjustable Rate Mortgage)</strong></td>
<td>A mortgage with a coupon rate that adjusts periodically on the basis of variations in a designated reference index; most ARMs have periodic and lifetime caps and floors.</td>
</tr>
<tr>
<td><strong>At-the-Money</strong></td>
<td>An option is at-the-money if the strike price equals the market price of the underlying security.</td>
</tr>
<tr>
<td><strong>Back Up</strong></td>
<td>The yield, spread or price of a security is said to back up when it gets more expensive or costly from the issuer’s perspective. In other words, if the security’s yield becomes higher or its price lower, the security might be said to have backed up in price.</td>
</tr>
<tr>
<td><strong>Basis Point / Bps / ”Beep”</strong></td>
<td>One one-hundredth of one percent; used to describe the amount of change in yield in debt instruments.</td>
</tr>
<tr>
<td><strong>Bermudan Call</strong></td>
<td>An option type where the option buyer can exercise the option on one or more pre-specified dates after and including the first exercise date, typically quarterly, semi-annually, or annually; the specific call dates frequently coincide with the coupon payment dates.</td>
</tr>
<tr>
<td><strong>Bid List</strong></td>
<td>List or inventory of securities held by an investor that is presented to dealers for them to quote prices at which they will purchase the securities from the investor.</td>
</tr>
<tr>
<td><strong>Bid / Ask (Bid / Offer) Spread</strong></td>
<td>The difference in the best buying price/yield and the best selling price/yield for any given security; the dealer buys and the customer sells at the bid; the dealer sells and the customer buys at the ask/offer.</td>
</tr>
<tr>
<td><strong>BMA (Bond Market Association)</strong></td>
<td>The trade association representing the debt securities markets and global bond industry.</td>
</tr>
<tr>
<td><strong>Book</strong></td>
<td>The investor order book for a syndicated debt issue; investor orders are submitted by the lead underwriters and the other members of the selling group and recorded in the book.</td>
</tr>
<tr>
<td><strong>Broker</strong></td>
<td>Generic name for a securities firm engaged in both buying and selling securities on behalf of customers and its own account.</td>
</tr>
<tr>
<td><strong>Bulge Bracket Dealers</strong></td>
<td>The very largest U.S. broker/dealers; usually associated with Wall Street, e.g., Goldman Sachs, Merrill Lynch, Morgan Stanley, Salomon Smith Barney, Deutsche Bank.</td>
</tr>
<tr>
<td>Glossary of Fixed Income Market Terminology</td>
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<tr>
<td>--------------------------------------------</td>
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</table>

**Bullet Bond**  
A debt security that cannot be redeemed prior to its maturity date.

**Burnout**  
Mortgage market phenomenon representing the tendency of mortgage pools to become less sensitive to interest rate changes as the pool seasons; the more the remaining loans in a pool have missed refinancing opportunities, the more ‘burnt out’ it is to interest rates changes.

**Buy and Hold**  
An investor who buys securities with the intention of holding them until maturity or a long period rather than selling them in secondary market within a short-term timeframe.

**Callable Bond**  
A debt security that has an embedded call option that allows the issuer to redeem the security prior to its maturity date, often after an initial lockout period during which the security cannot be called.

**Canary Call**  
A step-up bond that becomes non-callable when the first step has been reached.

**Carry Trade**  
The strategy that involves the simultaneous trading of two securities in order to create two offsetting positions, one of which creates an incoming cashflow that is greater than the obligations of the other.

**Cash Settlement**  
Typically same day settlement.

**Cash Transaction**  
When a mortgage lender sells a pool of mortgage loans to Freddie Mac in exchange for cash.

**Cash / Multi-lender Pools**  
Pools formed by combining loans acquired by Freddie through different cash transactions as well as loans offered to Freddie via swap transactions in small-sized lots by different lenders.

**CDS (Credit Default Swap)**  
A swap in which one party to the swap provides a guarantee for the benefit of a second counterparty to the swap with respect to the credit performance of a reference issuer on its debt obligations (typically of a stated seniority level e.g., senior or subordinated etc.). The counterparty hedging against the risk of the reference issuer’s default (the buyer of the CDS) makes periodic payments to the other counterparty (the CDS seller) for laying off this risk, while the CDS seller only makes a payment in the event of a default to compensate the buyer on a specified notional amount of the debt obligation.

**Cheap vs. Rich / Expensive**  
A security is said to be cheap relative to a benchmark when it is attractively priced in terms of yield offered from an investor’s viewpoint; a security is rich or expensive when it is less attractive in terms of yield to an investor.

