A reference guide to mortgages, bank loans and structured credit



the nuts and bolts of fixed income management



Asset Management

Contents

Introduction	1
Nuts and Bolts	
Mortgage-Backed Securities	2
Bank Loans	10
Structured Credit	13
Conclusion	17
Behind the Industry Jargon	18
Learn More	24



Introduction

Global fixed income markets are constantly evolving and have doubled in size over the past ten years, now surpassing \$28 trillion. Since August 2007, investors have witnessed unprecedented events, including a credit crisis, extreme Fed intervention and market volatility. As a result, investors and policymakers are more focused on the bond market than perhaps ever before.

Securitization has been a key driver of many events in today's fixed income markets. For investors seeking to successfully capitalize on opportunities and best utilize risk in this dynamic asset class, an understanding of securitization is critical. Securitization is the process of pooling loans or other financial assets and converting them into securities. It allows the cash flows and risks from the underlying assets to be reallocated to different classes of debt, which can be sold to investors with different risk and return appetites. The resulting securities typically have a broader and deeper investor base and better liquidity than the underlying asset pool would have by itself.

This guide focuses on three key areas of the bond market relating to securitization, including mortgage-backed securities, bank loans, and structured credit:

- Mortgage-Backed Securities (MBS): A security created by pooling a group of individual mortgage loans with similar characteristics. Monthly payments from the mortgage pool are then passed through to investors in the mortgage security.
- Bank Loans (leveraged loans): A tradable form of corporate debt, usually backed by hard assets, that is senior to bonds in the capital structure.
- Structured Credit: A form of securitization that uses underlying instruments, such as mortgages and bank loans, to create new securities with specific credit risk and return profiles.



Mortgage-Backed Securities

What is a mortgage?

A mortgage loan is a debt instrument by which a borrower gives the lender a lien on real property as security for a repayment of the loan. The borrower has the use of the property and the lien is removed when the obligation is fully paid.

What is a mortgage-backed security?

Mortgage-backed securities (MBS) are bonds that are secured by a collection of underlying mortgage loans. The mortgage payments of the individual real estate assets are used to pay interest and principal on the bonds.

History and size of the US mortgage market

With \$7.2 trillion in mortgage-related debt outstanding, mortgages have developed into one of the largest capital markets in the world, surpassing both the US Treasury and US corporate sectors.

Prior to the 1970s, the US mortgage market was largely a primary market. Financial institutions, such as thrifts and commercial banks, would make residential loans directly to individuals and then hold these mortgages on their balance sheets until maturity. Due to the lack of a robust secondary market, individual financial institutions were limited in the number of mortgages they could extend, which in turn, limited the size of the overall mortgage market. During the 1970s and 1980s, the US government, through its agencies and enterprises, began to establish an active secondary mortgage market by creating and selling securitized mortgage pass-through securities, effectively introducing the concept of securitization to mortgages.

The introduction of securitization provided great benefits to the marketplace. On the supply side, it provided greater flexibility to financial institutions originating mortgage loans by removing constraints. On the demand side, it introduced many new investors, such as pension funds, to the mortgage marketplace. These benefits have helped the market grow significantly in size and in diversity of securities. Alongside this growth, there have also been significant developments in the investment technology used to value these securities and to measure their risk.

The mortgage market has grown steadily

Mortgage-related securities outstanding¹



Source: Securities Industry and Financial Markets Association.

 $^{\rm 1}$ Includes GNMA, FNMA, and FHLMC mortgage-backed securities and CMOs and private-label MBS/CMOs.

Who issues MBS?

MBS are issued and/or guaranteed by the US Government, government sponsored enterprises (GSEs), or by a private entity. Below is a description of the three major agencies responsible for the majority of MBS issuance:

Formal Name	Nickname	Abbreviation	Year Established	Tie to Federal Government
Government National Mortgage Association	Ginnie Mae	GNMA	1968	Backed by full faith and credit of the US Government
Federal National Mortgage Association	Fannie Mae	FNMA	1938	Line of Credit to the US Treasury
Federal Home Loan Mortgage Corporation	Freddie Mac	FHLMC	1970	Line of Credit to the US Treasury

It is important to note that Fannie Mae and Freddie Mac, while generally referred to as "agencies," are technically GSEs given the fact that, unlike Ginnie Mae, their obligations are not backed by the full faith and credit of the US Government.

