Glossary of Investment Terms

A Notes – Tranche of an ABS or MBS issue that is senior to other tranches, such as the class B notes, in credit terms, as well as in priority of repayment of principal.

"A" Quality Credit – A borrower with the best credit rating, typically deserving of the lowest prices that lenders offer.

ABS – **Asset-Backed Security** – Bonds secured by assets, such as credit card receivables or auto loans.

ABX Index – A series of credit-default swaps based on 20 bonds that consist of subprime mortgages. ABX contracts are commonly used by investors to speculate on or to hedge against the risk that the underling mortgage securities are not repaid as expected. The ABX swaps offer protection if the securities are not repaid as expected, in return for regular insurance-like premiums. A decline in the ABX Index signifies investor sentiment that subprime mortgage holders will suffer increased financial losses from those investments. Likewise, an increase in the ABX Index signifies investor sentiment looking for subprime mortgage holdings to perform better as investments. CDS spreads are converted to a price (as a percentage of par) and often viewed as an indicator of investor sentiment in the nonmortgage securities market. Making inferences based on the ABX index should be approached with some caution, however, because the index consists specifically of subprime mortgages and (usually) of the longest duration tranches. A security consisting of higher quality mortgages or shorter duration tranches may show prices closer to par.

Accelerated Amortization – An accounting technique in which the larger portion of the asset's book value is written off in the early years of the asset's expected life.

Accelerated Remittance Cycle (ARC) – An option whereby an entity selling and/or servicing mortgages to/for FHLMC reduces the guarantee fee it pays by paying principal and interest payments early and shortening the monthly remittance delay. Remittance requirements are a component of servicing asset valuation due to their impact on assumptions of float profitability. Super ARC is also a remittance option which calls for even faster payment to FHLMC.

Accrual Bond – A bond that accrues interest, which is added to the remaining principal and paid to the investor at maturity, rather than periodically over the term of the bond. Also known as a **Z** bond.

Adjusted Trading – The sale of a security to a broker at an above-market price and the simultaneous purchase of a security from that broker also at an above-market price. This practice will overstate income. Also known as overtrading. It is also illegal.

Adverse Selection – A market process in which "bad" results occur when buyers and sellers have asymmetric information (i.e. access to different information): the "bad" products or customers are more likely to be selected. For example, a mortgage program that does not require income verification is more likely to attract borrowers that misstate their income.

Agencies – Government-sponsored intermediaries including FNMA and FHLMC.

Arbitrage – A transaction that generates a risk-free profit, typically by exploiting inefficiencies in the markets.

Arbitrage CDO – A CDO transaction based on assets whose aggregate yield is more than the aggregate yield for which the transaction's securities can be issued.

Asked – The lowest declared price that a dealer will accept for a security at a particular time. A thrift buys securities at the asked price.

Asset-Backed Commercial Paper (ABCP) – CP whose principal and interest payments are designed to be derived from cash flows from an underlying pool of assets. If CP cannot be reissued to repay maturing CP, however, a backstop liquidity facility is drawn upon to provide cash to repay investors.

At-the-Money – An option whose exercise price equals the underlying security's market price.

Attachment Point (AP) – The level of losses on the underlying assets at which a tranche would first incur a credit loss. Comparable to credit support percentage. Most commonly used in synthetic CDOs. See also Detachment Point.

Auction Rate Preferred Stock – Floating rate preferred stock whose dividend is adjusted every seven weeks through a **Dutch auction**. Also known as money **market preferred stock**.

Auction Rate Security (ARS) – A debt or preferred security in which the coupon is reset based on periodic auctions, which typically occur at 7, 28, 35, or 49-day intervals. The market for ARS essentially collapsed in 2008 as many auctions failed to clear. Also known as money market preferred, Dutch auction preferred stock, short-term auction rate stock, and auction rate preferred stock.

Available for Sale – Securities that the institution does not have the intent and/or ability to hold to maturity but are also not held for the purpose of selling them in the near term (i.e., trading securities). Unrealized gains and losses on securities available for sale are not included in current earnings but are reported as a separate component of shareholder's equity. Unrealized gains or losses on debt securities will not be included in regulatory capital calculations. Unrealized losses on equity securities (e.g., mutual funds) are included in regulatory capital calculation.

Average Life – Average number of years that each principal dollar will be outstanding. Alternatively, it is the number of years that each dollar in a pass-through pool is expected to be serviced. Average life is calculated as the dollar-weighted average time to repayment of all the principal paydowns.

Backstop Facility – The agreement of a highly rated entity to make payment if the entity with the primary obligation to make the payment is unable to do so.

Balance-Sheet CDO – A CDO transaction where the sponsor securitizes assets it already owns.

Basis Point – One 100th of a percentage point (e.g., .01% = 1 b.p.).

Basis (or Correlation) Risk – Risk that the yield or price in the futures market will change at a different rate than in the cash market. For example, if you are hedging MBSs with short futures and the futures price increases to 105 (a loss of 5) while the MBSs only increase to 103, you lose 2 on the hedge due to basis risk. More generally, basis risk is used to describe any risk that occurs due to the use of different price indices between assets and liabilities (see <u>Mismatched floaters</u>).

Beneficial Interest – The interest of an entity that does not have legal title to an asset, but enjoys the rights incident to ownership of that asset.

Bid – The highest declared price a dealer is willing to pay for a security at a particular time. A thrift sells securities at the bid price.

Bid-Ask Spread – The difference between the price a broker is willing to pay for a security vs. the price at which he is willing to sell a security. For example, if a broker will sell a security at 101 and is only willing to buy it at par, the bid-ask spread is \$1. A wide bid-ask spread is indicative of poor liquidity.

B Note – A subordinated tranche.

Bond Equivalent – A yield based on a 365-day year with two semiannual coupon payments.

Broken Bond – A collateralized security where losses on the underlying assets have caused credit support to become exhausted.

Brokered Deposits – Funds accepted for deposit obtained directly or indirectly, by or through a deposit broker.

Burnout – Phenomenon where mortgage pools that have had rapid prepayments (or defaults) in the past tend to slow down (burn out) as the faster prepayers (or those most likely to default) leave the pool.

Call Option – The contractual right (not obligation) to buy a security from someone at a prespecified price by a prespecified date. With a long call, you buy the right; with a short call, you sell the right. Long calls benefit when rates go down (you can buy the security at a below market price) while short calls benefit when rate go up (the option goes unused and you receive the premium). Similar to a floor. Some securities also have embedded call options that allow the issuer to redeem the security early.

Callable Security – A security that allows the issuer to call or redeem the security prior to contractual maturity.

Capital Markets – The market for debt and equity securities.

Cash Market - Transactions involving the transfer of an actual asset with payment given on delivery (distinguished from the futures market).

CDO of ABS – A collateralized debt obligation backed by asset backed securities, most commonly ABS of subprime mortgages.

CDO-Squared – A collateralized debt obligation consisting of other CDOs. The resulting leverage offers potentially higher returns but can also magnify potential losses.

Claw Back – The risk that assets that have been validly transferred will be set aside (or clawed back) in the insolvency of the originator/transferor. The risk is most common for transactions completed shortly before the insolvency or with terms deemed preferential to certain creditors.

Cleanup Call – A provision with a CMO or structured security that allows the issuer to call ("clean up") the remaining balance once the outstanding principal balance falls below a certain threshold level (e.g., ten percent of the original principal balance).

CMO – A mortgage-collateralized security where the cash flows are not simply passed through to the investor but are structured and divided into tranches with varying risk and return characteristics.

Collateralized Bond Obligation (CLO) – See CDO.

Collateralized Debt Obligations (CDO) – A security backed by a pool of bonds, loans and other assets. CDOs do not specialize in one type of debt but are often nonmortgage loans or bonds.

Collateral Interest Class – A subordinate class of securities issued in connection with a credit card receivables transaction, which provides credit enhancement to more senior classes of securities issued in connection with the same transaction. The collateral interest is often retained by the transaction sponsor.

Collateralized Loan Obligation (CLO) – See <u>CDO</u>.

Collection Float – The total time period between when a check is prepared by the remitter and when the check is presented to the remitter's bank. The float also includes the mail float, processing float, and transit float, and is considered the disbursement float for the organization that issues the check.

Commercial Mortgage Backed Security (CMBS) – Security backed by one or more loans secured by commercial properties, which may include multifamily housing, shopping centers, office buildings, and hotels.

Commercial Paper (CP) – Short term promissory notes, with maturities typically 30 to 50 days.

Commitment Fee (lender/borrower) – A fee paid by a potential borrower to the potential lender for the lender's promise to lend money at a specified date in the future, or for a specified period of time and under specified terms. The timing of income recognition for these fees should follow GAAP using the specified contractual terms.

Complex Security – Any security with an <u>embedded option</u>, excluding mortgage pass-through securities. Includes <u>CMOs</u>, <u>trust preferred securities</u>, and <u>callable securities</u>.

Complex Security with High Price Sensitivity – A complex security with a projected decline in value from a 200 basis point rate shock of more than ten percent. TB 13a requires institutions to conduct a price sensitivity analysis of the security prior to purchase. In general, investments in complex securities with high price sensitivity should be limited to investments that reduce an institution's interest rate risk. Investments that do not reduce risk require written authorization from the board of directors and should ensure that the institution's post-shock NPV ratio following the investment remains above four percent.

Component (CPT) – CMO class that combines two or more difference tranche types. The most prevalent structure is a combination of PAC and TAC classes or two PACs with different bands.

Convexity – The rate of change in duration as interest rates change. Positive convexity means that duration decreases as rates increase, while negative convexity means that duration increases as rates increase. Generally, an investment with negative convexity has greater downside than upside potential. A mortgage has negative convexity due to the presence of the prepayment option (prepayments tend to increase when rates fall, decreasing their effective duration). Convexity (positive or negative) is a measure of the stability or instability of the measured duration over a range of yields. If convexity is low, that is, if the price/yield relationship is close to a straight line, duration is stable. If convexity is high, duration is unstable. The greater an instrument's convexity, the less accurate duration will be. Convexity is a measure of the curvature of how the price of a bond changes as the interest rate changes. Specifically, duration can be formulated as the first derivative of the price function of the bond with respect to the interest rate in question, and the convexity as the second derivative. Also known as Gamma Risk.

Core Deposits – Customer deposits based on the convenience and financial service provided by an institution rather than the interest rate paid. In other words, deposits which are not rate sensitive. The NPV Model treats the incremental value attributable to core deposits as an asset. Core deposits are usually (but not always) synonymous with nonmaturity deposits, though some <u>nonmaturity deposits</u> do not represent true core deposits and there may be some core deposit features of CDs.

Coupon Rate – The interest rate stated on a bond, note, mortgage or other fixed income asset, expressed as a percentage of the principal (face value).

CPR – Conditional Prepayment Rate, a method for measuring prepayment speed. A 20 percent CPR means that the mortgage pool prepays at an annual rate of 20 percent.

Conditional Default Rate (CDR) – The annualized rate of default on a pool of mortgages or other assets. "Default" is defined as liquidation of the underlying collateral. For mortgage securities, that means when a loan goes into REO and is sold.

Conforming mortgage – A mortgage loan that meets all requirements (loan type, amount, and age) for purchase by the FHLMC or FNMA.

Conventional mortgage – A mortgage loan that is not government-guaranteed or governmentinsured. There are two types of conventional loans, conforming and nonconforming. See also conforming mortgage and nonconforming mortgage.

Convergence – The narrowing of futures prices to cash prices as the delivery date approaches.