**Cheapening vs. Richening**  
A security is cheapening when its price is decreasing and its yield/OAS is increasing; a security is richening when its price is increasing and its yield/OAS is decreasing.

**Cheapest-to-Deliver / Worst-to-Deliver**  
The term used for the TBA collateral that will be delivered at the settlement date; sellers are permitted to deliver any TBA-qualifying collateral, but the optimal delivery for the TBA seller is to deliver the least attractive loans which would be the cheapest to buy.

**CMO (Collateralized Mortgage Obligation)**  
Used interchangeably with either REMIC or Multiclass Security; the term refers to a multiclass securities issue backed by mortgage loans, pools of mortgages, or even existing CMOs. In structuring a CMO, an issuer distributes cash flow from the underlying collateral over a series of classes (tranches), which constitute the multiclass securities issue. Each CMO consists of two or more tranches.

**CMO Issuer**  
The Issuer of a CMO is the legal entity (also referred to as a Trust), which owns the underlying collateral and issues CMO securities to investors. Typically, the Issuer owns specific, identified collateral (such as pools of mortgages, individual mortgages, or even other CMOs, as well as combinations of the above). The Issuer’s name is often referred to as the deal, e.g. FHR 2425.
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<tr>
<td>CMS (Constant Maturity Swap)</td>
<td>A theoretical construction of par coupon swap curve where par coupon should be interpreted as referring to an at-market swap.</td>
</tr>
<tr>
<td>CMT (Constant Maturity Treasury)</td>
<td>A theoretical construction of the Treasury yield curve relating to hypothetical par-priced Treasury securities.</td>
</tr>
<tr>
<td>Concessions</td>
<td>Generically, the fees paid to dealers for underwriting / selling our debt securities. This is the only portion of the total concession that a selling group dealer would earn on a Reference Notes transaction.</td>
</tr>
<tr>
<td>Convexity</td>
<td>A measure of curvature in the relationship between bond prices and bond yields; accounts for the change in duration for a given change in yield; a security exhibits positive convexity when its price rises more as a result of a downward move in its yield than its price falls as a result of an equal upward move in yield. Bullet securities typically exhibit positive convexity. Callable debt and mortgage securities are said to exhibit negative convexity because their prices tend to rise relatively less for a given decline in bullet yield levels because of the embedded call/prepayment option, and fall relatively more when bullet yields increase. The negative convexity of PCs/MBS results from the underlying mortgage borrower’s incentive to refinance her/his mortgage loan at a lower rate when market yields decline.</td>
</tr>
<tr>
<td>CPR (Constant Prepayment Rate)</td>
<td>A prepayment model that assumes an annual constant mortgage prepayment rate each month relative to the then outstanding principal balance of a pool of mortgages for the life of that pool. For example, at 6% CPR, the CPR model assumes that the monthly prepayment rate will be constant at 6% per annum. (For mortgages in their 30th and later months, 6% CPR corresponds to 100% PSA).</td>
</tr>
<tr>
<td>Current Coupon</td>
<td>The security coupon closest to without exceeding par in the current month TBA contract.</td>
</tr>
<tr>
<td>Curve Switch</td>
<td>An investor’s request to simultaneously sell one bond and buy another with a different maturity date for relative value reasons, e.g., the investor sees relatively greater value in buying a bond at another point on the curve.</td>
</tr>
<tr>
<td>Dealer</td>
<td>Person or organization that underwrites, trades and sells securities, e.g., a principal market-maker in securities.</td>
</tr>
<tr>
<td>Defeasance</td>
<td>The purchase of extremely high quality (typically AAA or government-backed) fixed-income assets, the cash flows of which exactly match well-defined future payment liabilities of the asset purchaser.</td>
</tr>
<tr>
<td>Delay</td>
<td>The period from the time borrowers make their monthly loan payments to the time that mortgage security investors receive those payments (less the servicing and guarantee fees).</td>
</tr>
<tr>
<td>Delivery Date</td>
<td>The date when the collateral must be delivered to the investor.</td>
</tr>
<tr>
<td>Delta</td>
<td>The change - the first order derivative - in the price of an option with respect to a change in the price of the underlying security.</td>
</tr>
<tr>
<td>Discount</td>
<td>The amount by which the sale price of a note is less than the par value; sometimes used to connote a degree of cheapness relative to some benchmark value resulting from a specific factor, e.g., security trading at discount due to headline risk etc.</td>
</tr>
<tr>
<td>Discount Note (DN)</td>
<td>A short-term debt security that has a maturity of one year or less from its issue date, is sold at a discount to its stated principal amount, does not bear interest and is paid only at maturity.</td>
</tr>
<tr>
<td>Discount Window</td>
<td>The investor interface Freddie Mac uses to post a number of offering levels for discount notes of varying maturities on Telerate, Reuters and our web-site; trades are said to take place ‘through the window’ when an investor makes a trade in response to our posted offerings.</td>
</tr>
</tbody>
</table>
**Dollar Roll**
A form of financing where a security is exchanged for cash in the current month, to be reversed at a later time by a “substantially similar” security. It is a special type of repurchase agreement in which the security transferred to the buyer in the initial leg of a transaction is a mortgage-backed security; the seller gives up the cash flows during the roll period, but has use of the proceeds; the returned security does not have to be the same, but must be “substantially similar” (e.g., just as in TBA delivery).