While these three agencies account for the majority of MBS issuance, private companies also issue MBS. The housing agencies are limited to the types of mortgages they can securitize. Loans that exceed a certain amount as well as loans that do not meet the agencies' strict underwriting standards are not eligible for securitization by the agencies. "Private-label" MBS, or non-agency MBS, are typically issued by homebuilders or financial institutions through subsidiaries and are backed by residential loans that do not conform to the agencies' underwriting standards. Non-agency issued mortgage-backed securities are now a major component of the MBS market.

Securitization process: the creation of mortgage pass-throughs

Agency mortgage pass-through securities are the most common type of mortgage-backed securities and represent one of the largest capital markets in the world. The agencies create pass-through securities by securitizing residential mortgages. This process involves pooling individual residential mortgage loans originated by the private sector, issuing securities against the pool, and providing some guarantee for the payments expected from these securities. These newly created securities are called mortgage pass-through securities. The diagram below illustrates this process:

Financial

Institution

Individual Home



Mortgages are

real property.

100% of the

collateral

consists of

estate, with

single family

representing

homes



Deed



Mortgage

Two mortgage loan structures loans secured by are most common: Fixed Rate and Adjustable Rate. residential real In both cases, principal and interest are typically repaid in equal installments over 70% of the total.

15-30 years.

Commercial banks, savings and loans and insurance companies lend money collateralized by the property directly to the home owner.



US Agency

FHLMC are

governmental

agencies that

They purchase

conforming

resale in the

and credit



Investor

GNMA, FNMA and Pools of individual mortgages, now packaged in a standard, diversified form, provide liquidity are sold to institutional enhancement in the investors. These mortgage market. include pension funds, banks, mortgage collateral governments, and repackage it for corporations and insurance securities market. companies.

Sources of risk:

Prepayment risk

- · Borrowers of mortgages have an option to prepay their mortgages. Typically, they will exercise this option to their advantage and the investor's disadvantage.
- Unanticipated prepayments can change the value of some MBS.

Interest rate risk (Duration risk)

• Prices fall as interest rates rise due to fixed coupon rates.

Term structure risk

- Monthly principal cash flows cause a laddered structure.
- The value of securities can be affected by a steepening or flattening of the yield curve.

Negative convexity/volatility risk

• Embedded options cause the duration of most MBS to shorten in a rally and lengthen in a sell-off.

Credit risk

- The agency market has little or no credit risk.
- The non-agency market has varying levels of credit risk.

Credit enhancements

For agency MBS, the issuing agency guarantees investors that they will receive timely payments of interest and principal, regardless of the delinquency or default rates on the underlying loans. Because non-agency MBS have no such guarantees, another form of protection is needed to shield investors from borrower delinquencies. Private-label MBS are rated by rating agencies and often feature credit enhancements, such as subordination and over-collateralization, which are designed to help protect investors from delinquencies or losses on the underlying loans.

Subordination

Senior-subordinated credit structures are created with single or multiple subordinated credit classes. The "junior" tranches are subordinated to the "senior" tranches in terms of the prioritization of principal cash flows. In addition, the subordinate tranches are designed to absorb losses before they are allocated to senior tranches. In other words, these designated junior securities provide the credit support to the senior securities.

A typical capital structure (as shown in the exhibit below) includes investment grade bonds, as well as "junk" or unrated bonds. The senior bonds are rated AAA and have first priority on cash flow. The investment grade subordinates are rated AA to BBB and have a lower priority on cash flow. At the bottom of the credit structure are the non-investment grade subordinates. These bonds are rated BB+ or lower and are significantly exposed to losses from the underlying mortgage loans.



Typical mortgage pool structure

Understanding mortgage collateral

Mortgage securities can be backed by a wide variety of loans with different borrower characteristics, but the market is generally divided into four main sectors: agency mortgages, prime jumbo mortgages, Alt-A mortgages and subprime mortgages.