Correlation – The degree of relationship between two sets of data. A correlation near plus 1, called a positive correlation, indicates that changes in one set of data are closely related to changes in the other set and that the data sets change in the same direction. A correlation near minus 1, called negative correlation, indicates that changes in one set of data are closely related to changes in the other set and that the data sets change in the opposite direction. A correlation near zero indicates little or no relationship between the changes in the two sets of data. Correlation is equal to the covariance between two variables, divided by the standard deviation of each variable. While a high correlation can be indicative of effective hedging, a low correlation between assets (of asset classes) is desirable for purposes of portfolio diversification.

Correspondent / Correspondent Originator – An entity that originates mortgage loans that are sold to other mortgage bankers.

Counterparty – The entity on the other side of a swap or other bi-lateral financial agreement (e.g., if the institution pays fixed, receives floating, the counterparty pays floating and receives fixed). The financial condition of the counterparty is important because of the possibility that the counterparty will be unable to make its payments on the swap.

Covariance – A measure of how much two variables move together. Unlike correlation, it is not adjusted for the standard deviations of the two variables.

Covenant – A provision in a legal document that involves a promise to do or not do something stipulated in the related agreement.

Covered Bond -- A corporate bond with one important enhancement: recourse to a pool of assets that secures or "covers" the bond if the originator (usually a financial institution) becomes insolvent. This enhancement typically (although not always) results in the bonds being assigned AAA credit ratings. Unlike an ABS, the pool of assets remains consolidated on the issuer's balance sheet.

Credit Default Swap (CDS) – A credit default contract between two counterparties. The *buyer* makes periodic payments (premium leg) to the *seller*, and in return receives a payoff (protection or default leg) if an underlying financial instrument defaults.

Credit Derivative – Capital markets instruments designed to transfer credit risk from one party to another. Instruments include <u>credit default swaps</u>, market value swaps, and credit linked notes.

Credit Enhancements – This can encompass a variety of provisions to reduce the credit risk (to the buyer) and may involve over-collateralization, recourse to the seller, and standard reps and warranties.

Credit Event – An event that can trigger a loss claim by the protection buyer of a credit derivative to a protection sell.

Credit Linked Note (CLN) – A note whose payments depend on the performance of a reference equity or pool of assets. For example, payment on a CLN may depend on the level of losses within a specified mortgage pool.

C Statistic – A test of the <u>discriminatory</u> ability of a model based on the number of concordant and discordant pairs. A pair is concordant if the subject ranking higher on the predicted probability also ranks higher on the dependent variable. A pair is discordant if the subject ranking lower on the predicted probability ranks higher on the dependent variable.

A pair is tied if the subjects rank the same on the predicted probability and the dependent variable. For example, a credit model might try to predict defaults based on FICO scores.

Higher FICO	Lower FICO	
Defaults	Does Not Default	Discordant
Does Not Default	Defaults	Concordant
Defaults	Defaults	Tie
Does Not Default	Does Not Default	Tie

Current Coupon – The interest rate for mortgage-backed securities which is approximately 50 basis points less than the most widely quoted interest rate for fixed rate mortgages. (For example, if interest rates on new mortgages are 8.5 percent, the current coupon MBS is 8 percent.) It will be priced near par.

Current Market Index – An ARM index that adjusts quickly to changes in market interest rates. Examples include the one-year **CMT** and **LIBOR**.

Custodial Accounts – Bank accounts for the deposit of funds belonging to others.

CUSIP – Committee on Uniform Securities Identification Procedures. Uniquely identifying numbers and symbols for a security. All buy or sell orders contain the security's CUSIP number.

Dealer – A person or firm acting as a principal rather than as an agent, in the purchase or sale of securities or commodities.

Derivatives – Financial instruments whose value depends upon the values of underlying assets, interest rates, currency exchange rates, or indexes. Large financial institutions use derivatives for hedging. Options, futures, swaps, and swaptions are common derivatives used for hedging purposes. FAS 133 define derivatives as any financial instrument or other contract that has all three of the following characteristics:

- A. The financial instrument or contract has both:
 - 1. One or more underlyings.
 - 2. One or more notional amounts or payment provisions or both.
- B. The financial instrument or contract either does not require an initial investment or requires an initial net investment that is "smaller than the amount that would be required for other types of contracts that would be expected to have a similar response to changes in market factors."
- C. The terms of the financial instrument or contract:
 - 1. Require or permit net settlement.
 - 2. Provide that the contract can be readily settled net by a means outside the contract.
 - 3. Provide for delivery or an asset that puts the recipient in a position not substantially different from net settlement.

Detachment Point – Level of losses on the underlying assets at which a tranche would be wiped out. Most commonly used with respect to synthetic CDOs. See also Attachment Point.

Discount – The amount by which the price of an asset is less than its face value, increasing its yield to the investor.

Discount Rate – The rate at which future dollars are converted into present value. The time value of money can be interpreted as the rate at which individuals are willing to trade present for future consumption or as the opportunity cost of capital.

Discriminant Analysis – Statistical technique that (for example) classifies customers into two groups: those that will default and those that will not.

Dollar Roll – A type of reverse repurchase agreement wherein the security pledged or collateralizing the borrowing may be substituted with another similar security with the same coupon and face value. The substitution of the security is not treated as a sale and, therefore, there is no recording of a gain or loss on the transaction.

Dual Index Floaters – Structured notes that pay an interest rate based on two separate interest rate indices, which typically are not perfectly correlated. An example of this is a bond return based on the Prime Rate (which tends to be sticky) less LIBOR (which is typically more volatile). The rate of return realized on these bonds will vary depending on the shape of the yield curve.

Duration – The present value weighted term to repricing of an asset, considering maturity, prepayments, and intervening cash flows. More generally, duration is used to signify the level of sensitivity between market interest rates and the market price of an asset. For example, an asset with a duration of 5 years would decline in price by roughly 5 percent for every 100 basis point rise in market interest rates.

Duration Drift – As time passes, the shift in durations between assets and their funding sources which were initially matched at the onset of the transactions. For example, if the institution purchased an MBS with a duration of five years funded with short-term source. The effective maturity of the short-term funding source was synthetically extended by entering into an interest rate swap (pay fixed, receive variable) with a 5-year duration. After 2 years, the MBS has a duration of 5.5 years due to an expected decrease in the prepayments while the swap has a duration of 2.9 years. Therefore, the entire transaction now has interest rate risk.

Dutch Auction – Also known as a descending price auction, uses a bidding process to find an optimal market price for a stock or a bond, i.e., the lowest price at which the issuer can clear the market (sell all the shares). Auctions of Treasury securities use a Dutch auction approach, as do auction rate preferred stock (money market preferred stock) offerings, which are sometimes known as Dutch auction preferred stock.

DV01. (Dollar Value of 1 Basis Point) – The present value impact of a 1 basis point move in an interest rate. It is often used as a price alternative to duration (a time measure).

Early Amortization Event – A triggering occurrence that leads to an immediate end to the revolving period and early repayment of investor principal. Applies to <u>ABS</u> transactions that operate on a revolving basis, such as those backed by credit card receivables. These qualifying events could include bankruptcy of the originator or a decline in asset yields below some specified levels.

Early Payment Default (EPD) – A provision in the sales contract that requires a seller to repurchase or indemnify a purchaser against loss if a loan becomes delinquent. The regulations permit a seller to repurchase delinquent loans within 120 days of the sale date without recourse ramifications if the loans were first liens, sold within one year of origination and qualify for the 50 percent risk based capital category.

Early Pay-Off (EPO) – A provision in a loan sales contract similar to the **EPD** clause. If the sold loans prepays within a contractually set period after the sale, the seller may have to repay set amounts. This type of clause is subject to the same risk based capital treatments as the EPD clauses.

Early Pool Buyouts – An agency-approved loan servicing option of buying eligible delinquent loans from GNMA pools to eliminate the servicer's exposure to principal and interest payment pass-through requirements.

Earnings at Risk (EAR) – The quantity by which net income is projected to decline in the event of an adverse change in prevailing interest rates. EAR is one measure of an institution's exposure to adverse consequences from changes in prevailing interest rates. See <u>Value at Risk</u> for an alternative measure.

Embedded Option – Many investments have implicit or explicit options associated with them that affect their risk and return characteristics. These can include a call option on a bond, a prepayment option (call) on a mortgage, a cap and floor on an ARM, or a put option on an asset purchased with recourse. The option adjusted spread technique attempts to value the embedded prepayment option on mortgages (see OAS).

Equity Piece - See First Loss Piece.

Escrow – A legal arrangement in which an asset (usually cash) is held in trust pending a contingency or fulfillment of a condition in a contract. Mortgage servicers escrow funds to pay taxes, insurance, and related expenses when due. A delay between the deposit of escrows and their actual payout (float) provides servicers with access to an inexpensive source of funds.

Event of Default – An occurrence that allows the other party to a transaction (bondholder, counterparty) to demand repayment in advance of the normal due date. Can arise from an actual failure to pay principal and interest or due to prospective default (e.g., the borrower has put into liquidation; losses on the underlying collateral exceed certain triggers).

Expected Loss – The average loss expected on a portfolio or an individual asset. It represents the mean of a distribution of possible losses.

Expected Loss Given Default (ELGD) – Basel II term that reflects the long run average loss on defaulted exposures. Expected losses are net of expected recoveries.

External Credit Enhancement – Credit support provided by a highly-rated third party, such as a monoline insurer.

Event Risk – The risk that a political, economic, or regulatory "event" could affect either the institution as a whole or the value of some of its assets. The FIRREA-mandated divestiture of junk bonds (which depressed the junk bond market) is an example of the event risk.

Excess Spread – The difference between the yield on the underlying collateral and the coupon payable on securities issued from the same structure. A form of internal credit enhancement.

Excess Yield – The interest rate spread between the weighted average coupon rate (WAC) of a mortgage loan pool and the pass-through interest rate after deducting the servicing fee and the guarantee fee. For example, when the WAC is 9.00 percent for the pool, the pass-through rate is 8.50 percent, the servicing fee is 0.25 percent, and the guarantee fee is 0.21 percent, the excess yield is 0.04 percent.

Extension Risk – The risk that a rise in rates will lead to a reduction in prepayments and a lengthening of the expected life of a mortgage or mortgage-related securities.

Face Value – Par value; the principal or nominal value of a bond, note, mortgage, etc.; the amount of principal the issuer contracts to repay.

Factor – The number, calculated monthly, which represents the proportion of the original principal amount of the securities issuance that remains outstanding. It is calculated by dividing the current principal balance of a pool by the original face value at issue.

Fallen Angel – A debt security that was initially investment grade but subsequently was downgraded to a level below investment grade (i.e., junk bond). Unlike other junk bonds, divestiture of fallen angels is not required under FIRREA. Instead, the market depreciation is classified as "doubtful" and the remaining balance is classified as "substandard". Also applies to CMOS that initially pass but subsequently fail the old FFIEC High Risk Test.

Fallout – Mortgages in the pipeline that do not close. This is a common problem in mortgage banking, particularly if the institution has a forward commitment to sell the loan. For example, suppose that a thrift commits to originate a 6.5 percent mortgage. Shortly after commitment (but prior to origination), the thrift commits to sell the loan at par (100). Rates fall, and the borrower decides he can find more attractive financing elsewhere. To honor its commitment, the thrift must purchase another 6.5 percent loan in the secondary market. The market price is now 103, so the thrift loses 3. The historical fallout ratio is used to estimate the desired coverage for expected loan closings (pull-through) subject to price risk in the secondary market. Volatile rate changes can significantly impact expected fallout and make pipeline hedging more difficult. It is the inverse of the pull-through rate.

Fannie Mae / FNMA – A government sponsored enterprise (formerly the Federal National Mortgage Association) created by Congress that operates mortgage purchase and securitization programs to support the secondary market in mortgages on residential property.

FASB Accounting Standards Codification 948 (formerly FAS 65) – Accounting pronouncement that requires loans held for sale to be carried at the lower of cost or market (LOCOM).