**Dutch Auction**
A blind auction where the price for a security is lowered through bids and set at the lowest price having enough bids equal to or greater than the set price to fill the full required amount of the auction; bid prices below this level do not receive any allocation; this process is used for issuance of our Reference Bills® Securities.

**Dwarf**
15-year Fannie MBS.

**Euribor**
The euro area inter-bank offered rate for the euro; often used as a benchmark for our €Reference Notes® securities.

**European Call**
An option type where the option buyer can exercise the option only on one pre-specified exercise date.

**Factor**
Monthly decimal value that represents the proportion of the original amount outstanding at a given time. At origination the factor of pool equals 1.0000000.

**Fill or Kill**
An order to trade a security, which is cancelled if it cannot be executed immediately.

**Flipper**
A debt security that changes from having a floating-rate coupon to a fixed-rate coupon. Or, an investor who buys securities with expectations of quickly reselling them for a profit, as opposed to buy-and-hold investors.

**Flipping**
Implies resale by an investor of a newly issued bond within a short period of time after pricing to lock in a quick profit.

**Floater / FRN**
Floating Rate Note; a security with a coupon rate or interest rate that varies based on either a direct or inverse relationship to one or more designated short-term rate index. The term floater may refer to a debt security that we issue or a mortgage pass-through or structured mortgage security.

**Flows**
The buying and selling of a security or sector; light flows means there has been minimal trading in the security or sector.

**Forward Price / Forward Yield / Forward Rate**
The price implied by the current yield curve for a security where the settlement date is some time in the future, e.g., forward.

**FreddieNotes®**
A type of Freddie Mac senior unsecured callable general obligation debt security with a unique estate planning feature (a death put option) that is offered in the retail market.

**Gamma**
The first order change, the delta, is never a linear function. Gamma captures this curvature in option pricing. Thus, gamma is the second order of change in option price (e.g., the change in delta itself) with respect to a change in the price of underlying security. Gamma is similar to the concept of convexity used for bonds.

**General Collateral / GC**
Securities that are eligible to be sold back in a repurchase agreement; must be similar but do not have to be the original securities that were purchased. A GC market exists for Treasury collateral and separately for agency collateral.

**G-fee (Guarantee Fee)**
The fee that an entity, such as Freddie Mac, receives for guaranteeing the timely payment of principal and interest to mortgage security investors.

**Giants (Giant PCs)**
Freddie Mac Giant Certificates that represent pass-through interests in PCs. Giant PCs have names – “Gold Giant PCs”, “Original Giant PCs” and “ARM Giant PCs” – that identify their underlying assets and the applicable payment delay.
Glossary of Fixed Income Market Terminology

**Gold (Gold Participation Certificate (“PC”))**
Freddie Mac’s mortgage participation certificates.

**Greeks**
This refers to analytical option pricing variables, essentially derivatives of the option price change with respect to different variables that affect options, callable debt and mortgage security prices. Examples of “greeks” are delta, gamma, vega, rho, theta (see definitions of each).

**Guarantor**
An entity that takes on the credit risk for a security by guaranteeing the timely payment of principal and interest for a nominal fee, e.g., Freddie Mac serves as a guarantor for Gold PCs such that if mortgage borrowers default on the underlying loans of the Golds, Freddie Mac is responsible for covering those losses. Agency MBS are considered by investors to be supported by an agency of the U.S. Government (such as Ginnie Mae) or mortgage government sponsored entities (such as Freddie Mac and Fannie Mae). The forms of guarantee differ, but include loan level guarantees, pool level guarantees, and MBS-level guarantees. Because of the support, market participants consider agency MBS as having the credit quality of the agencies and thus, as to having implied AAA/Aaa ratings. REMICs thus have implied AAA/Aaa ratings because their underlying collateral is Agency guaranteed. Note that the implied AAA/Aaa credit quality means that there is a very low likelihood of not receiving timely interest and principal, but the exact timing and amount of receiving the cashflows varies based on prepayments of the underlying collateral.