- Agency mortgages Must conform to the agencies' standards in terms of size, the borrower's credit score and documentation, and the loan amount relative to the value of the home. Other types of mortgages do not comply with these standards for one or more reasons.
- Prime jumbo Exceed the agency maximum size (traditionally \$417,000 but the maximum was raised to \$729,000 through 2008), but borrowers generally have high credit scores.
- Alt-A Generally conform with agency standards in terms of loan size and borrower credit score, but have other features that do not conform, such as low documentation.
- Subprime Do not conform with agency standards primarily due to lower credit scores (generally 605-640 out of a possible 850, compared to 680-730 for agency mortgages) and higher borrower leverage (as measured by the debt-to-income ratio, typically 40% for subprime borrowers). Documentation on subprime mortgages also tends to be significantly lower than agency standards, but may actually be higher than documentation on an Alt-A mortgage.

Different types of MBS

Pass-throughs are the most basic type of mortgage-backed securities. One of the unique aspects of the mortgage market is the diversity of instruments and products available to market participants. Below are some other types of residential mortgage-backed securities:

- Adjustable Rate Mortgage (ARM) A pass-through security that has predetermined adjustments of the interest rate at specific intervals. Mortgage payments are tied to varying indices, such as the interest rate on US Treasury bills, London Interbank Offered Rate (LIBOR) or the average national mortgage rate. Adjustments are made regularly, usually at intervals of one, three, or five years. Different types of ARMs include Hybrid ARMs, where the interest rate on the note is fixed for a period of time, and then floats thereafter; as well as, Option ARMs, where the borrower has the option to make minimal payments, which allow for negative amortization, or to make fully amortizing payments.
- Collateralized Mortgage Obligations (CMOs) A type of mortgage security created by redirecting the cash flows from underlying pools of mortgages to different classes of bonds called tranches. The redistribution of scheduled principal, unscheduled principal and interest from the underlying mortgage pool to different tranches creates securities with different coupon rates, average lives and price sensitivities. Consequently, these instruments can be used to match an investor's particular risk and return objectives more closely.

Other sectors

So far, this guide has focused on residential mortgage-backed securities. However, there are other sectors of the market that are interesting in the current environment. These include:

- Commercial Mortgage-Backed Security (CMBS) Bonds backed by pools of mortgages on commercial and multi-family real estate.
- Asset-Backed Security (ABS) One of the most diverse sectors in the global fixed income markets, yet with one common trait: they are backed by a pool of homogeneous assets.

Unique characteristics of the mortgage market:

Market size

Market comprises approximately one-third of the US fixed income aggregate indices.

Enhanced diversification

Investment opportunities vary by product type, geography and borrower.

Derivative components

Substantial risk "customization" is made possible through deep and sophisticated structuring markets, like CMOs.

Leverage

Investors can implicitly or explicitly lever investment bets due to structuring capability.

Credit quality

Agency market is AAA, and senior/subordinated credit enhancement allows AAA creation from non-agency/whole loans.

Credit depth

While the bulk of the mortgage universe is highly rated, equity-like risk is available from credit tranching whole loans and commercial mortgages.

Diversity of participants

Most broad fixed income portfolios participate actively in the mortgage market.



Bank Loans

What is a bank loan?

The bank loan market consists of floating rate senior secured loans made by banks or other financial institutions to corporations. Loans are generally classified as "leveraged" if the company to whom the loan is being made has outstanding debt rated below investment grade (i.e., less than BBB-). Unlike traditional bonds, which pay fixed interest over a specific period of time, bank loan interest rates "float" or reset periodically (usually 30, 60 or 90 days) based on LIBOR.

Characteristics of a sample bank loan

Coupon	Floating		
Typical Maturity	7-8 years		
Callability	Anytime @ 100		
Effective Duration	Short		
Capital Structure	Senior		
Security	Secured Lien		
Covenants	Yes		
Recovery Rates	73.2%		

Bank loans are at the high end of the capital structure

Seniority	Type of Capital	Security Types
High	Senior Debt	Secured Bank Loans
	Subordinated Debt	Unsecured High Yield Bonds
Low	Equity	Private Equity

History and size of the bank loan market

The bank loan market emerged from two trends: the leveraged buyout trend of the 1980s, and the tightening of bank capital requirements that began in 1998 under the first Basel Accord. Companies fund leveraged buyouts by borrowing from a bank or a syndicate of banks. As the leveraged buyout trend emerged in the 1980s, demand for bank loans to fund LBOs increased sharply. Then, in 1998, the Bank for International Settlements' Basel Accord increased the capital that banks were required to hold against their loans. As a result, banks that had traditionally held loans on their own balance sheet increasingly began to sell those loans to investors.