FASB Accounting Standards Codification 320 (formerly FAS 115) – Accounting pronouncement that addresses the reporting for investments in equity securities that have readily determinable fair values and for all investments in debt securities. These investments are classified and accounted for as 1) held-to-maturity; 2) available for sale; or 3) trading securities.

FASB Accounting Standards Codification 815 (formerly FAS 133) – Accounting guidelines for derivative instruments and hedging activities. ASC 815 stipulates that the value of derivatives (positive or negative) should be reported on the balance sheet at their fair value. If the derivative hedges another asset or liability, changes in the fair value of that instrument may also be recorded.

FASB Accounting Standards Codification 860 (formerly FAS 140) – Accounting pronouncement addressing transfers and servicing of financial assets and the extinguishment of liabilities. It replaced FAS 125. Both FAS 125 and FAS 140 were controversial because they were seen as fostering the frontending of income, known as gain on sale accounting.

FASB Accounting Standards Codification 820 (formerly FAS 157) – Accounting pronouncement that defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles (GAAP), and expands disclosures about fair value measurements.

Federal Financial Institutions Examination Council (FFIEC) – Interagency rulemaking group, consisting of the Federal Reserve, OTS, OCC, FDIC, and NCUA.

Federal Home Loan Bank (FHLB) – Government Sponsored Enterprise whose mission "is to provide cost-effective funding to members for use in housing, community, and economic development; to provide regional affordable housing programs, which create housing opportunities for low– and moderate-income families; to support housing finance through advances and mortgage programs; and to serve as a reliable source of liquidity for its membership." The FHLB System consists of 12 district banks and these banks are regulated by the Federal Housing Finance Authority. The FHLBs are owned by their member banks and thrifts.

Federal Home Loan Banks (FHLBs) Mortgage Programs—Certain FHLBs purchase single-family mortgages from their member financial institutions through these programs and provide an alternative to selling mortgage loans to FNMA and FHLMC. These programs permit a participating institution to share in the credit risk with the FHLB and receive compensation accordingly. These mortgages must meet the same requirements as mortgages that FNMA and FHLMC are permitted to purchase (single-family one—to four-family conforming loans within the size limit established by Congress).

Federal Home Loan Mortgage Corporation (Freddie Mac or FHLMC) – A U.S. Government-sponsored enterprise that purchases conventional mortgages in the secondary mortgage market from insured depository institutions and HUD-approved mortgage bankers and sells participation certificates backed by pools of these mortgages.

Federal Housing Administration (FHA) – FHA is a division of the Department of Housing and Urban Development. Its main activity is insurance of residential mortgage loans made by private lenders.

FICO Score – Another name for credit score. The FICO acronym stands for the Fair Isaac Credit Organization. A consumer will have three FICO scores, one from each national credit bureau. FICO scores are a measure of a consumer's financial responsibility, based on their credit history. Most lenders will look at FICO scores when evaluating a loan application.

Financial Engineering – The field of applied finance devoted to the design and pricing of derivative instruments.

First Loss Piece – The class or tranche within a structured transaction (such as a CMO or CDO) that is first to absorb losses on the underlying collateral or reference index. Also known as the equity piece.

First Payment Default (FPD) – If the borrower does not make the first required payment, it is referred to as a FPD. Some refer to the first payment due under the note but others refer to the first payment due to the investor. If the sale to the investor takes several months, that difference can be material.

Fixed-Rate Mortgage – A mortgage on which the interest rate is set at one level for the term of the loan.

Giant – Large (e.g., \$10 million) pool of FHLMC mortgage-backed securities. The market pays a premium for these securities because the prepayment experience is less likely to deviate from the market norm they are associated with lower recordkeeping expenses, and they are more liquid.

Float – In mortgage servicing, the period of time between receipt of a borrower's loan payment and remittance of funds to investors. Float also applies to tax and insurance escrows.

Floor – Similar to a call option. The buyer of a floor attempts to lock in a minimum interest rate. This strategy may be appropriate if the institution has a sizable portion of short-term assets that are expected to reprice downward in the near future.

FLUX – A measure of the variability of cash flows for mortgage pass-through and mortgage derivative securities in different interest rate scenarios. The higher the FLUX score, the more volatile the security. The average FLUX score is 9.6, ranging from 2.9 for PACs to 31.2 for lOs. FLUX scores are used by insurance regulators as a measure of risk.

Forwards – A commitment to sell a security at a prespecified price at a prespecified date in the future. This technique is frequently used to hedge interest rate risk for mortgage bankers.

Fully Indexed Rate – For adjustable rate mortgages, equals the rate on the underlying index (e.g., CMT, Libor, COFI) plus a predetermined spread. The actual rate on the mortgage may be different due to an initial <u>teaser rate</u> or due to the presence of periodic or lifetime caps and floors.

Futures – Contracts for the purchase or sale of commodities in the future, usually on or before a particular date. Futures contracts on fixed-income instruments, such as Treasury bills, are referred to as financial futures.

Gamma – The rate of change of an option's delta for a small change in the price of the option's underlying, or the second derivative of an option's value with respect to the underlying financial instrument. See also <u>delta</u> and <u>convexity</u>.

Gain-on-Sale (GOS) – The amount by which the sales price exceeded the carrying value of the loan.

Gain-on-Sale Accounting – Asset sales and securitizations result in a gain (or loss) on the sale of the sold assets. Gain on sale accounting is often used as a derisive term for the front ending of income that may not reflect the economic substance of the transaction. For example, retained mortgage servicing rights create an asset that reduces the cost basis of the assets sold, increasing the gain on sale (or decreasing the loss). In addition, FASB Accounting Standard Codification 860 stipulates that the definition of a sale depends on control rather than whether the risk and rewards of ownership have effectively been transferred (the previous standard). As a result, a "sale" can occur even if the institution has retained much of the risk associated with the assets.

Gains Trading – Practice of selling loans/securities when they can be sold for a gain, but holding them for portfolio when market conditions become less favorable. FAS 115 was adopted, in part, to prevent gains trading by establishing stricter rules for designating securities as held to maturity, available for sale, or trading. The practical impact of these rules was somewhat blunted, however, by FFIEC's decision to exclude unrealized gains or losses on debt securities from regulatory capital calculations.

Gearing – Leverage; most often used in the United Kingdom.

GIC – **Guaranteed Investment Contract**. – Although similar to a CD, a GIC is not federally insured. Its risk is largely a function of the financial strength of the insurance company that issued it. Some thrifts bought GICs that were originally investment grade, but as a result of problems with issuing insurance company, these assets became fallen angels.

Give Up – The lower yield resulting from the sale (at a profit) of high yielding assets and the reinvestment into lower yielding assets.

GNMA I – A mortgage-backed security program in which individual mortgage lenders issue securities backed by the "full faith and credit of the United States government." The mortgages comprising the security are government-insured or government-guaranteed. The issuer is responsible for passing principal and interest payments directly to the securities holders, whether or not the homeowner makes the monthly payment on the mortgage. All mortgages in a GNMA I pool must have the same note rate.

GNMA II – Under the GNMA II program, monthly payments are made to the security holders through a paying agent. Multiple issuer pools may be formed through the aggregation of loan packages of more than one GNMA issuer. Under this option, packages submitted by various GNMA issuers for a particular issue date and pass-through rate are aggregated into a single pool backing a single issue of GNMA II certificates. Each security issued under a multiple issuer pool is backed by a proportionate interest in the entire pool rather than solely by the loan package contributed by any one GNMA issuer. Single issuer pools also may be formed. Mortgages underlying a particular GNMA II certificate may have annual interest rates that vary from each other, by established thresholds.

Gnome – Fifteen-year FHLMC pass-through securities (single family, fixed rate conventional loans).

Good Delivery – Securities industry designation (developed by the Public Securities Administration) that obligates the buying broker to accept delivery of a particular security. Generally, "good delivery" occurs when the principal amount purchased is within 2.5 percent of the agreed-upon amount.

Government National Mortgage Association (GNMA) also known as Ginnie Mae – A federal government corporation that guarantees mortgage-backed securities that are insured by the Federal Housing Administration or guaranteed by the VA and backed by the full faith and credit of the U.S. government.

Government-Sponsored Enterprise (GSE) – A private organization with a government charter and backing. The Federal Home Loan Mortgage Corporation (FHLMC) and Fannie Mae (FNMA) are GSEs, as are the Federal Home Loan Banks, the Tennessee Valley Authority (TVA) and others.

GRADE – (for Graduated Risk Assessment for DEbentures) Rating system used by Bloomberg Analytics to rate the relative riskiness of a bond, particularly CMOs. It contains a number and two letters to indicate the bond's duration, convexity under a moderate (i.e., 100 basis point) rate change and under a stressed (i.e., 300 basis point) rate change. Convexity scores range from A (strong positive convexity) to E (strong negative convexity). A Treasury bond has a convexity of B while a current coupon MBS has a convexity of C. If a CMO has, for example, a grade of 5BE, this means that its simple duration is comparable to that of a 5 year Treasury Note. The security remains relatively stable if rates change moderately, but becomes extremely volatile if rates change substantially. A Type II PAC may have these characteristics.

Graduated Payment Mortgage (GPM) – A type of flexible-payment mortgage in which the principal payments increase for a specified period of time, usually five years, and then level off.

Granularity – Level of detail.

Guarantee (or Guaranty) Fee – The fee paid to a federal agency (or private entity) in return for its agreement to accept a portion of the loss exposure. Currently, typical guarantee fees required by Freddie Mac and Fannie Mae for loan sales without recourse range from 0.16 percent to 0.25 percent of the pool balance annually. The GNMA guarantee fee on pools of federally insured or guaranteed loans is lower, 0.06 percent annually.

Haircut – The difference between the market value of a security used as collateral for a loan and the amount of money a lender will advance against it. Frequently used in reference to repurchase agreements and reverse repurchase agreement. Also used to refer to the capital requirement that mortgage servicing rights be carried at the lower of the carrying value or 90 percent of their market value.

Hazard Bond – Bond that will absorb prepayments or losses due to hazard conditions.

Held-to-Maturity – Classification for securities that the institution has the intent and ability to hold to maturity. These securities are reported at amortized cost.

High LTV Loan – Any loan, line of credit, or combination of credits secured by liens on or interests in owner-occupied one— to four-family residential property that equals or exceeds 90 percent of the real estate's appraised value, unless the loan has appropriate credit support. Appropriate credit support may include mortgage insurance, readily marketable collateral, or other acceptable collateral that reduces the LTV ratio below 90 percent.

High-Yield Bonds – Debt instruments, which are typically below investment grade or are unrated. The high yields associated with these securities are commensurate with an increased level of default and credit risks. Also called junk bonds.

HUD – A governmental entity responsible for the implementation and administration of housing and urban development programs. HUD was established by the Housing and Urban Development Act of 1965 to supersede the Housing and Home Finance Agency.

Hurdle Rate – Minimum rate of return required by an investor. The investment is only attractive if the expected return is greater than the hurdle.

Implied Forward Rate Analysis – A method for inferring the market's expectations of interest rates based on the yield curve. For example, if we know the six month Treasury rate, and the one year treasury rate, we can calculate what the six month rate should be six months from now.

International Financial Accounting Standards (IFRS) — Standards and interpretations adopted by the International Accounting Standards Board (IASB). IFRS tends to be more principles-based (less specific) that U.S. GAAP. In August 2008, the SEC announced a timetable that would allow some companies to report under IFRS as soon as 2010 and require it of all companies by 2014.

Interest-Only Loans – Mortgages that for a specified period (e.g., three or five years) the borrower is required to pay only interest and not principal. IO loans can be fixed rate, hybrid, or ARM mortgages.