**Hybrid ARM (Hybrid)**
An adjustable rate mortgage with an initial fixed rate period; e.g., an adjustable rate mortgage that has a fixed rate for its first five years before it adjusts is referred to as a 5/1 hybrid ARM.

**Implied Volatility**
A variable in option pricing formulas that denotes the extent to which the price/value of the underlying asset or pricing variable (e.g., yield) will fluctuate between now and the expiration of the option; found by calculating the annualized standard deviation of daily changes in price.

**Inter-Dealer Broker (IDB)**
Sometimes referred to as a broker who acts as a go-between for securities dealers who act as market-makers.

**In-the-Money**
An option that has intrinsic value and can be sold or exercised for a profit; a call option is in-the-money when the strike price is below the market price of the underlying security; a put option is in-the-money when the strike price is above the market price of the underlying security.

**Jumbos**
Mortgages that are larger than the GSE conforming limit, currently $417,000 as of January 1, 2007. Also known as non-Agency and sometimes also as whole loan mortgages.

**Lagging**
Relative underperformance by a security relative to benchmarks or peers, particularly when the benchmarks or peers have been performing well.

**Launch Date**
The date following announcement (see above) but prior to pricing (below) when the issuer announces tentative pricing terms and structure without finalizing them.

**Lead(s)**
One or more main dealers in charge of underwriting and distribution for a syndicated debt issuance.

**Long-End / Short-End**
Can be used to mean long-term or short-term debt securities (see below), or could more specifically refer to the long maturity range or short maturity range of a given yield curve. For the Freddie Mac curve the long end might refer to 10-years, while for the Treasury curve the long end typically refers to 20 to 30 year maturity points.

**Long-Term Debt**
Fixed income securities with maturity terms ranging from 2 to 30 years.
Management & Underwriting Fees
A portion of the total fees paid on a debt securities transaction specifically for managing and underwriting services.

Margin
The fixed spread to a benchmark rate used to compute current interest rates on a floating rate note, usually expressed in basis points.

MBS (Mortgage-Backed Securities)
Securities whose cash flows are derived from underlying mortgage loans; Fannie Mae’s mortgage-backed securities are typically referred to as MBS while Freddie Mac’s are referred to as PCs.

Media Effect
Mortgage market phenomenon representing the tendency of borrowers to take actions in response to stories in the media, e.g., media reports of low interest rates and increased incentives to refinance cause more borrowers to look into refinancing their mortgages.

Megas
Fannie Megas®; are equivalent to Freddie Mac Giants.

Modified Duration
The percentage price change of a security for a one percent change in yield; higher duration equates to higher interest rate risk.

Mortgage Repo
A repo transaction involving specific mortgage securities, in which identical collateral must be returned at the end of the transaction.

MSR (Mortgage Servicing Rights)
The rights to the stream of net revenue associated with servicing a portfolio of mortgage loans that is typically earned by a so-called mortgage servicer, who may be different from the originator of the loan since the MSR may be bought and sold. On the revenue side it includes the servicing fee, earnings on homeowner escrow accounts, float income earned on prepayments. The costs included would be administrative, delinquency and foreclosure costs incurred in servicing the loans.

MTN (Medium-Term Note)
Fixed income security having a maturity of one day or more from its issue date and that bears interest at a fixed rate or variable rate or bears no interest; may pay interest only at maturity, periodically until maturity or upon repayment or (in the case of callable MTNs) upon redemption.

NC (Non-Callable)
Abbreviation for the non-callable (lockout) period for a callable debt security; for example, 5NC2 is the abbreviation for a 5-year fixed-income security, non-callable for the first 2 years.

Non-Agency Issuers
Private label issuers / securitizers of mortgages, e.g., non-GSE entities who wrap and perhaps guarantee mortgage-backed securities.

Nugget
15-year Freddie PC.

OAS (Option-Adjusted Spread)
The spread between a fixed income security and a benchmark security such as a Treasury note, adjusted for the embedded option(s); typically quoted in basis points (AOAS –option-adjusted spread to agency curve; LOAS option-adjusted spread to LIBOR curve); sometimes quoted for bullet securities, which should be interpreted as a spread to a curve.

Off-the-Run Treasuries / Reference Notes
Older Treasury (or Reference Notes) securities traded in a secondary market, as opposed to the most recently issued of a given maturity.

On-the-Run Treasuries / Reference Notes
The most recently issued Treasury (or RN) securities of a given maturity. They are typically used as benchmarks for price quotations on Freddie Mac and other debt securities.