Over time, the secondary market has matured significantly as investors came to recognize the potential of these loans as investment vehicles. The first bank loan fund was launched in 1989 and, since then, trading volume has soared from \$8 billion in 1991 to over \$900 billion as of December 2007. The size of the market today is estimated at \$1.5 trillion.

The bank loan market has grown significantly



CLOs, hedge funds and high yield make up most of the primary bank loan base



Source: Credit Suisse, Standard & Poor's

Risk of buying bank loans

The most notable risk factors that all lenders contend with in buying loans are credit risk, price risk and interest rate risk. While bank loan funds have very low interest rate risk (due to the floating rate structure of the loans), they carry the risk of default. Noninvestment grade fixed income securities are often issued in connection with a corporate reorganization or restructuring, or as part of a merger, acquisition, takeover or similar event. Such issuers are often highly leveraged and, at times, less able to make scheduled payments of principal and interest.

The market value of non-investment grade fixed income securities tends to reflect individual corporate developments to a greater extent than that of higher-rated securities, which react primarily to fluctuations in the general level of interest rates. Issuers of noninvestment grade fixed income securities may not be able to make use of more traditional methods of financing. Additionally, their ability to service debt obligations may be more adversely affected by economic downturns, specific corporate developments or the issuer's inability to meet specific projected business forecasts than issuers of higher-rated securities. Negative publicity about the junk bond or leveraged loan market and investor perceptions regarding lower-rated securities, whether or not based on fundamental analysis, may also depress the prices for such securities.

The secondary market for leveraged loans is less liquid, and more volatile than the secondary market for higher-rated securities. In addition, market trading volume for high yield fixed income securities is generally lower, and the secondary market for such securities could shrink under adverse market or economic conditions, independent of any specific adverse changes in the condition of a particular issuer. These factors may have a negative effect on the market price and a fund's ability to dispose of particular portfolio investments. A less liquid secondary market also may make it more difficult for a leveraged loan fund to obtain precise valuations of the high yield securities in its portfolio.



Structured Credit

What is structured credit?

Structured credit is a term used to describe securitizations of diverse portfolios of credit-related debt instruments, such as bank loans, high yield bonds, investment grade corporate debt and consumer asset-backed securities. Collateralized Debt Obligations (CDOs) and Collateralized Loan Obligations (CLOs) are examples of structured credit transactions. These transactions issue different classes of securities, or tranches, with a variety of ratings ranging from AAA down through Unrated (also known as "equity"). The underlying debt instruments can be in either cash or synthetic form, as can the issued tranches for that matter.

Structured credit securitizations are different from static securitizations in that they tend to be managed transactions with reinvestment periods. Collateral managers typically earn a fee to reinvest principal paydowns and selectively trade in the underlying portfolio. That said, the most liquid structured credit transactions – the index tranche markets – are actually static (i.e., there is neither a manager nor a reinvestment period, and hence, the underlying individual credits cannot change over time). For example, the investment grade index tranche market is carved out of a static pool of 125 investment grade credits – the investment grade index itself.

The structured credit market provides investors with access to a range of risk versus reward exposure to diverse portfolios of credit assets. For example, the more senior tranches tend to embody exposure to systematic credit risk, while the more junior tranches tend to embody exposure to idiosyncratic credit risk.



History and size of the structured credit market

The first CDOs were extensions of the securitization model to new types of assets that had not been securitized before. Previously, securitizations were static vehicles without the ability to reinvest, and backed mostly by mortgage loans, auto loans, and credit card receivables. Starting in the mid-1990s, the concept was extended to diverse pools of credit assets such as high yield bonds, high yield bank loans, investment grade corporate debt and consumer assetbacked securities. The concept of managed transactions, with collateral managers and reinvestment periods, was also introduced. It is this more recent evolution of securitization that is known today as the structured credit market.

