Basics of Fannie Mae
Single-Family MBS
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Table of Contents

MBS Overview ................................................................................................................................. 1
Market Landscape .............................................................................................................................. 1
Credit Guaranty Business and Securitization .................................................................................. 1
How Fannie Mae MBS Are Constructed ............................................................................................ 1
Credit Quality and the Fannie Mae Guaranty .................................................................................... 2
MBS Risk Considerations .................................................................................................................. 2
Understanding MBS .......................................................................................................................... 3
Yield Calculations .............................................................................................................................. 3
Cash Flow Effects .............................................................................................................................. 3
MBS Pricing .......................................................................................................................................... 4
Value of Calendar-Month Prepayment Factors ................................................................................... 4
Weighted-Average Life ...................................................................................................................... 5
Selecting an MBS Investment ............................................................................................................ 5
Standard MBS Products ..................................................................................................................... 5
  Fixed-Rate Mortgage (FRM) MBS ...................................................................................................... 5
  Adjustable-Rate (ARM) MBS ............................................................................................................ 6
    ARM Structure ................................................................................................................................. 6
    Understanding ARMs ...................................................................................................................... 6
    Common Indices .............................................................................................................................. 6
    Margin ............................................................................................................................................... 6
    Interest Rate ..................................................................................................................................... 7
    Caps and Floors ............................................................................................................................... 7
    Adjustment Frequency ..................................................................................................................... 7
    Fixed-Period (Hybrid) ARMs ............................................................................................................ 7
    Convertibility ................................................................................................................................... 7
    Common Fannie Mae ARM MBS ...................................................................................................... 7
    Lookback .......................................................................................................................................... 8
Fannie Mae MBS Prospectuses and Related Documents ................................................................. 8
Additional Fannie Mae MBS Products ................................................................................................. 9
Helpful Tools ...................................................................................................................................... 9
MBS Business Applications ............................................................................................................... 9
Contact Information .......................................................................................................................... 9
MBS Overview

Market Landscape

The U.S. single-family residential mortgage market consists of a primary mortgage market in which lenders make loans to homebuyers and a secondary mortgage market in which mortgage lenders exchange loans for mortgage-backed securities (MBS). Those MBS are then generally purchased by investors.

As a secondary market participant, Fannie Mae does not lend directly to consumers. We are a government-sponsored enterprise (GSE) chartered by Congress to keep liquidity flowing to mortgage lenders such as local and national banks, thrifts, credit unions, and other financial institutions. We purchase and guarantee their loans to enable families to buy homes, refinance their existing mortgages, or access affordable rental housing. We package loans into Fannie Mae MBS, which global investors can purchase. Our most significant activities are securitizing mortgage loans originated by lenders into Fannie Mae MBS and purchasing loans and MBS to provide funds to the mortgage market through short-term financing and other activities. The MBS discussed in this document refers to Fannie Mae guaranteed MBS.

Credit Guaranty Business and Securitization

One key business line at Fannie Mae is the credit guaranty business, which revolves around the securitization of whole loans and the issuance of MBS. Fannie Mae issues MBS and typically assumes the default risk on the mortgages underlying the security, while guaranteeing to an MBS trust that Fannie Mae will supplement amounts received by the MBS trust as required to permit timely payments of principal and interest on the certificates, even if the borrower defaults on the mortgage payments. Fannie Mae alone is responsible for making payments under our guaranty. The certificates and payments of principal and interest on certificates are not guaranteed by the United States and do not constitute a debt or obligation of the United States or any of its agencies or instrumentalities other than Fannie Mae.

Two basic types of Fannie Mae securitizations are whole loan conduit (a.k.a. cash commitment window) and lender swap transactions. Fannie Mae’s whole loan conduit is designed to provide liquidity to the mortgage market while offering investors diversified pools of mortgages to meet their needs. Fannie Mae purchases loans from a large, diverse group of lenders and then securitizes them as Fannie Mae MBS, which may be sold to the market. Whole loan conduit issuance has become a larger percentage of Fannie Mae MBS issuance over recent years, particularly following the credit crisis, as lenders sought liquidity and several large aggregators scaled back, or exited altogether, their correspondent broker business.

Lender swap transactions are the most common type of securitization for Fannie Mae. Lenders pool similar loans together to be securitized and deliver the pool of loans to Fannie Mae in exchange for a Fannie Mae MBS, commonly referred to as a “swap.” Fannie Mae receives a guaranty fee as compensation for the creation of the MBS security. The lender may choose to either keep or sell the security.

This document highlights the basics of Fannie Mae single-family MBS including how the securities are constructed; the credit quality and the Fannie Mae guaranty; risk considerations; how to value an MBS security; and resources available to investors such as MBS disclosure documents offered by Fannie Mae.