Interest Rate Collar – Risk management tool that mitigates risk by restricting the range to which a variable rate instrument may rise (cap) or fall (floor).

Interest Rate Floor – A lower limit on a variable interest rate paid or received in a transaction. Also, an interest rate contract typically used in hedging where one party is paid if an index rate moves below an established strike rate, effectively maintaining a floor on the interest rate. An interest rate floor can benefit a servicer as rates decline below a specified level, which has an offsetting effect to the runoff of MSRs.

Interest-Only Strip – A contractual right to receive some or all of the interest due on a bond, mortgage loan, collateralized mortgage obligation, or other interest-bearing financial asset. The interest only strip or "excess yield" consists of forward-looking estimates of interest earned on the underlying assets less the servicing fee paid to the servicer, administration and trustee fees, coupon paid to investors, and credit losses. Interest only strips may or may not be in the form of a security.

Interest Rate Option – Right but not an obligation to pay or receive a specific interest rate on a predetermined principal for a set interval.

Interest Rate Swap – A financial instrument often used in hedging where two parties agree to swap net cash flows, on agreed-upon dates, for an agreed-upon period of time, for interest on an agreed-upon principal, or notional, amount. The notional amount is not typically exchanged, as only net interest cash flows are remitted.

Internal Credit Enhancement – Credit protection provided by subordination, excess spread, and overcollateralization.

International Swaps and Derivatives Association (ISDA) – A trade association for participants in the over-the-counter derivatives market. ISDA has created a master agreement (ISDA Master Agreement) to standardized derivatives contracts.

Interest Coverage (IC) – The current collateral interest flow divided by the interest owned to the reference bond and all bonds senior to it in the structure. The higher the IC ratio for a particular tranche, the greater its credit protection.

Inverse (LIBOR) Floaters – Also known as Yield Curve Notes, have returns based on an intermediate-term fixed interest rate less a short-term floating rate index (e.g., 6-month LIBOR).

IO Security – A security that pays only the interest distributions from a pool of underlying loans. The principal cash flows from the underlying loans are thus "stripped" into two separate securities. IOs generally decline in value as rates fall, due to the increased prepayments on the underlying mortgage loans. This reduces the amount of interest received by the security holder over the life of the underlying loans. Servicing rights have cash flow risks similar to IO securities. IOs can be categorized as rate sensitive or credit sensitive. Rate sensitive IOs have little credit risk (except to the extent that defaults on the underlying loans have the same practical effect as prepayments), but are subject to market risk as interest rates change. Credit sensitive IOs provide credit support to senior positions, so are subject to both credit risk and market risk. Credit sensitive IOs are known as credit enhancing IOs in the capital regulations literature.

IPO – Initial public offering.

Investor advances – In mortgage banking, funds advanced to the investor and costs incurred by the servicer on behalf of a delinquent mortgagor.

Jam – A practice by broker/dealers of pawning off undesirable securities on purchasers that may not fully understand their risk.

Jumbo Loan – A mortgage in an amount larger than the statutory limit on loans that may be purchased or securitized by the FHLMC or FNMA.

Jump Class – Class of CMO whose principal priorities change upon the occurrence of multiple "trigger" or other priority changing conditions. This category includes classes whose priority changing conditions fail to satisfy the requirements for the nonsticky jump or sticky jump designation.

Key-Rate Duration – Method that calculates the spot durations of each of the 11 "key" maturities along a spot rate curve. These 11 key maturities are at the three-month and one, two, three, five, seven, 10, 15, 20, 25, and 30-year portions of the curve. In essence, key-rate duration, while holding the yield for all other maturities constant, allows the duration of a portfolio to be calculated for a one-basis-point change in interest rates. The key-rate method is most often used for portfolios such as the bond-ladder, which consists of fixed-income securities with differing maturities. Here is the formula for key-rate duration:

Price of security after 1% decrease in yield – Price of security after 1% increase in yield 2* (Initial price of security)*1%

The sum of the key-rate durations along the curve is equal to the effective duration.

Kitchen Sink Bond – A CMO that pools a number of different CMOs into a single security. The underlying securities are typically high risk (e.g., IOs and POs) but their risks are supposed to be offsetting so that the resulting bond is less risky that its component parts. The risks with a Kitchen Sink Bond are that the underlying securities may not offset each other perfectly, the structure is extremely complex and difficult to evaluate, and bonds may become illiquid. Also known as a **Re-REMIC** or an **Available Funds Class** (**AFC**) **bond.**

Knock-Out – A provision (for an amortizing swap) that can trigger termination based on an indexed rate. For example, it may specify that if LIBOR is below six percent after one year, the swap will terminate.

Lagging Index – An ARM index that reflects past as well as current interest rates. COFI is a lagging index because a bank's cost of funds reflects both past and current transactions so it will not fully reflect the current interest rate environment.

Level I Pricing – The top rung of the <u>SFAS 157</u> valuation hierarchy, which favors observed inputs over unobserved inputs. Uses quoted prices in active markets on identical instruments. An active market is said to exist when transactions occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level II Pricing – The middle rung of the <u>SFAS 157</u> valuation hierarchy. Prices are based on observable inputs, either directly or indirectly.

Level III Pricing – The bottom rung of the <u>SFAS 157</u> valuation hierarchy where prices are based on unobserved inputs. Most common with illiquid assets. Also known as <u>mark -to-model</u> pricing.

Leverage – A debt-to-equity ratio. Leverage increases both potential returns and potential losses.

London Interbank Offered Rate (LIBOR) – The rate the highest quality banks pay for Eurodollar deposits. There s a different LIBOR for each deposit maturity. LIBOR is commonly used as an index that represents short-term rates.

LIBOR/Swap Curve – Yield curve based on Libor rates (for shorter maturities) and swap rates (for longer maturities).

Liquidity CMOs – CMOs with a stated maturity of less than five years.

Loan Production Office or LPO – An office where loan application, underwriting, and/or loan closing take place. This office does not take deposits and it is not considered a branch of the thrift.

Loan Serviced for Others, or LSFO – The dollar amount of loans being serviced for outside investors.

LOCOM –**Lower of Cost or Market** – Accounting technique appropriate for held for sale portfolios (e.g., mortgage banking operations) where carrying values are adjusted downward based on market depreciation. The carrying value never exceeds amortized historical cost.

Lock-Out – A provision (for a bond, borrowing, or an amortizing swap) that indicates that no amortization or prepayment will occur over a specified period of time (e.g., the first year of the contract). Designed to limit call risk.

Loss Curve – A graphical representation of the pattern of losses experienced over time. See Seasoning.

Loss Severity – The rate of losses suffered on defaulted assets.

Marginal Cost – The change in total cost that arises when the quantity produced (or purchased) changes by one unit. Economies of scale are said to exist when marginal cost is less than the average cost per unit. This means that the average cost will decline as new volumes are added.

Marginal Cost to Originate – The increase in total costs when one additional loan is originated.

Marginal Cost to Service –The increase in total servicing costs when one additional loan is added to the servicing portfolio.

Market Value Swap – A form of credit enhancement for <u>ABCP</u> transactions where a highly rated counterparty (credit provider) agrees to cover any declines in the market value of the underlying collateral. The credit provider risk exposure results from a default by the ABCP issuer combined with a decline in the value of the underlying collateral.

Mark-to-Market – Accounting technique appropriate for trading accounts and available-for-sale portfolios where the carrying values of assets are adjusted based on market depreciation <u>or</u> market appreciation.

Mark to Model – A process where the value of assets (or liabilities) are based on the result of a model, typically a sophisticated statistical model, rather than by market transactions. Mark to model values are generally considered less reliable than true market prices. The poor performance of models in recent years has prompted some to label mark to model approaches as "mark to make believe."

Mark Up – Refers to the difference between what the dealer has paid for a security and the price at which the security is offered to another person. Also called spread.

Master Servicer – Contractually responsible servicer of a mortgage or pool of mortgages that is included in a servicing or subservicing arrangement.

Matched Principal Bond – Similar to a Kitchen Sink Bond in that it pools a number of different CMOs into a single security. In addition, however, there is sufficient underlying principal (usually in the form of POs) to cover the principal on the bond.

Maturity – The date on which an agreement expires.

MBA – **Mortgage Bankers Association** – The national association representing the mortgage banking business.

MBA Cost Study Report – The annual report provides analysis of income and costs associated with origination, warehousing, marketing, and servicing.

MBA Method – Approach to measuring mortgage delinquencies that indicates a loan increases its delinquency status if a monthly payment is not received by end of day immediately preceding the loan's next due date. This approach is standard in the prime market. Contrast with the <u>OTS method</u>. A borrower that misses one payment would be delinquent under the MBA method but current under the OTS method.

MBA Refi Index – An index of applications to refinance mortgages. The index's base uses mortgage applications as of 3/16/1990, so an index rate of 200 means that refinancing applications were double those of 3/16/1990. The Refi Index is considered a leading indicator of future prepayments.

MBS – **Mortgage-Backed Security** – An investment instrument backed by mortgage loans as security. Ownership is evidenced by an undivided interest in a pool of mortgages or trust deeds. Income from the underlying mortgages is used to pay interest and principal on the securities. (Note – OTS's TFR instructions refer to this as an MPS or mortgage pool security).

MERS – (Mortgage Electronic Registrations System) – A separate corporation that acts as the nominee for the lender and any of the lenders successors. MERS is the mortgagee and the loan is registered in the MERs system. When the loan is sold, the MERS system records the transaction but MERS remains as the mortgagee.

Mezzanine Bond – A bond that provides credit enhancement to the senior classes of a deal, but has a higher credit rating than the subordinated bonds also offered in the deal. For example, a security may have tranches A, B, and C. The first wave of losses is absorbed by C, then by B, then by A. B is the Mezzanine Bond; it has more credit risk than the senior A tranche but less credit risk than the subordinate C tranche.

Midget – A 15-year GNMA pass-through security. (FHA/FMHA/VA loans). This is a dealer term and not used by GNMA in its formal description of the program.

Mismatched Floater – A floating rate CMO that adjusts at least annually, but off of a longer-term index (e.g., the 10 year Treasury). The major risk with this type of security would be if short-term rates adjust upward more quickly than long term rates. (See <u>basis risk</u>.)

Modified Duration – Duration divided by (1+i/c) where i is the interest rate and c is the number of times the interest payment is received in one year. For example, if the duration of a bond with a semi—annual coupon payment has a current market yield of ten percent and a duration of four years, the modified duration is calculated as follows: 4/(1+.10/2) or 3.8 years. If interest rates increased or decreased by 100 basis points, the bond would be expected to change in value by 3.8 percent. Modified duration is a better measure of price sensitivity than duration.

Money Good – A bond where full repayment of principal is expected even if the security is trading below book.

Monoline Insurer – Insurance company that is restricted, by the terms of its charter, to writing insurance policies related to a single type of risk. A monoline insurer typically provides unconditional guarantees of repayment for securities. Many of these companies have experienced financial difficulties, reducing the value of their guarantees.

Mortgage-Backed Bonds – Bonds secured by mortgages. Unlike mortgage-backed pass-through securities, mortgage-backed bonds do not convey ownership of any portion of the underlying pool of mortgages.

Mortgage Banker – A lender that originates loans for sale to other investors. The mortgage banker frequently continues to service the loans after their sale to others.

Mortgage Broker – An individual or firm that receives a commission for matching mortgage borrowers with lenders. Mortgage brokers typically do not fund the loans they help originate.

Mutual Funds – Funds coordinated by investment companies that invest in portfolios of related securities, such as growth stocks or money market instruments. The value of the fund's shares is related to the value of the underlying securities. The funds may be open-ended, whereby the investment company continuously accepts new investors, or closed-ended, in which case an investor must purchase existing shares either through the investment company or in the secondary market.