CLO and CDO markets have grown significantly

The boom in CLO issuance over the past three years has been driven by a combination of:

- The imposition of higher regulatory requirements on banks, which caused a shift from banks owning bank loans to becoming distributors of bank loans
- A boom in the supply of bank loans driven by private equity demand to acquire companies via leveraged buyouts

The global CLO market now stands at approximately \$400 billion USD outstanding.



Growth of CLO issuance

Source: Standard & Poor's

The boom in investment grade corporate CDO issuance over the last five years has been fueled by the rise of credit default swap (CDS) contracts as the preeminent vehicle for trading single-name corporate credit risk. With the arrival of CDX indices and index tranches, the first standardized "liquid" CDO market was born.

The global investment grade corporate CDO market now stands at approximately \$200 billion USD outstanding.



Growth of CDO issuance

Source: Standard & Poor's

Structured credit is only a subset of the securitization market

The securitization process begins with a borrower – a home owner or a corporation – who borrows money in the form of a mortgage loan or corporate debt instrument. This loan or debt instrument is then packaged into a securitization, which issues different classes of securities (tranches) of various ratings ranging from AAA down through Unrated (also known as "equity").

The term Level 1 means the first time a portfolio of loans or corporate debt is packaged into a securitization (see exhibit below). Level 1 securitizations are relatively straightforward to analyze. Level 2 securitizations, on the other hand, are far more complex and difficult to analyze because they are securitizations of securities issued by Level 1 securitizations, each of which is backed, in turn, by its own portfolio.





Conclusion

The changing dynamics of the global fixed income markets in recent years have been fueled, in large part, by financial engineering. Securitization, which has made much of the proliferation of innovative products possible has, in essence, provided the liquidity necessary to broaden the opportunity set for an expanding pool of market participants. A solid understanding of these securities is critical in navigating the complex fixed income markets and effectively assessing new opportunities.



Behind the Industry Jargon

Adjustable Rate Mortgage (ARM): A pass-through security that has predetermined adjustments of the interest rate at specific intervals. Mortgage payments are tied to varying indices, such as the interest rate on US Treasury bills, LIBOR or the average national mortgage rate. Adjustments are made regularly, usually at intervals of one, three, or five years.

ALT-A: A type of US mortgage that, for various reasons (e.g., low or no documentation), is considered riskier than "prime" and less risky than "subprime," the riskiest category. Alt-A interest rates, which are determined by credit risk, tend to be between that of prime and subprime home loans.

Assignment: A form of contract to purchase a loan and to have the rights as a lender under the credit agreement.

Asset-backed security (ABS): Is essentially the same as a mortgage-backed security, except that the collateral is more diverse. The range of assets used in ABS deals as collateral has been very wide, and includes ABS backed by auto loans, credit card receivables, home equity loans, manufactured housing loans and utility stranded costs.

Collateralized Bond Obligation (CBO): A securitized pool of investment-grade bonds backed by a large number of junk bonds. It is broken into tiers with varying degrees of risk and interest rates.

Collateralized Debt Obligation (CDO): Special-purpose vehicles that invest in a diversified pool of assets in either cash or synthetic form, financed with several tranches of debt (typically a 'AAA' tranche, a 'ABB' tranche, and a mezzanine tranche) that have rights to the collateral and payment stream in descending order. The funded form invests in actual cash assets such as mortgage pass-throughs and bank loans. The unfunded form invests in credit derivatives such as credit default swaps.

Collateralized Loan Obligation (CLO): Similar to CDO except it is securitized by pools of leveraged loans.

Collateralized Mortgage Obligations (CMOs): A type of mortgage security created by redirecting the cash flows from underlying pools of mortgages to different classes of bonds called tranches. The redistribution of scheduled principal, unscheduled principal and interest from the underlying mortgage pool to different tranches creates securities with different coupon rates, average lives and price sensitivities. Consequently, these instruments can be used to match an investor's particular risk and return objectives more closely.

Commercial Mortgage-Backed Security (CMBS): A type of mortgage-backed security that is secured by pools of mortgages on commercial property. These loans are typically secured by such commercial property as apartment buildings, shopping malls, warehouse facilities, hotels and office buildings.

Conforming Mortgage: A residential mortgage that conforms to the loan purchasing guidelines set forth by the Government Sponsored Enterprises (GSE), e.g., FNMA/FHLMC. Criteria include debt-toincome ratio limits and documentation requirements. There is also a maximum loan amount, which changes based on the mean home price (above which a mortgage is considered a "jumbo loan").