How Fannie Mae MBS are Constructed

Mortgage loans are grouped, or pooled, together for the purpose of securitization. A nationwide network of lenders — such as mortgage bankers, commercial banks and credit unions — originates the loans backing Fannie Mae MBS. Lenders submit groups of similar mortgage loans to Fannie Mae for securitization. Fannie Mae ensures that the loans it acquires generally meet its credit quality guidelines and then it securitizes the pool of mortgages. The loans are converted — or securitized — into more liquid, flexible instruments. The resulting Fannie Mae MBS carries a guaranty of timely payment of principal and interest to the investor, whether or not there is sufficient cash flow from the underlying group of mortgages. Fannie Mae’s obligation under this guaranty is solely Fannie Mae’s and is not backed by the full faith and credit of the U.S. government.

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1 The lenders make representations and warranties to Fannie Mae regarding the mortgage loans in a particular pool, when they sell us loans. The loans pooled together must have similar characteristics based on Fannie Mae guidelines. Mortgages underlying Fannie Mae MBS must pass several checkpoints before they qualify. Every mortgage loan seller or servicer within Fannie Mae’s nationwide network undergoes a careful approval process before they can do business with us. The loans selected for Fannie Mae MBS must adhere to Fannie Mae’s strict, nationally published underwriting requirements or approved variances thereto. For more details, please reference the Fannie Mae Selling Guide, which explains how to become an approved Fannie Mae lender and the procedures for normal and routine selling matters.
In general, mortgage-backed securities are commonly called “MBS” or “Pools” but they can also be called “mortgage pass-through certificates.” This is because the security passes through to investors, at a specific coupon, scheduled principal and interest that mortgagors pay each month on the outstanding balance of the loans backing the security, along with any unscheduled prepayments.

As a Fannie Mae MBS investor, the certificateholder receives a pro rata share of the scheduled principal and interest from mortgagors on the loans backing the security.

Fannie Mae MBS offer investors high quality investments with attractive yields to fit their portfolio needs or investment strategies. Investors should exercise care to understand fully the value of any mortgage investment and carefully review the applicable disclosure documents. Investors may wish to discuss the potential risks versus rewards with their investment advisors.

Fannie Mae MBS issued in book-entry form are paid by wire transfer, which is both convenient and safe. Certificates issued in book-entry form initially will represent at least $1,000 of the unpaid principal amount of the mortgage loans in the pool. Fannie Mae’s central paying agent, the Federal Reserve Bank of New York, wires monthly payments to depository institutions on behalf of registered security holders on the 25th of each month, or the first business day after that if the 25th of a month is not a business day. This central paying agent concept simplifies accounting procedures because investors can receive just one payment monthly for all their book-entry Fannie Mae MBS.

Credit Quality and the Fannie Mae Guaranty

The quality and value of Fannie Mae MBS hinge on several major considerations:

- Fannie Mae’s guaranty to the MBS trust of full and timely payment of both principal and interest,
- the financial strength behind the guaranty, and
- the investment quality of the underlying mortgages.

The value of the guaranty is important to investors because it reduces cash flow risk and increases the marketability of the security. Fannie Mae guarantees to the MBS trust that the trust will have sufficient funds to ensure that investors will receive monthly payments of principal and interest, whether or not collected from the borrower.

While Standard & Poor’s, Fitch and Moody’s have not rated any of the MBS issued by Fannie Mae, securities issued by others and collateralized by Fannie Mae MBS are rated consistently as “Triple A” quality. Investments rated “Triple A” are generally considered the highest credit quality.

MBS Risk Considerations

In general, MBS expose investors to several different types of risk, such as prepayment risk, market risk, and credit risk.

- **Prepayment risk** (or option risk) is the chance that borrowers prepay their mortgages more quickly or slowly than expected, thereby affecting the investment’s average life and perhaps its yield. Most mortgages can be prepaid in whole or in part at any time without penalty and borrowers are most likely to exercise the prepayment option at a time when it is least advantageous to investors.

- **Market risk** is the risk that the price of the security may fluctuate over time. For MBS, prepayment risk and market risk are closely intertwined. The price of any bond, including MBS, is a function of several factors such as prevailing interest rates, the coupon rate, the length of time the security is expected to be outstanding, and the liquidity of the issue which can fluctuate with market conditions. Interest rate movements have a greater impact on MBS than traditional fixed income investments because they affect prepayment rates that, in turn, affect the average life and yield of MBS as well as returns from reinvesting principal.

- **Credit risk** is the risk that the investor may not receive all or part of the principal invested because the borrower of the underlying mortgage loan defaulted on its financial obligations. Fannie Mae MBS have reduced credit risk because they carry a guaranty of timely payment of both principal and interest. Fannie Mae’s obligations under this guaranty are based on the financial health of the corporation and are not backed by the full faith and credit of the U.S. government.
Understanding MBS

Yield Calculations

Yield is generally the rate of return on an investment over a given time, expressed as an annual percentage rate. Yield-to-maturity is generally the annual percentage rate of return on an investment, assuming it is held to maturity. Yield is affected by the price paid for the investment and the timing of the security’s cash flow.