Mortgage Derivative Product – A financial instrument that is created by redistributing the cash flows from mortgages or mortgage-backed securities to new classes of securities instruments. The most common derivatives include multiple class securities, stripped mortgage-backed securities, and residuals.

Mortgage Insurance (MI) or Private Mortgage Insurance (PMI) – Insurance coverage that protects mortgage lenders or investors in the event the borrower defaults. By absorbing some of the credit risk, MI allows lenders to make loans with lower down payments. The federal government offers MI for FHA loans; private companies offer MI for conventional loans.

Mortgage Pool – A group of mortgage loans with similar characteristics that are combined to form the underlying collateral of a mortgage-backed security.

Mortgage Servicing Rights (MSR) – The right to service a mortgage loan or a portfolio of loans. The value of MSRs are treated as assets if they were purchased by a third party or retained as part of a mortgage sale or securitization. The value of MSRs is primarily a function of the servicing fee, costs to service, prepayments on the underlying mortgages, earnings from float on escrows, and the required rate of return on the servicing (discount rate).

NASDAQ – National Association of Securities Dealers Automated Transaction System – An American electronic stock exchange.

Negative Carry – A situation whereby an arbitrageur earns a lower yield on securities than paid to finance the securities. Opposite of Positive Carry.

Negatively Amortizing Loan – A loan in which monthly payments fund only part of the interest payable, and the remainder is added to the principal balance, thereby increasing, or negatively amortizing the outstanding balance.

Negative Convexity – Phrase used to describe a particular type of instability in the duration of an instrument. Negative convexity means that as yields rise, duration rises and as yields fall, duration falls. Graphically, this is seen as a price/yield curve for which the price at very low and very high yields is less than the price indicated by a straight, tangent line. For an instrument with negative convexity, duration understates the interest rate sensitivity. If convexity is low, that is, if the price/yield relationship is close to a straight line, duration is stable. If convexity is high, duration is unstable. The greater an instrument's convexity, the less accurate duration will be. Callable bonds, mortgage loans, and mortgage-backed bonds typically have negative convexity.

NIMS (Net Interest Margin Securities) – A NIM securitization structure is created when an issuer securitizes residual cash flows from existing asset-backed transactions. Residual certificates receive cash flow on a monthly basis only after all fees and expenses related to the transaction and amounts due on all other classes of certificates have been paid.

No-Bid— An option that permits the VA to pay the guaranty rather than take possession of the property and pay the full amount of the loan.

NonAgency Security – A security, especially an MBS that is not issued by Fannie Mae, Freddie Mac, or Ginnie Mae. These securities are subject to more credit risk and are less liquid than agency MBS. Also known as <u>Private Label</u> Securities.

NonAsset Trigger Event – A change in a transaction's priority of payments due to a specific event that is not related to the performance of the underlying assets (e.g., the insolvency of the seller or servicer).

Nonconforming Mortgage – A mortgage loan that does not meet the standards of eligibility for purchase or securitization by the FHLMC or Fannie Mae. The loan amount, the loan-to-value ratio, the term, or some other aspect of the loan does not conform to the agencies' standards.

Nontraditional Mortgage Product (see also "<u>Alternative</u>") – A type of mortgage that allows borrowers to defer payment of principal and sometimes interest. Examples include interest only loans and payment option ARMs.

Normal Servicing Fee –The servicing fee rates set by GNMA, FNMA, and FHLMC are generally considered normal servicing fees. Currently, the normal servicing fee rate is 0.25 percent for fixed rate mortgages, 0.375 percent for adjustable rate mortgages, and 0.44 percent for federally insured and guaranteed loans. A bank may not use its cost to service loans as the normal servicing fee.

Notional Amount – The principal amount or face value of a financial derivative. The notional amount is used to calculate the payments that are exchanged by the counterparties in the transaction. Market participants refer to notional principal because, unlike bonds or other conventional credit instruments, these types of derivatives do not involve an exchange of principal. Rather, the parties state the principal amount only as a basis for calculating the sizes of the interest related payments that they exchange. In this application, principal is only a reference point or idea – hence the term. Also called the notional principal balance.

Notional Class (NTL) – CMO classes that have only a notional principal amount (i.e., used to calculate the amount of interest due on an interest only class that is not entitled to any principal.

NRSRO – National Recognized Statistical Rating Organization – Firm designated by the SEC whose bond ratings can be used for meeting certain regulatory criteria (e.g., investment grade bonds, SMMEA). NRSROs include Moody's, Standard and Poor's, Fitch, A.M. Best, and Dominion Bond Rating Service, Ltd.

Off-Balance Sheet Item – Asset or liability of actual or potentially assignable value or cost, such as letters of credit or loan commitments that are not permitted or required to be booked on the balance sheet under GAAP. Financial derivatives, such as futures, options, and swaps are often referred to as off-balance sheet items as well, even though their net values (positive or negative) are recorded on the balance sheet under GAAP.

Offering Circular – A disclosure document used in marketing a new securities issuance to prospective investors. The circular usually describes the characteristics of each class of the security and provides information on the underlying assets.

Offset – The liquidation of a purchase of futures through sale of an equal number of contracts of the same delivery month, or the covering of a short sale of futures through the purchase of an equal number of contracts of the same delivery month. Either action cancels the obligation to make or take delivery.

Operational Risk – Risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.

Option – A contract granting the right to buy or sell a security or a commodity at a set price within a stipulated time.

Option ARM – An <u>alternative or nontraditional mortgage product</u> where the borrower may choose from several payment amounts. The payment options often include amounts that allow for negative amortization, interest-only, or amortizing payments.

Origination Fee – The fee a lender charges to prepare documents, make credit checks, and inspect the property being financed. Origination fees are usually stated as a percentage of the face value of the loan.

Optional Principal Reduction Bonds – Securities with a fixed rate of return but an uncertain term to maturity. These bonds may be fully or partially called based on the interest rates they are indexed to. According to a predetermined call schedule, investors can expect to earn a "significant" spread over Treasury if these bonds are called away; however, if the call provision is not exercised, investors can expect a return equivalent to similar maturity Treasuries.

Out-of-the-Money – For call options, when the strike price exceeds the market price. For put options, when the current market price exceeds the strike price. Its immediate exercise value is negative. It has no intrinsic value.

Overcollateralization – The extent to which the dollar amount of the underlying assets exceed the dollar amount of the security. Often used as a form of credit enhancement for CMOs, CDOs, and ABSs.

Over-the-Counter Market (OTC) Market – The market for securities that are not listed on the NASDAQ or a national securities exchange, like the New York Stock Exchange. Trading in these securities takes place through dealers who negotiate the transactions over the telephone. Prices are determined by negotiation between dealers and customers, rather than by auction, as on a stock exchange.

OTC Bulletin Board – A regulated quotation service that displays real time quotes, last-sale prices, and volume information on OTC equity securities.

PAC – **Planned Amortization Class** – Type of CMO class that attempts to resemble more closely noncallable bonds. A PAC limits prepayment risk by establishing a planned schedule of cash flows within a band of prepayments. A PAC can become "busted" when prepayments become exceptionally high or low, and the cash flows become much more uncertain.

PAC Drift – A PAC band does not remain fixed over time. For example, high prepayments on the underlying collateral can deplete the supply of support bonds, limiting their ability to absorb prepayment risk. As a result, the PAC band can narrow or even disappear, or "bust."

PAC Support – Also known as companion bonds. Support bonds make PACs possible by absorbing much of the prepayment risk. These securities can have considerable prepayment and extension risk.

Pair Off – A security purchase transaction that is closed out or sold at, or prior to, settlement date. In a pair-off, the institution will commit to purchase a security. Then, prior to settlement date, the purchase will be paired-off with the sale of the sale security. Such transactions are regarded as trading activity and considered speculative.

Participation Certificate (Freddie Mac PC or FHLMC PC) – A mortgage pass-through security issued by the FHLMC that is backed by a pool of conventional mortgages purchased from a seller. The seller typically retains a 5 percent to 10 percent interest in the pool.

Pass-Through or Pass-Through Certificate (PC) – A mortgage-backed security in which principal and interest are passed through to the investors as received. The mortgage collateral is held by a trust in which the investors own an undivided interest.

Pass-Through Rate – The interest rate paid to the investors who purchase mortgage loans or mortgage-backed securities. Typically, the pass-through rate is less than the coupon rate of the underlying mortgages.

Pass-Through Security – A pass-through is created when one or more mortgage owners form a group or "pool" of mortgages and subsequently sell shares or participations in the pool. The pool may contain as few as one or as many as several thousand mortgages. After pooling, each mortgage continues to be serviced by its originator, or other contracted service. A trustee is assigned to hold the mortgage titles and to ensure all mortgages and properties are in acceptable form. The cash flow generated by the pool of mortgages, which consists of principal plus interest minus servicing and other fees, is distributed to the pass-through security holders on a pro-rata basis. The name is derived from the fact that cash flow is "passed through" to the security holders by the servicers.

Penultimate ABX – An <u>ABX</u> index based on the second-to-last (penultimate) tranche in a CMO structure. Penultimate ABX indices will show less price volatility than will ABX indices based on otherwise comparable, but longer duration tranches.

Pipeline – For a mortgage banker, the period between commitment and origination. Pipeline risk is often hedged with forward commitments to sell.

PITI – **Principal, Interest, Taxes, and Insurance** – The payment a borrower must make to cover the principal and interest on the loan as well as the amounts needed for the escrows amounts to pay taxes and insurance.

PO – **Principal Only Strip** – Mortgages and mortgaged backed securities can be stripped with the cash flows attributable to principal and interest payments segregated and sold separately. When the underlying mortgages prepay, the yield on POs increases because the cash flows are received more quickly. A decline in prepayments reduces the yield.

Pool Factor – The outstanding mortgage pool's principal balance divided by the original principal balance.

Portfolio Lender – A company that holds loans in portfolio rather than selling them in the secondary market.

Positive Carry – Circumstance where the cost of financing an investment is less than the return obtained from that investment. In warehousing, positive carry results when the interest rate paid for short-term warehouse financing is less than the interest rate earned on the mortgages held in the warehouse.

Positive Convexity – A particular type of instability in the duration of an instrument. Positive convexity means that as yields rise, duration declines. Graphically, this is seen as a price/yield curve for which the price at very low and very high yields exceeds the price indicated by a straight, tangent line. For an instrument with positive convexity, duration overstates the interest rate sensitivity. If convexity is low, that is, if the price/yield relationship is close to a straight line, duration is stable. If convexity is high, duration is unstable. The greater an instrument's convexity, the less accurate duration will be.

Premium – A fee paid over and above the face value of a bond or note.

Preferred Term Securities (PRETSLs) – A type of pooled <u>trust preferred security</u> issued by Keefe, Bruyette & Woods.

Prepayment – The payment of all or part of a loan before it is contractually due.

Prepayment Penalty – A fee that must be paid to the lender if the borrower prepays a loan within a defined time period.

Prepayment Speed – The rate at which mortgage prepayments occur or are projected to occur, expressed as a percentage of the outstanding principal balance.

Price Compression – For bonds, mortgages, etc. prices are generally inversely related to market interest rates. The price appreciation for mortgages and MBS, however, can be dampened due to a corresponding increase in prepayments. Price compression is particularly prevalent for premium mortgages. (Traditionally, prepayments would start to kick in when market rates were 200 basis points below the coupon rate, although recent experience indicates that the trigger points are occurring earlier.)

Primary Dealer – Bank or investment dealer authorized to buy and sell government securities in direct dealings with the Federal Reserve Bank of New York in its Open Market Operations. Such dealers may be qualified due to their reputation, capacity, and adequacy of staff and facilities.