Covenant: A commitment in a loan agreement, which certifies that certain activities may be carried out. There are several examples of loan covenants, but the purpose is to give the lender more security protection.

Credit Default Swap: A financial instrument designed to transfer the credit exposure of fixed income securities between parties. It is essentially an insurance contract that enables a seller to protect against the risk of default on debt obligations.

Credit Derivative: Contracts that are based off credit assets such as corporate bonds and mortgage bonds. They are over-the-counter and are designed to customize the risk taking/hedging.

Credit Enhancement: Securities generated in a securitization deal are "credit enhanced," meaning that their credit quality is increased above that of the originator's unsecured debt or underlying asset pool.

Credit Support: Refers to the amount of collateral available to absorb losses.

Current Yield: Annual income (interest) divided by the current price of the loans.

Discount Margin: The return earned above the index underlying a floating rate security.

FICO (Credit Score): A measure of a borrower's credit-worthiness. The lower the FICO score, the higher the likelihood of default. Generally a FICO score of 630 or lower corresponds to a subprime borrower.

First Lien: A lien that takes priority over all other liens or claims over the same property in the event of default.

Floating Rate: Moves up and down with the market, or along with an index, in contrast to a fixed rate, which does not vary over the duration of the debt obligation.

Full Documentation ("Full Doc")/Low Documentation ("Low Doc"): Full doc refers to a loan where all income and asset information is documented. Low doc refers to a loan where income and/or asset information is not fully documented.

Government Sponsored Enterprises (GSEs): A group of financial services corporations created by the US Congress to assist groups of borrowers in targeted sectors by enhancing the flow of credit to these sectors. Targeted sectors include: agriculture, home finance and education. The two housing government-sponsored enterprises, Fannie Mae and Freddie Mac, were chartered by Congress to create a secondary market for residential mortgage loans.

Home Equity Line of Credit (HELOC): A revolving line of credit with an adjustable interest rate, whereas a home equity loan is a onetime lump-sum loan, often with a fixed interest rate.

Home Equity Loan (HEL): A type of loan in which the borrower uses the equity in their home as collateral. It creates a lien against the borrower's house and reduces actual home equity. Home equity loans are most commonly second position liens (second trust deed), although they can be held in first or, less commonly, third position. There are two types: closed end and open end.

Hybrid Adjustable-Rate Mortgages (Hybrid ARMs): A type of adjustable rate mortgage where the interest rate on the note is fixed for a period of time, and then floats thereafter. The "hybrid" refers to the blend of fixed rate and adjustable rate characteristics. Hybrid ARMs are referred to by their initial fixed period and adjustment periods (e.g., 3/1 for an ARM with a 3-year fixed period and subsequent 1-year rate adjustment periods). The date that a hybrid ARM shifts from a fixed-rate payment schedule to an adjusting payment schedule is known as the reset date. After the reset date, a hybrid ARM floats at a margin over a specified index just like any ordinary ARM.

LIBOR (London Interbank Offered Rate): Daily reference rate based on the interest rate at which banks offer to lend unsecured funds to other banks in the London Interbank market.

Loan-to-Value Ratio (LTV) or Combined Loan-to-Value Ratio (CLTV): A way of measuring household leverage. LTV is a percentage ratio of a first mortgage lien in relation to the total appraised value of the property. CLTV considers additional loans on the property in the calculation of the percentage ratio.

Market-Flex Language: Language within a prospectus which allows arrangers to price a loan based on investor demand, in some cases within a predetermined range, as well as shift amounts between various tranches of a loan.

Mortgage: Debt instrument by which a borrower gives the lender a lien on property as security for a repayment of the loan. The borrower has the use of the property and the lien is removed when the obligation is fully paid. A mortgage normally involves real estate.

Mortgage Pass-Through: A security created when an entity (e.g., GNMA, FNMA, FHLMC, commercial bank, thrift) forms a collection (pool) of single family mortgages and sells shares or participation certificates in the pool. The monthly cash flow of a pass-through depends on the cash flow of the underlying mortgages and consists of monthly mortgage payments representing interest, the scheduled repayment of principal, and any unscheduled prepayments of principal. The cash flow is less than that of the underlying mortgages by an amount equal to servicing and any guarantor fees.