Out-of-the-Money
When an option has no intrinsic value and would be worthless if it expired today; for a call option, this situation occurs when the strike price is higher than the market price of the underlying security; for a put option, this situation occurs when the strike price is less than the market price of the underlying security.
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<tr>
<td><strong>Outperform vs. Underperform</strong></td>
<td>A security is said to outperform when its price rises more or falls less than the benchmark’s price and its yield either falls more or rises less than the benchmark’s yield; a security is said to underperform when its price falls more or rises less than the benchmark’s price and its yield either rises more or falls less than the benchmark’s yield.</td>
</tr>
<tr>
<td><strong>Oversubscribed</strong></td>
<td>When the total investor orders are greater than the offered size of the bond issue in a syndicated deal.</td>
</tr>
<tr>
<td><strong>Pari Passu</strong></td>
<td>In the case of insolvency, all bondholders of the entity’s debt are treated equally.</td>
</tr>
<tr>
<td><strong>Parity</strong></td>
<td>The theoretical price, which makes the yield equal to the coupon (usually very close to par price).</td>
</tr>
<tr>
<td><strong>Pass Through / Single Class Security</strong></td>
<td>The securitization structure where a GSE or other entity ‘passes’ the amount collected from the borrowers every month to the investor, after deducting fees and expenses.</td>
</tr>
<tr>
<td><strong>Pool</strong></td>
<td>Mortgage Pool; a group of mortgage loans with common characteristics that have been combined for resale in the secondary market.</td>
</tr>
<tr>
<td><strong>Premium</strong></td>
<td>The amount by which the sale price of a note is greater than the par value, sometimes used to connote a degree of richness relative to some benchmark value resulting from a specific factor.</td>
</tr>
<tr>
<td><strong>Price Talk</strong></td>
<td>A process in which the investment community decides on the likely price of an upcoming security issuance, usually in terms of a spread to a benchmark (e.g., an older security from the same issuer in the same maturity bucket).</td>
</tr>
<tr>
<td><strong>Pricing Date</strong></td>
<td>The date that the issuer irrevocably locks in the upcoming issue’s price and other terms such as coupon rate.</td>
</tr>
<tr>
<td><strong>Primary Market</strong></td>
<td>The market in which dealers first sell newly issued securities to investors.</td>
</tr>
<tr>
<td><strong>Profit Taking</strong></td>
<td>A situation in which investors sell securities that they believe are overvalued in order to take down profits before the securities lose value.</td>
</tr>
<tr>
<td><strong>PSA / Prepayment Speed Assumption</strong></td>
<td>The Bond Market Association’s standard prepayment model. The PSA model assumes that mortgages will prepay at an annual rate of 0.2% in the first month after origination, the prepayment rates will increase by an annual rate of 0.2% per month up to the 30th month after origination and the monthly prepayment rate will be constant at 6% per annum in the 30th and later months. This assumption is called “100% PSA.” For example, at 100% PSA mortgages with a loan age of three months (mortgages in their fourth month after origination) are assumed to prepay at an annual rate of 0.8%. “O% PSA” assumes no prepayments; “50% PSA” assumes prepayment rates equal to 0.50 times 100% PSA; “200% PSA” assumes prepayment rates equal to 2.00 times 100% PSA; and so forth</td>
</tr>
<tr>
<td><strong>Putable Bond</strong></td>
<td>A debt security that has an embedded put option that allows the bondholder to sell the security back to the issuer prior to its maturity date, typically at par; there is typically a lockout period during which the put option cannot be exercised similar to a callable bond.</td>
</tr>
<tr>
<td><strong>Rallying vs. Selling Off</strong></td>
<td>A market is rallying when prices are being bid up and yields are falling; a market is selling off in the opposite scenario when prices are falling and yields are rising.</td>
</tr>
<tr>
<td><strong>Realized / Historical Volatility</strong></td>
<td>The actual variability of the price/value of the underlying asset or pricing variable over a designated time period, as opposed to the implied volatility, which is a predicted value.</td>
</tr>
<tr>
<td><strong>Reallowance Fees</strong></td>
<td>The portion of total fees on a debt securities transaction that will be “reallowed” by the original underwriting dealer to another dealer (not an underwriter) for selling some of the underwritten securities.</td>
</tr>
</tbody>
</table>
Reference Bills®
Reference Bills® Securities are Freddie Mac’s benchmark short-term debt securities with maturities of 1, 3, 6 and 12 months; auctioned weekly or on a four-week basis (12-month securities) and have a minimum new issue size of $1 billion.

Reference Notes®
Reference Notes® Securities are Freddie Mac’s benchmark U.S. dollar-denominated bullet securities with maturities of 1 to 10 years; have optional though pre-determined issuance dates and a minimum new issue size of $3 billion.

Reference REMIC℠
Reference REMIC℠ Securities are Freddie Mac's benchmark structured mortgage-backed securities.