Primary Servicer – The primary servicer responsibilities include payment collection, cash management, escrow administration, customer service, and investor reporting. The primary servicer should maintain effective systems to report loan activity directly to the trustee and/or investor, or when in place, to the master servicer, who oversees and monitors the primary servicer's performance.

Principal-Only Mortgage Strips (PO Strip) – A PO strip is the principal portion of a collateralized mortgage obligation. A PO strip has positive convexity and a long duration. Its yield increases as prepayments increase, making it an effective vehicle to hedge MSRs.

Private Label – See **NonAgency** Security.

PSA – (**Public Securities Association**) **Prepayment Model** – A standard of measurement of the projected annual rate of prepayment for a mortgage loan or pool of loans. A 100 PSA prepayment rate assumes that loans prepay at a 6 percent annual rate after the 30th month of origination. From origination to the 30th month, the annualized prepayment rate increases in a linear manner by 0.2 percent each month (6 percent divided by 30). See also <u>CPR</u>.

Put Option – The right (not obligation) to sell a security at some predetermined price over some predetermined period. With a long put, you buy the right; with a short put, you sell the right. Long puts benefit from rising rates (you can sell, or "put" the security at an above market price) while short puts benefit from falling rates (the option will expire unused while you receive a premium). Similar to a cap.

Recourse – The retention, in form or in substance, of any credit risk directly or indirectly associated with a sold asset that exceeds a pro rata share of that seller's claim on the asset. If a seller has no claim on an asset it has sold, then the retention of any credit risk is recourse. Recourse obligations typically arise from the transfer of assets in a sale and retention of an explicit obligation to repurchase assets or to absorb losses due to a default on the payment of principal or interest or any other deficiency in the performance of the underlying obligor or other party. Recourse may also exist implicitly through credit enhancements beyond contractual obligations to support assets sold. Recourse obligations include: (1) Credit-enhancing representations and warranties made on transferred assets; (2) Loan servicing assets retained pursuant to an agreement under which the savings association will be responsible for losses associated with the loans serviced. Servicer cash advances as defined in this section are not recourse obligations; (3) Retained subordinated interests that absorb more than their pro rata share of losses from the underlying assets; (4) Assets sold under an agreement to repurchase, if the assets are not already included on the balance sheet; (5) Loan strips sold without contractual recourse where the maturity of the transferred portion of the loan is shorter than the maturity of the commitment under which the loan is drawn; (6) Credit derivatives that absorb more than the savings association's pro rata share of losses from the transferred assets; (7) Clean-up calls on assets the savings association has sold. However, clean-up calls that are ten percent or less of the original pool balance and that are exercisable at the option of the savings association are not recourse arrangements; and (8) Liquidity facilities that provide support to asset-backed commercial paper (other than eligible ABCP liquidity facilities).

Recourse Servicing – Mortgage servicing contracts whereby the servicer assumes all or part of the risk in the event of borrower default.

Registered Agent – A mortgage loan producing entity that has contracted with an investor to generate loans for that investor to a specified standard in return for a set fee per loan.

Regulation AB – Rules governing offerings of asset-backed and mortgage-backed securities that were adopted by the Securities and Exchange Commission in December 2004 and provide a consolidated, comprehensive set of registration, disclosure, and reporting requirements for these securities. The rules require extensive additional disclosure in asset-backed security prospectuses, including expanded descriptions and financial disclosure regarding transaction parties and static pool data for portfolios and prior securitizations. The rules include, among other things, requirements for additional periodic reports and new standards for assessment of servicing compliance and the related accountants' attestation.

Relative Value – A phrase used to refer to whether or not a security's price is relatively cheap, relatively fair, or relatively rich (expensive) compared to prices for other securities.

Real Estate Mortgage Investment Conduit (REMIC) – A pass-through tax entity for issuing multiclass mortgage-backed securities, which allows the issuer to treat the security as a sale of assets for tax and accounting purposes. Most CMOs are issued as REMICs.

Redemption in kind – A mutual fund redemption in the form of a pro rata share of the fund's underlying assets rather than in cash.

Re-REMIC - Same as Kitchen Sink Bond. Also called an Available Funds (AFC) Bond.

Reserve Account – A form of credit enhancement in a <u>securitization</u>. Reserve accounts are at least partially funded at the start of the transaction but are often designed to be built up over time with excess cash flow available after making payments to investors.

Residual – The equity interest in a CMO. Returns on these securities can be very sensitive to changes in prepayments on the underlying mortgages. A floating rate residual represents the difference between the fixed rate on the underlying mortgages and the floating rate paid to investors. The securities will suffer an erosion in yield if rates rise (because the spread between the rate on the underlying mortgages and the rate on paid out to investors will shrink) or if they fall precipitously.

Residual Interest – Any on-balance sheet asset that: (i) Represents an interest (including a beneficial interest) created by a transfer that qualifies as a sale (in accordance with generally accepted accounting principles) of financial assets, whether through a securitization or otherwise; and (ii) Exposes a savings association to credit risk directly or indirectly associated with the transferred asset that exceeds a *pro rata* share of that savings association's claim on the asset, whether through subordination provisions or other credit enhancement techniques. (2) Residual interests generally include credit-enhancing interest-only strips, spread accounts, cash collateral accounts, retained subordinated interests (and other forms of overcollateralization), and similar assets that function as a credit enhancement. (3) Residual interests further include those exposures that, in substance, cause the savings association to retain the credit risk of an asset or exposure that had qualified as a residual interest before it was sold. (4) Residual interests generally do not include assets purchased from a third party. However, a credit-enhancing interest-only strip that is acquired in any asset transfer is a residual interest.

Reps and Warranties – Representations and Warranties – This is the term used to cover the representation and warranties of the seller to the buyer of loans. Standard reps and warranties generally cover items such as the loans are all the type presented (all 30-yr fixed and not ARMs), they all meet the documentation and underwriting requirements of the buyer, and there is no fraud.

"Credit-enhancing" representations and warranties are considered <u>recourse</u> for regulatory capital purposes. Warranties that permit the return of assets in instances of fraud, misrepresentation, or incomplete documentation are not considered recourse, but are likely to be scrutinized more closely if the sold assets experience significant credit losses.

Retail Class (RTL) – CMO classes designed for sale to retail investors. Retail assets typically are issued in small retail class units and may receive principal payments in accordance with special priorities and allocation procedures.

Retail Production – Mortgage loan production for which the origination and underwriting process was handled exclusively by the bank or a consolidated subsidiary of the bank.

Revenue Bonds – State or municipal debt securities which are repaid from the income generated by specific projects established by governmental authority. Revenue bonds are considered to be less secure than general obligation bonds because they are not supported by the full taxing authority.

Revolving Period – The period during which newly originated loans or other receivables may be added to an asset pool of a revolving transaction.

Reverse Auction – Also known as a <u>Dutch Auction</u>.

Riding the Yield Curve – The purchase of a higher-yielding, longer-maturity securities financed by short-term, lower costing funds. The strategy depends on an upward-sloping yield curve.

Rich – Securities that sell at a high price, relative to their risks and reward. This situation can arise due to a supply shortage (e.g., too few adjustable rate mortgages are originated) or from excess demand.

Risk Controlled Arbitrage (RCA) – The purchase of mortgage-backed securities (MBS) funded by a short-term source such as reverse repurchase agreements. The short-term funding source is synthetically extended using futures, options, interest rate swaps, caps, or derivative mortgage products so that there is reasonable match in the effective maturities of the assets and liabilities involved in the program. The term is also used more generally to a transaction using financial leverage and emphasizing wholesale funding, such as borrowings.

Risk Management – Controlling the probability, and/or the severity, of a potential adverse event so that the consequences of that event are within acceptable limits. Since all risks have, by definition, the potential to generate losses, and since capital is the ultimate protection against failure resulting from losses, the underlying basis of risk management is equivalent to managing solvency risk.

Rule 144A – An SEC rule that permits institutional buyers to trade privately placed securities, without satisfying certain holding period requirements. Rule 144A securities tend to be more liquid than other private placements, but less liquid than public offerings.

Scenario Analysis – Formalized "what if" analysis typically performed as a part of asset-liability management or corporate risk management.

Scheduled Bond – Type of CMO similar to a PAC in that it has a fairly predictable stream of cash flows across a range of prepayments. The range of protection is narrower than for a PAC, however.

Seasoning – The age of an asset, which can affect its likelihood of default and prepayment. Both prepayments and defaults tend to follow a seasoning curve, where the rates typically rise, then level off and eventually decline.

Secondary Mortgage Market – Trading operations between lenders and investors who buy and sell mortgages and mortgage securities on the open market. Purchasers include both private investors and government sponsored enterprises like FNMA and FHLMC.

Securitization – The process and the result of pooling financial assets together and issuing liability and equity obligations backed by the resulting pool of assets to convert those assets into marketable securities. Any type of financial asset can be securitized. Securitized mortgage obligations may be called **mortgage-backed securities** or **collateralized mortgage obligations**. Securitized nonmortgage assets are typically called **asset-backed securities**. A single loan or groups of similar loans may be securitized. Loans to be securitized must usually be underwritten with terms and documents that conform to wholesale market standards. For some <u>securitizations</u>, additional credit support, called credit enhancement, may be obtained through insurance, a letter of credit, over collateralization, or other means. Many <u>securitizations</u> use multi-tranche (senior/subordinate) structures that allocate the principal and interest cash flows from the underlying assets in patterns that create higher and lower risk securities. Securitization is designed to reduce the issuer's credit risk and improve its liquidity, though reliance on securitization can lead to credit and liquidity problems during periods of financial stress.

Seller/Servicer – FNMA and FHLMC reference to an entity that meets the requirements to sell and service mortgages for these GSEs.

Semi-Variance – An alternative to <u>variance</u> that focuses on negative values of a distribution. This focus on bad outcomes can make semi-variance a better indicator of risk than variance.

Senior Mezzanine - Senior support tranche.

Senior/Subordinated Structure – Method for facilitating <u>securitization</u>. To make a private-issue security (e.g., mortgage backed) more attractive to risk-averse investors the security is sometimes divided into two or more pieces: a "senior" piece with minimal credit risk and a "subordinated" piece that absorbs most of the credit risk on the underlying assets. The senior/subordinated relationship is similar to the relationship between PACs and PAC support bonds. The creation of a senior/subordinated structure is known as **tranching the credit risk**.

Senior Support – CMO tranche that receives credit support from subordinate and mezzanine tranches but also provides credit support to <u>super senior</u> tranches. Losses on senior support tranches will experience losses less-than-proportionate to losses on the underlying assets until its credit support is exhausted; then it will experience more-than-proportionate to losses on the underlying assets.

Sensitivity Measure – A capital-neutral statistic for measuring interest rate risk. The NPV Sensitivity ratio equals the decline in the NPV/PV of Assets Ratio from a 200 basis point rise or decline in rates (whichever has the more adverse effect). For example, if NPV equals 8 percent of the portfolio value of assets in the current market and 5.5 percent of the portfolio value of assets if rates rise 200 basis points, the Sensitivity Ratio will equal 250 basis points. See also Exposure Measure.

Sensitivity Tests (Analysis) – A test to see how dependent a forecast, projection or stress test outcome is upon a selected variable or assumption. For example, the secondary marketing manager would be able to see how sensitive the mortgage pipeline and warehouse positions are to changes in interest rates or mortgage prices.

Sensitivity to Market Risk – One of the six CAMELS components reflects the degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a financial institution's earnings or economic capital.

Sequential Pay (SEQ) – CMO classes that receive principal payments in a prescribed sequence, that do not have predetermined schedules and that, in most cases, receive payments of principal continuously from the first payment date on which they receive principal until they are retired.

Servicer – The company that owns the servicing rights to a pool of loans.