Negative Amortization Mortgage ("NegAm") or Option ARM: A

type of adjustable rate mortgage security which applies an amortization method in which the borrower pays back less than the full amount of interest owed to the lender each month. The unpaid interest is added to the unpaid balance of the mortgage. It could be considered borrowing equity from yourself. The period of time the NegAm is applicable is usually limited on each mortgage.

Non-Conforming Mortgages: Mortgage loans that do not meet the Agencies' underwriting standards due to one or a combination of factors. Fannie Mae and Freddie Mac, "the housing agencies," are limited to the types of mortgages they can securitize. Examples of factors which would render a loan ineligible include large mortgage loan balance, high LTV, and/or limited documentation.

Non-Agency (Private-label) Mortgages: Banks and mortgage bankers pool non-conforming mortgages and typically sell the resulting non-securitized loan package to investors as "whole loans" or as publicly registered securities.

Occupancy Type: Refers to whether the residence is owneroccupied or is an investor property.

Prepayment Risk: Borrowers of mortgages have an option to prepay all or part of their mortgage at any given time. The uncertainty for the mortgage holder which results, as well as the risk of receiving principal back at an inopportune time (i.e., a lower rate environment), is called prepayment risk.

Prime Rate: The interest rate that commercial banks charge their most credit-worthy customers (generally, large corporations).

Second Lien: Debt that is subordinate to the rights of other, more senior debts issued against the same collateral, or a portion of the same collateral. If a borrower defaults, second lien debts stand behind higher lien debts in terms of rights to collect proceeds from the debt's underlying collateral.

Securitization: The process of pooling loans or other financial assets and converting them into securities. Securitization allows the cash flows and risks from the underlying assets to be reallocated to different classes of debt which can be sold to investors with different risk/return appetites. The resulting securities typically have a broader and deeper investor base and better liquidity than the underlying asset pool would have by itself. The process can encompass any type of financial asset. Mortgage-Backed Securities are an example of static securitization, while CLOs are "managed" securitizations.

Subordination: A common type of internal credit enhancement. Senior/ subordinated tranches are created where senior bonds have first priority on cash flows and subordinated securities are designated to absorb loan losses before they are allocated to senior securities.

Special Purpose Vehicle (SPV): A vehicle established to acquire a portfolio of credit assets such as mortgage-backed securities, commercial real estate debt and corporate bonds. The SPV finances the underlying assets by issuing different classes of securities with different risk characteristics (tranches).

Spread: The risk premium on the loan paid over LIBOR.

Subprime: Borrowers who generally exhibit lower credit scores and higher leverage (i.e., higher debt-to-income ratio).

Syndicate: A group of investment banking firms who work together temporarily on a large project, typically underwritings. Acting in a group reduces the risk that each individual firm must assume.

Syndicated Loan: A loan provided by a group of lenders and is structured, arranged, and administered by one or several commercial or investment banks as arrangers.

Third Party Credit Enhancement: Includes insurance provided by bond insurers, corporate guarantees and letters of credit. Companies such as MBIA, FGIC, AMBAC, FSA are able to insure up to AAA ratings. These entities typically insure investment graderated cash flows to higher ratings desired by the issuer or the underwriter for an upfront fee and or ongoing fee.

Tranche: A portion or piece of a deal of structured financing.

Underwritten Deal: A deal where the arrangers guarantee the entire commitment and then syndicate the loan.

YTM (Yield to Maturity): The rate of return earned on a bond if it is held to maturity.



Learn More

Following is a list of GSAM publications that can help you further explore the intricacies of MBS, Bank Loans and Structured Credit, as well as expand your understanding of fixed income investing.

- Active Alpha Investing: Redefining the Role of Fixed Income in a Portfolio
- Closing the Gap: Addressing the Liability Challenge
- Determining Value in Emerging Local Markets
- Finding Opportunities in Mortgage and Credit Markets
- Increasing Active Bond Risk: A Practical Guide to Implementation
- A Primer on Mortgages
- Using Derivatives to Enhance the Opportunity Set for Fixed Income Investing

Please contact your relationship management team to obtain a copy of these materials.

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