Reg (Regular) Date
The settlement date prescribed by the BMA for separate TBA settlement of 30-year, 15-year, balloon and 75-day delay PC securities. The BMA publishes a calendar of dates for each month of the year well in advance.

Regular Way Settlement
Normal settlement period for agency debt; typically one day from trade date, or T+1.

Relative Value
A measure of a bond’s value relative to other bonds or pricing benchmarks; based on measures such as z-score, AOAS and total return.

REMIC
A Real Estate Mortgage Investment Conduit is a type of owner trust based on a tax election allowing the creation of a MBS more complicated than passing-through the underlying cashflows (pass-through structure) or stripping off the principal and interest. REMIC law was passed as part of the Tax Reform Act of 1986 and marked the beginning of the growth of the CMO market. Virtually all CMOs are REMICs, and often the terms CMO and REMIC are used interchangeably, although that is not technically correct. Without REMIC law, a CMO would have to either register as a Registered Investment Company or be treated as a tax-paying corporation on the arbitrage (profit from the difference between the price received from selling CMOs and the cost of collateral).

REMIC Class
An individual REMIC tranche. Also informally referred to as a bond or CMO bond.

REMIC Group
Some REMIC series are subdivided into groups, each of which holds its own collateral. A group’s collateral is not shared with any other group; hence, a group’s REMICs are not affected by the other groups in a REMIC transaction. Because of this separation, one need not analyze the collateral or structure outside of the subject tranche’s own group.

REMIC Series
A single REMIC underwriter may make a single shelf filing for a series of REMIC issuances planned for a given time period, typically one month. The entire series of REMIC issuances typically comprises several REMIC Groups (see above) each of which is supported by different underlying collateral.

Re-offer
The price or yield at which an investor buys a security.

Reopening
Additional issuance of a previously offered and currently outstanding bond; usually done in smaller size than the original issuance and is subject to limitations based on the current price of the bond.

Repurchase
Operation where an issuer buys back bonds from the investment community.

Repurchase Agreement (Repo)
The sale of securities to investors with the agreement to buy them back at a higher price after a specified time period, usually overnight; a form of short-term borrowing.

Re-REMIC
A REMIC that has as its collateral parts of other existing REMICs.

Residual
The legal ownership class and last to be paid off in a REMIC. Usually considered debt for tax purposes, but equity for liability purposes. The liability (mostly connected to taxes) gives the residual a negative value. An economic residual also carries principal and coupon, which offsets the negative residual value, while a non-economic residual only has the liability, and the investor must be paid to purchase it.
**Retail**
An individual investor who generally purchases small amounts of securities for himself, as opposed to an institutional investor.

**Reverse Repurchase Agreement (Reverse Repo)**
The purchase of securities with the agreement to sell them at a higher price at a specified future date.

**Rho**
The sensitivity of the price of an option on a fixed income security with respect to a change in the underlying interest rate.

**Roll**
Rolling down the curve or yield curve refers to a security becoming a shorter maturity security as it ages. With respect to Reference Notes and Treasury securities, the term roll also refers to the difference in yield or yield spread between a new on-the-run issue of a given maturity and the previous issue of the same original maturity. Roll Switch is an investor’s request to simultaneously sell one bond and buy another (typically a new security) with the same or similar maturity date for relative value reasons, e.g., the investor sees relatively greater value in buying the new bond at the same point on the curve. Roll can also refer to “dollar rolls” – an over-the-counter forward transaction for PCs and MBS (see “dollar roll”).

**Seasoning / Burnout**
Servicing describes the changing refinance behavior over time; usually as a pool ages, there is a gradual increase in prepay speeds, reaching a reasonably steady state, followed by a period of relatively low prepayment responses to interest rate changes, also referred to as burnout.

**Secondary Market**
The market where previously issued securities are bought and sold.

**Selling Group**
Group of dealers in a syndicated debt issuance who are each allocated a much smaller portion of the overall deal than the lead dealers.

**Settlement Date**
The date securities must be delivered and paid for to complete a transaction.

**Short-term Debt**
Fixed income securities with maturity terms ranging from 0-1 year.

**Silent Second Mortgage**
When a borrower’s first mortgage lender is unaware of the existing second note, usually because the buyer is not eligible for a large enough first loan.

**Skew**
A statistical term used to describe a situation’s asymmetry to a normal distribution; in the context of volatility, it refers to the degree to which volatility of out-of-the-money options differs from at-the-money options.

**Smile (Volatility Smile)**
A common graphical shape that results from plotting the strike price and implied volatility of a group of options with the same expiration date; used by investors to price options in the option market.