Servicing (See also <u>LSFO</u>) – A mortgage banking function that includes document custodianship, receipt of payments, cash management, escrow administration, investor accounting, customer service, loan setup and payoff, collections, and the administration of other real estate owned.

Servicing Agreement – A written agreement between an investor and a mortgage servicer stipulating the rights and obligations of each party.

Servicing Fee – The contractual fee due to the mortgage servicer for performing various loan servicing duties for investors.

Servicing Premium Refund – A common clause in many sales agreements that may require the seller to refund the fee paid for the servicing rights if certain conditions occur. (Also, see <u>reps and warranties</u>).

Servicing Released – A stipulation in a mortgage sales agreement that specifies that the seller is not responsible for servicing the loans.

Servicing Release Premium – **SRP** – A fee paid to a correspondent originator to entice that loan producer to sell their loan and associated servicing. This represents a significant portion, if not the majority, of the fair value of the MSR associated with that loan.

Servicing Retained – A stipulation in a mortgage sales agreement that specifies that, in return for a fee, the seller is responsible for servicing the mortgages.

Servicing Runoff – Reduction in the principal of a servicing portfolio resulting from monthly payments, mortgage prepayments, and foreclosures. Runoff reduces future servicing fee income and other related cash flows as well as the current market value of the servicing portfolio.

Set-Off – Right that allows two parties with cross-claims to net the amounts owed.

Settlement Date – The deadline by which a purchaser of securities must pay the seller and the seller must deliver the securities. The deadline for "regular way" or "corporate" delivery of securities is the fifth business day following the execution of an order. For listed options or government securities, the deadline is the next business day.

Short Sale — The practice of selling a financial instrument that the seller does not own at the time of the sale. Short selling is done with intent of later purchasing the financial instrument at a lower price. Short-sellers attempt to profit from an expected decline in the price of a financial instrument. Short selling or "going short" is contrasted with the more conventional practice of "going long" which occurs when an investment is purchased with the expectation that its price will rise. May also refer to a real estate transaction where the outstanding obligations (loans) against a property are greater than what the property can be sold for. Short sales are a way for homeowners to avoid foreclosure and still be able to pay off their loan by settling with lender.

Significant Transaction – Any transaction that might reasonably be expected to increase an institution's sensitivity measure by more than 25 basis points. TB 13a requires analysis of the incremental impact of such a transaction on the institution's interest rate risk profile prior to initiating the transaction.

Skewness – A parameter that describes a lack of symmetry of a probability distribution.

SMMEA Security – Asset the meets the definition of mortgage backed security pursuant to the Secondary Mortgage Market Enhancement Act. This definition includes, among other items, a credit rating of AA or better. For privately-issued (as opposed to agency) MBSs, the SMMEA designation is significant for a number of reasons. SMMEA securities can qualify for the 20 percent risk weight for capital purposes. In addition, these securities tend to be more liquid.

Special Purpose Entity (SPE) – A legal entity, sometimes a trust or a limited partnership, typically created solely for the purpose of holding assets.

Special Servicer – Entity responsible for maximizing recoveries predominantly on portfolios of subprime, home equity, nonperforming, and other loans that necessitate intensive default-related activities, as well as liquidating real estate owned (REO) assets.

Speculator – One who does not hedge, but who trades in futures or options with the objective of achieving profit through the successful anticipation of price movements.

Spot Curve – Points on the zero-coupon yield curve.

Spread – The percentage difference between the interest earned on assets less the interest expense of liabilities.

Standard Deviation – A measure of how much variation from the mean can be expected and is equal to the square root of the variance. Standard deviation is often referred to as the sigma of a distribution.

Standard Error – Measurement that estimates the standard deviation of the difference between the measured or estimated values and the true values.

Standby Commitment – An agreement to purchase mortgages at the option of the issuer synonymous with optional delivery or a short put.

Standby Contract – An option to sell a specified amount of mortgages or mortgage-backed securities by or on a specified date at a specified price.

Standby Fee – A nonrefundable fee paid by a prospective borrower to a prospective lender for a standby commitment.

Stated Maturity – Also known as legal maturity, this represents the final date on which a security must be repaid to avoid an event of default.

Static Pool – Where the underlying collateral or reference assets are known and fixed for the life of the security.

Static Pool Analysis – A measure for assessing the performance of a pool of loans by providing a cumulative default and prepayment history for estimating expected future portfolio cash flows and determining the cash yield on servicing assets. Static pool analysis captures information from a specified population of loans originated or acquired during a specified time frame or from a specific origination source and tracks scheduled payments, prepayments, and default frequency. The information is used to determine performance behavior for evaluation of portfolio cash flow dynamics. These statistics can identify high-risk segments of the portfolio of owned or serviced assets and allow management to determine why a segment failed to perform as profitably as expected.

Step-Up Bonds (and Multiple Step-Up Bonds) — Securities that have interest rates that are fixed over time and then "step-up" to a higher rate after a certain time period. (For example, the initial rate may be 5 percent, increasing to 6 percent after 2 years and 7 percent after 4 years.) The disadvantage with these securities is that they are typically callable at the first (and every) step-up date. It is advantageous for the issuer to call away these bonds if market interest rates are below the higher "step-up" rate, allowing the issuer to refinance these bonds at the lower rate. The duration of these securities gets longer when rates increase since the probability of them being called away is less likely. Additionally, the yield premium given the investor is typically small. Step-up bonds are considered complex securities.

Step-Up Margin – The margin on notes that occurs after a specified date (the step-up date), typically double the previous margin. The step-up margin provides an incentive for issuers to call the security.

Sticky Jump (SJ) – CMO classes whose principal payment priorities change permanently upon the occurrence of one or more "triggers" or other priority-changing conditions. A sticky jump class "jumps" (changes its principal payment priority) on the first payment date when the condition is met and retails that priority until retired. This jump feature makes risk assessment difficult.

Stochastic - Random.

Story Bond – A security that is marketed based on a compelling scenario. For example, a broker may indicate to a thrift that a particular MBS is "cheap", because they were planning to issue a CMO with the securities, were not able to, and are now left with excess inventory.

Strike Price – The price at which securities can be purchased or sold upon exercise of an option, standby or optional commitment. Also called Exercise Price.

Stripped MBS – An instrument that segregates the principal from interest to make separate interest only and principal only MBS.

Structured Arbitrage – The purchase of MBS, normally in conjunction with several derivative products. The objective of the strategy is to achieve high returns within a certain expected range of interest rates and prepayments. If interest rates fluctuate outside of the expected interest rate range, the returns could decline significantly.

Structured Advance/Borrowing – A borrowing with embedded options. One popular example is a convertible advance that the FHLB can, at its option, convert to a floating rate.

Structured Security – A bond that includes derivative elements, such as call or put options or use of complex indices. Structured securities are often issued by government sponsored enterprises.

Subprime Loans – Loans whose borrowers have weakened credit histories, reduced repayment capacity, or incomplete credit history.

Sub-Servicer – A company that performs the on-going servicing activities for a mortgage or pool of mortgages under the terms of an agreement with the contractually responsible servicer.

Substitution Criteria – The parameters under which new assets can be purchased from principal receipts during the revolving period of a transaction, such as a <u>securitization</u>.

Super-Duper Senior – The <u>super-senior</u> tranche of a re-REMIC, which is itself made up of super-senior tranches. The term is especially appreciated by those who like to mock Wall Street hype.

Super-Senior – CMO or CDO tranche that will be the last to absorb losses on the underlying assets. Typically super-senior tranches receive credit support from not only subordinate and mezzanine tranches but also from senior support tranches, which are often rated AAA.

Surety Bond – Written evidence of a third party, called the surety that will be primarily liable for a debt in the case of default.

Swap – An agreement to exchange interest rate payments on a notional amount for a given time period. One party is a fixed-rate payer; the other is a floating-rate payer.

Swaption – An option on a swap.

Synthetic CDO – A <u>collateralized debt obligation</u> in which the risk is transferred through the use of credit derivatives (such as credit default swaps) rather than a true sale of assets.

Systematic risk – That component of an instrument or portfolio's market risk that is correlated with the overall market. Systematic risk cannot be reduced through diversification. See <u>Beta</u>.

Systemic Risk – The likelihood of the collapse of a financial system, such as a general stock market crash or a joint breakdown of the banking system. As such, it is a type of "aggregate risk" as opposed to "idiosyncratic risk", which is specific to individual stocks or banks. Systemic risk should also be carefully distinguished from *systematic risk*, which describes risks the whole economy faces such as business cycles or wars.

Table Funding – Mortgage transaction where the broker or third-party originator (TPO) closes the mortgage in its own name for simultaneous assignment to an investor who advanced money for the funding at closing.

TAC – **Targeted Amortization Class** – A type of CMO that limits the risk of early prepayment (similar to a PAC). However, unlike a PAC, a TAC offers no protection against extension risk arising from slower-than-expected prepayments.

Tail – (1) Mortgage-backed securities allow for a deviance of +2.5 percent of the face value. The tail is that part which is in excess of face value. For example, a \$1 million GNMA security issued for \$1,025,000 would have a tail of \$25,000. (2) The extreme end of a probability distribution, used to describe improbable (but potentially catastrophic) events.

Taint – If a significant portion of a "held to maturity" portfolio is sold (gains trading), the entire remaining portfolio may be considered tainted and required to be "held for sale" and recorded at fair value.

TB 13a – "Management of Interest Rate Risk, Investment Securities, and Derivative Activities" – Thrift Bulletin that provides guidance on the management of interest rate risk, including the management of investment and derivatives activities. The bulletin also describes the framework examiners will use in assigning the "Sensitivity to Market Risk" (or "S") rating.

TB 13a-2 – "Structured Advances" – Thrift Bulletin that provides guidance on the prudent management of structured advances. Includes a requirement to conduct a prepurchase analysis for any <u>significant transaction</u> involving structured advances.

TB 73a – "Investing in Complex Securities" – Thrift Bulletin that provides guidance on investing in trust preferred and other complex securities.

TBA – Abbreviation for future pools "to be announced" which are bought and sold for future settlement. "To be announced" refers to interest rates and due dates which are determined at a later date. Trading in these securities is done on a yield basis.

Teaser Rate (Introductory Rate) – A low initial rate on an adjustable rate mortgage, used as a means of attracting borrowers. A major implication of a teaser rate is that it limits the upward adjustment when rates rise. For example, if the fully indexed rate is 7 percent, the teaser rate is 5 percent, and the annual cap is 2 percent, the interest rate after the first year will adjust to 7 percent if rates remain stable or if rates rise sharply (because it will cap out).

Time-series Data – Observations of a variable over time.

Time Value of an Option – The market value of an option minus its intrinsic value. Options with longer time to expiration, all else being equal, have higher values.

Theta (Time) Risk – Measure of how much the value of an option changes as it moves toward maturity.

Third Party Originator (TPO) – see Broker or Correspondent.

Third-party Servicing (Subservicer) – Mortgage loan Servicer that performs the on-going servicing activities for a mortgage or pool of mortgages under the terms of an agreement with the contractually responsible servicer.

Three-Part Test – Under former TB 52, mortgage derivatives were considered "high risk" if 1) its weighted average life is > 10 years; 2) expected weighted average life extends by more than 4 years or shortens by more than 6 years from a yield curve shift of 300 basis points; or 3) its price declines by more than 17 percent from a yield curve shift of 300 basis points. Floating rate securities are exempted from the first 2 tests. While TB 52 is no longer in effect, these risk benchmarks often appear in an institution's internal investment policy.

Tick – Refers to a change in price, either up or down. Synonymous with minimum fluctuation.

Time Decay (Theta) Risk – The exposure to a change in the value of a transaction or portfolio arising from the passage of time. Typically associated with options.

Time Value – Along with <u>intrinsic value</u>, the other element of an option premium. The longer the remaining time before expiration, the greater the time value of the option.

Title I Loan – Under the Title I loan insurance program, established by Title I of the National Housing Act in 1934, lenders make loans from their own funds, and HUD insures the lender against loss if the borrower defaults on the loan. Title I loans are made for property improvement or manufactured home and lot purchase. Title I loans are also used as part of state and local community revitalization programs.

Toggle (T) Class – Floating rate or inverse floating rate CMO classes whose coupons can change significantly as a result of very small changes in the applicable index. The change in coupon is not a continuous function of changes in the index; rather, a change in the index will result in a "shift" from one predetermined rate to another predetermined rate. Similar to a **Range Bond**.

TPM – **Tiered Payment Mortgage** – A 15-year FHLMC mortgage-backed security associated with a "buydown' arrangement on the underlying mortgages. The mortgagor pays a low initial rate that increases over time. The holder of the TPM, however, receives a fixed rate because any interest shortfalls are paid by a buydown fund. TPMs typically prepay quickly. Although TPMs have minimal credit risk (due to the FHLMC guarantee), they have less liquidity than more conventional mortgage-backed securities.

Trading – Debt and equity securities that are bought and held principally for the purpose of selling them in the near term. These securities are reported at fair value and unrealized gains and losses are included in earnings and shareholder's equity. Trading activity is generally considered speculative in nature and should only be conducted in a closely supervised trading account by institutions with strong capital and earnings.

Tranche – CMOs are split into different units, called tranches, with different cash flows, yields, and risks. Analogous to the Three Bears fairy tail. Just as Goldilocks could choose between the too hot porridge of Papa Bear, the too cold porridge of Mama Bear, and the just right porridge of Baby Bear, investors can choose between the cash flow certainty of a PAC tranche, the yield of a support tranche, and the lower interest rate risk of a floating rate tranche. From the French, meaning "slice."

Tranche Thickness – The difference between a tranche's <u>detachment point</u> and <u>attachment point</u>. Tranches with less thick tranches incur losses more quickly once losses on the underlying assets exceed the attachment point. For example, if a tranche's attachment point is 15 percent and its detachment point is 17 percent, tranche thickness is 2 percent. In this example, an additional one percent increase in losses on the underlying assets beyond the attachment point of 15 percent would result in a 50 percent loss on the tranche.

Tranching the Credit Risk – Term used to characterize a senior/subordinated structure. It broadens the base of potential investors by dividing the security into low risk/low yield and high risk/high yield pieces.

Treasury Bill (T-Bill) – US Treasury security with a maturity of a year or less at the time of issue.

Treasury Bond (T-Bond) – A coupon-bearing Treasury security with original maturity greater than ten years.

Treasury Note (T-Note) – Coupon-bearing Treasury security with original maturity greater than one year and up to ten years.

Trigger Event – The occurrence of an event that indicates the financial condition of the issuer of the quality of the underlying collateral has deteriorated, such as defaults rising above some threshold level. Typically, such events are defined in the transaction documents, as are changes in the transaction structure or priority of payments.

Trust Preferred Securities (TruPS) – Cumulative preferred stock issued by bank holding companies through a Special Purpose Entity (SPE). For the issuing bank holding company, TruPS combine benefits of both debt and equity. TruPS often have a provision that allows the issuer to defer preferred stock payments for periods of time. TruPS can be pooled and issued as a **CDO**. See **PreTSLs**.

t-Statistic — A measure of how extreme a statistical estimate is. Frequently used in <u>regression analysis</u> to determine whether the slope of an <u>independent variable</u> is significantly different from zero. The threshold for statistical significance varies by sample size, but t-statistics with absolute values more than 2.00 are generally considered statistically significant. Sometimes known as the Student's t-statistic after William Sealy Gosset, a statistician working for the Guinness brewery in Dublin, Ireland, who introduced the concept in 1908 and used "Student" as his pen name.

Type II PAC – This security combines the elements of a PAC and a support bond. Like a PAC, it follows a planned redemption schedule within a range of prepayments. However, the band of prepayments is narrow, and when they fall outside that band, cash flows become much more volatile. For example, a Type II PAC may have a WAL of 3.4 years if prepayments are between 130 percent and 180 percent PSA. At 90 PSA, WAL extends to 7.4 years, and at 500 PSA, WAL shortens to 2 years.

Unexpected Loss (UL) –The Unexpected Loss relates to potentially large losses that seldom occur. According to this concept, capital would only be needed for absorbing Unexpected Losses. Banks are expected in general to cover their Expected Losses on an ongoing basis, e.g. by provisions and write-offs, because it represents another cost component of the lending business.

Unwind – Derivative trades (e.g., swaps) are normally not terminated through a simple sale of the instrument. Rather, the terminator obtains another derivative that is exactly the opposite of the first. The result is to cancel, or "unwind" the first trade.

VA No Bid Exposure – Recourse servicing risk that can exist for GNMA pools. The recourse on GNMA servicing is usually limited to the VA portion of the mortgage pool. The VA guarantee covers the first 25 percent of loss on the individual loans. In the event of losses in excess of the 25 percent guarantee, the VA may exercise its "no bid" option, whereby the servicer would be subject to any loss beyond 25 percent.

VA Loan – A loan made through an approved lender and partially guaranteed by the Veterans Administration.

VA No-Bid – An option that allows the Veterans Administration (VA) to pay only the amount of its guarantee on a defaulted mortgage loan, leaving the investor with the title to the foreclosed property. The VA must exercise this option when it is in the government's best interest. No-bid properties become other real estate owned.

VADM (Very Accurately Directed Maturity) Bond – Type of CMO that never extends. Cash flows are directed from an accrual bond to ensure that scheduled prepayments are made, no matter what. In contrast to a PAC bond (which offers protection against prepayment and extension risk) and a TAC (which offers protection against prepayments but not extension), a VADM's primary aim is to prevent extension risk.

Value at Risk (VaR) – A general measure developed to equate risk across products and to aggregate risk on a portfolio basis. VaR is defined as the predicted worst-case loss with a specific confidence level (for example, 95 percent) over a period of time (for example, one day). For example, a 99 percent VAR of \$10 million means there is a one percent chance that losses will exceed \$10 million. See <u>earnings at risk</u> for an alternative measure of interest rate risk.

Vantage Score – A credit risk score that was developed through the utilization of information from the three national credit-reporting companies. In the past, the agencies had each used their own proprietary formulas to create their own scores. With vantage score, a single methodology is used to create the scores.

Variance – The mean square difference in the difference between a random number and its mean. It is a measure of how widely dispersed a distribution and the variance of a portfolio's returns is an indicator of its risk. Variance equals the **standard deviation** squared.

Vintage – A group of assets or liabilities originated or put on the balance sheet at a given time period. For example, mortgages originated in 2007 would represent the 2007 vintage. Vintage analysis can be used to assess and forecast asset quality, mortgage prepayments, or the attrition rates on nonmaturity deposits as defaults, prepayments, and deposit withdrawals can all vary with the age of the asset or liability. Vintage analysis is often used to enable lenders to compare delinquency, foreclosure, and loss rates on similar portfolio products over comparable loan origination periods.

Vega (Volatility) Risk – The exposure to a change in the value of a transaction or portfolio resulting from a given change in the expected volatility of the price of an underlying asset or index. The risk is typically associated with options. Vega is considered one of the **Greeks** based on the mistaken notion that it is a Greek letter. In fact, Vega was a star and the name was of Arabic origin. Vega was also a notoriously unreliable car produced by Chevrolet in the early 1970's.

Voluntary Prepayment Rate – The annualized rate of mortgage prepayments due to refinancings or sales rather than to defaults. This measure contrasts with <u>CPR</u>, which also includes defaults.

WAC – **Weighted Average Coupon** – The average **coupon rate** (not necessarily yield) of the underlying mortgages of a mortgage backed security or a servicing portfolio, weighted by the balance of each mortgage in the portfolio. It provides one indicator of prepayment characteristics.

WAC Class – CMO class whose coupons represent a blended interest rate that may change from period to period. WAC classes may consist of components with different interest rates or may be backed by assets with different interest rates.

WAL – **Weighted Average Life** – The average expected period to maturity or prepayment of the underlying mortgages of a mortgage backed security. Unlike WAM, it considers likely prepayments. Unlike duration, it does *not* consider intervening cash flows prior to maturity or prepayment.

WALA – Weighted Average Loan Age – The period of time since origination. The age or "seasoning" of the underlying mortgages of a mortgage backed security or servicing portfolio can affect its prepayment characteristics. The life cycle of a mortgage pool is generally characterized by a rise in prepayments in the early years, a leveling off, and eventually a decline as "burnout" occurs.

WAM – **Weighted Average Maturity** – The average contractual maturity (not considering prepayments) *at origination* of the underlying mortgages of a mortgage-backed security or servicing portfolio.

Warehouse – For a mortgage banking operation, the period between origination and sale. A warehouse is exposed to rising rates. This risk can be hedged with forward sales.

Warehouse Loan – In mortgage lending, this refers to newly closed loans that are funded and awaiting sale or delivery to an investor.

Warehouse Financing – The short-term borrowing of funds by a mortgage banker, collateralized by warehouse loans. This form of interim financing is used until the warehouse loans are sold to a permanent investor.

WARM (Weighted Average Remaining Maturity) – The weighted average of the remaining terms to maturity of the mortgages in a mortgage pool subsequent to the security issue date. The difference between the <u>weighted average maturity</u> and the weighted average remaining maturity is the <u>weighted average loan age (WALA)</u>.

Wash Sale – The sale and repurchase of the same or very similar securities over a very short period of time. Under GAAP, no gain on sale from a wash sale may be recognized.

Waterfall (Cash Flow) – The priority of payments on a CMO, CDO, or ABS, where, in the event of credit losses on the underlying assets, the senior tranches are paid first, then mezzanine tranches, then subordinate tranches. The "waterfall" refers to the cascading effect between tranches.

When Issued Securities Trading – The buying and selling of securities in the period between the announcement of an offering and the issuance and payment date of the securities. A purchaser of "when issued" (also know as TBA) securities acquires the risks and rewards of ownership and may sell the security prior to taking delivery. This is considered trading activity. In some cases (e.g., CMOs) the characteristics of the "when issued" security are not completely known at the time of purchase.

Yankee – A bond or CD denominated in U.S. dollars, publicly issued in the U.S. by foreign banks and corporations. According to the Securities Act of 1933, these bonds must first be registered with the Securities and Exchange Commission (SEC) before they can be sold.

Yield Curve – The relationship between short-term rates and long-term rates. A yield curve is considered steep when long-term rates are much higher than short-term rates. A yield curve is considered flat when short term and long-term rates are similar. A yield curve is considered inverted when short-term rates are higher than long-term rates. The yield curve is normally somewhat upward sloping due to a liquidity premium for short-term securities.

Yield to Maturity (YTM) – A rate of return to an investor, YTM is the discount rate used to equate a bond's current selling price with the present value of it future cash flows (principal and interest). It is assumed that all cash flows are reinvested at the YTM rate. For assets with embedded options, such as calls, investors occasionally use yield to call (yield based on the next call date) or yield to worst (the lowest yield the investor could receive, depending on whether or not the asset is called.

Z Bond – Also known as an accrual bond. A type of CMO that receives no payments until the other pieces (tranches) of the CMOs are paid off — then it receives principal and interest payments. Similar to a zero coupon bond, except that its returns are heavily dependent on prepayment rates.

Zero Coupon Bonds – Debt issues sold at a deep discount from par value. Since the holder of a zero receives no periodic interest payments, the return on the investment is derived from the difference between the purchase price and the par value if held to maturity.