**SMM (Single Month Mortality)**
Measures the percentage of principal that has prepaid on a monthly basis. It is based on the change in the pool balance survival factors between two periods. The survival factor is the percentage of principal balance that has not prepaid and is computed by dividing the reported factor by the scheduled factor. SMM assumes a constant percentage prepayment of principal each month. SMM is calculated as follows:

\[
\text{SMM} = \left( \frac{\text{Scheduled Balance} - \text{Actual Balance}}{\text{Scheduled Balance}} \right) \times 100
\]

**Specials**
Repurchase transactions in specific securities, where only those securities may be delivered back to close out the transaction. Substitution of similar collateral, such as other securities of the same issuer, is not permitted to close out special repurchase transactions.

**Specified Pools**
Mortgage pools for which buyers know exactly which pools they are buying and their relevant characteristics; trade at a premium to TBA securities due to this certainty.
| **Sponsorship** | Refers to the sustained action of several professional investors, such as broker-dealers, when they actively support the market for a particular security. |
| **Spread** | Yield context: the difference between two debt securities’ yields, typically quoted in basis points; one can also quote the spread to a benchmark curve, such as U.S. Treasuries or LIBOR swaps. See also “spread to curve”. Price context: Spread or difference between the prices of two securities. This is often used in the context of the spread between Freddie PCs and Fannie MBS of comparable coupon and maturity. |
| **Spread to Curve** | Margin or spread, typically in basis points, over a benchmark curve (i.e., U.S. Treasury curve or LIBOR curve); can refer to the spread over the yield on the Agency OAS Reference curve at a point with the closest maturity or average life; sometimes calculated by discounting cash flows by forward rates derived from benchmark yields plus a spread to the curve, which is similar to an OAS calculation. |
| **Squeezing the Market** | When a dealer or other market participant corners most or all available supply in a security so as to engineer an artificial price rise; may refer specifically to futures or repo market when the supply of loanable or deliverable securities is reduced by such cornering activity. |
| **Steepening vs. Flattening** | A curve is steepening if there is an increasing yield spread between a point on the short-end of the curve and a point on the long-end of the curve; a curve is flattening if there is a decreasing yield spread between a point on the short-end of the curve and a point on the long-end of the curve. |
| **Step-up Callable** | A callable debt security that pays one coupon rate for an initial period followed by one or more increases in the coupon rate thereafter; typically callable after the first step-up occurs. |
| **Strip** | The separation of coupons from a bond, where the coupons become a security and the remaining face-value bond becomes another security known as a Zero Coupon Bond. May refer to a debt security stripped to interest and principal components or to PCs/MBS stripped into IOs and POs. Eurodollar strip refers to the combination of a series or strip of Eurodollar futures contracts in such a way that the risk and performance characteristics mirror those of an interest rate swap maturing at the same time as the longest maturity futures contract. To buy a stock in order to collect its dividend. Variant of a straddle. Two puts and one call on a stock, where both the puts and the call have the same strike price and expiration date. |
| **Sub Debt** | Indebtedness represented by Subordinated Debt securities is subordinate to all other classes of debt securities that have priority in the case of liquidation or asset distribution. |
| **Sub-Prime** | Loan pools that are considered inferior due to certain characteristics they possess, i.e., high LTV, low FICO score, etc. |
| **Swap** | (1) Asset/Liability Management: Refers to interest rate swap, which we use to hedge interest rate risk. It is an over-the-counter hedging instrument between two counterparties, one of who pays a fixed interest rate with the other paying a floating interest rate on a set notional (principal) amount. (2) Gold/Fannie swap: the price spread between Freddie Gold PCs and Fannie MBS of comparable coupon and maturity. This is a closely watched variable as it helps assess the relative value or competitive equilibrium between the two mortgage sectors. |
| **Swap Transaction / Guarantor Program** | When a mortgage lender sells a pool of mortgage loans to Freddie Mac in exchange for a security guaranteed by Freddie Mac and backed by those loans. This is referred to at Freddie Mac as our Guarantor Program. |
| **Syndicated Debt Issue** | A debt securities issue underwritten by more than one dealer; typically large in size; examples for Freddie Mac are Syndicated Callables and Reference Notes®. |
### Synthetic Coupons
A synthetic coupon premium REMIC tranche has a fixed coupon larger than the underlying collateral, while a synthetic discount REMIC tranche has a coupon stripped down from collateral.

### TAPs
*Federal Home Loan Bank TAP Issue Program.* Instead of bringing numerous separate small bullet issues of similar maturities to the market, this program enables the FHLBs to aggregate the most common maturities (2, 3, 5 and 7 years) by reopening them through competitive auctions over a three-month period, bringing each issue to a multi-billion dollar size.

### TBA (To Be Announced)
Mortgage-backed securities for forward settlement, in which the buyer and seller decide on trade parameters, but exact pools are unknown until two days before settlement notification date.

### Tender Offer
An offer to repurchase any and all of the outstanding amount of targeted securities.

### Theta
The variation in option value due to the passage of time is called theta. It is also known as time decay.

### Through the Curve
If a security is priced *through the curve*, its spread to the benchmark curve (e.g., the U.S. Treasury curve) is negative.

### Tick
One thirty-second (1/32) of one percent. Usually used with reference to prices of Treasury and mortgage securities, but not our debt securities for which prices are quoted in decimals.

### Tightening / Narrowing vs. Widening
A security is tightening/narrowing when its yield or OAS is decreasing; a security is widening when its yield or OAS is increasing.

### TIPS (Treasury Inflation-Protected Security)
A security that is identical to a Treasury bond except that principal and coupon payments (not the coupon rate) are adjusted to eliminate the effects of inflation.

### To the Strip
In saying that an instrument is priced *to the strip*, it means that the security is benchmarked to the Eurodollars Futures Strip; for example, “we priced a new 3-month discount note at –10 basis points to the strip.”

### UPB / Current Balance / Current Face
The aggregate unpaid principal balance of a PC pool.

### Vega
Option prices are exposed not only to market movements in the direction of the spot price of the underlying, but also to market movements in the implied volatility used to price the option. Thus, the sensitivity of an option price with respect to volatility of the underlying security price is called vega.

### WAC (Weighted Average Coupon)
Most recently disclosed weighted average of the coupons of the mortgages contained in each PC pool.

### WAL (Weighted Average Life)
The assumed weighted average amount of time that will elapse from the date of a security’s issuance until each dollar of principal is repaid to the investor. The WAL will change as the security ages and depending on the actual realized rate at which principal, scheduled and unscheduled, is paid to the loans underlying the MBS.

### WALA (Weighted Average Loan Age)
Most recently disclosed, calendar-adjusted, weighted average of the number of months since note origination of the mortgages contained in each PC pool.

### WARM (Weighted Average Remaining Maturity)
Most recently disclosed, calendar-adjusted, weighted average of the remaining terms to maturity (in months) of mortgages contained in each PC pool.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td><strong>When Issued (WI)</strong></td>
<td>A transaction or trade in securities that are not yet issued, on the understanding that the trade will settle once the securities have actually been issued; this is a special kind of forward transaction; active WI markets exist for Treasury securities. They sometimes exist for Freddie Mac securities that are to be issued in an auction, e.g., Reference Bills.</td>
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<tr>
<td><strong>Wings / Body of Butterfly Trade</strong></td>
<td>The short-end and the long-end of a butterfly curve trade are referred to as the wings, while the middle maturity of the butterfly is referred to as the body. One would typically buy the body and sell the wings or vice versa. For example, one may buy 5-year bonds and sell 2-year and 10-year bonds.</td>
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<tr>
<td><strong>Yield-to-Call</strong></td>
<td>The expected yield to maturity of a bond if it is called on the scheduled exercise date.</td>
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<tr>
<td><strong>Yield-to-Maturity</strong></td>
<td>The expected rate of return of a bond if it is held to its maturity date; calculated by taking into account the current market price, stated redemption value, coupon payments and time to maturity and assuming all coupons are reinvested at the same rate; equivalent to the internal rate of return (IRR).</td>
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<tr>
<td><strong>Yield-to-Worst</strong></td>
<td>The expected yield to maturity in the worst possible bond repayment scenario – typically used with reference to a callable bond, where the lower of the bond’s yield-to-call and the yield-to-maturity would be the yield-to-worst.</td>
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<tr>
<td><strong>Zero Coupon Callable Bond</strong></td>
<td>Callable bond that pays no coupon; callable at varying prices that typically accrete to par by maturity; schedule of call prices determined from a single yield level.</td>
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<tr>
<td><strong>Zero Coupon Bond</strong></td>
<td>Fixed income securities which do not pay a coupon and are instead issued at a discount.</td>
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<tr>
<td><strong>Zero-Volatility OAS</strong></td>
<td>OAS calculated relative to a reference yield curve by assuming that the future prepayment schedule of a mortgage security is known in advance and fixed, e.g., not uncertain.</td>
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<tr>
<td><strong>Z-Score</strong></td>
<td>A spread-based measure of whether a bond is rich or cheap; Z-score is calculated by taking the difference between a bond’s current spread and it’s 3-month average spread and then dividing by its 3-month standard deviation.</td>
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