An understanding of yield on a typical bond may aid in understanding the yield on MBS. The interest rate, or coupon, of MBS, like the interest rate of a bond, is the annual rate at which interest is paid on the security. Consequently, the effective yearly rate of interest can be raised or lowered by changing the price of the MBS.

The feature that most distinctly differentiates a mortgage investment from a traditional bond is the principal repayment method. Whereas a traditional bond typically repays the entire principal amount at maturity, an MBS repays principal throughout the life of the investment. The timing and rate at which principal repayment occurs are major factors affecting an MBS yield.

An earlier than expected return of principal generally increases the yield on securities purchased at a discount. However, when an MBS is purchased at a premium, an earlier than expected return of principal reduces yield. Consequently, an analysis of cash flow may be very important to an MBS investor.

MBS may offer certain advantages, such as attractive yields, to investors but it is not possible to forecast with certainty the actual returns over time on most MBS because of the relationship between interest rates and prepayments, which are virtually impossible to predict with certainty.

Cash Flow Effects

The cash flow of an MBS consists of scheduled principal payments, accrued interest payments, and unscheduled payments of all or part of the outstanding principal (prepayments).

A level payment, fixed rate mortgage loan with a 30-year amortization schedule, without prepayments and at prevailing interest rates, would repay one-half of the original principal amount by the 18th to 21st year. A higher interest rate results in a slower amortization of principal for the loan. For example, a loan with a 15-year amortization schedule would, without prepayments and at prevailing interest rates, result in repayment of one-half the original principal amount by the 8th to 9th year. (These examples assume interest rates in the 3% to 5% range.)

The mortgage investor faces the possibility that the mortgages backing the MBS will prepay more slowly or more quickly than anticipated. Prepayments may occur at any time and for any of several reasons, including — but not limited to — voluntary prepayments by the mortgagor from refinancing the mortgage or proceeds from the sale of the mortgaged home.

Several models have been developed to calculate cash flows. Each uses expectations of mortgage repayments together with price to determine yield. Fannie Mae does not recommend any particular model and no guarantee can be made that the use of a particular model will be beneficial to an investor. The major difference among these methods is the assumption or methodology used to forecast how quickly principal will be returned. Market analysts and research departments at major investment firms continually monitor mortgage prepayment activity. Extensive prepayment histories are publicly available through these firms.

Constant Prepayment Rate (CPR) and the Securities Industry and Financial Markets Association’s Standard Prepayment Model (PSA curve) are the most popular models used to measure prepayments. CPR represents the annualized constant rate of principal repayment in excess of scheduled principal amortization. The PSA curve is a schedule of prepayments that assumes that prepayments will occur at a rate of 0.2 percent CPR in the first month and will increase an additional 0.2 percent CPR each month until the 30th month and will prepay at a rate of 6 percent CPR thereafter (“100 percent PSA”). PSA prepayment speeds are expressed as a multiple of this base scenario. For example, 200 percent PSA assumes annual prepayment rates will be twice as fast in each of these periods — 0.4 percent in the first month, 0.8 percent in the second month, reaching 12 percent in month 30 and remaining at 12 percent after that. A zero percent PSA assumes no prepayments.
Table 1: PSA Example - Yield-to-Maturity for Current Coupon, 30-Year MBS

<table>
<thead>
<tr>
<th>Coupon</th>
<th>Price Paid</th>
<th>0% PSA No Prepayments</th>
<th>100% PSA</th>
<th>300% PSA</th>
<th>500% PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>98-19</td>
<td>2.6074</td>
<td>2.6598</td>
<td>2.7763</td>
<td>2.8898</td>
</tr>
<tr>
<td>3.0</td>
<td>102-23</td>
<td>2.7962</td>
<td>2.6766</td>
<td>2.4118</td>
<td>2.1530</td>
</tr>
<tr>
<td>3.5</td>
<td>105-11</td>
<td>3.0875</td>
<td>2.8498</td>
<td>2.2986</td>
<td>1.7204</td>
</tr>
<tr>
<td>4.0</td>
<td>106-14</td>
<td>3.4781</td>
<td>3.1714</td>
<td>2.4102</td>
<td>1.5189</td>
</tr>
</tbody>
</table>

As of March 11, 2013

The table above shows that if an investor pays a premium (e.g., 105, or 105 percent of the face amount of the security) for an MBS, the yield will increase if the pool pays off at a slower rate than assumed at the time the investment was priced. The yield will decrease if the pool pays off at a faster rate than assumed at the time that the security was bought. The reverse is true for a security bought at a discount (e.g., 95, or 95 percent of the face amount of the security). For such a security, yield increases when the pool pays off faster than assumed and decreases when prepayments are slower.

Regardless of the methodology used, there can be no assurance that the rate of repayment applicable to any particular issue of MBS will conform to past experience or traditional assumptions. For example, the likelihood that mortgages will be refinanced will vary with interest rate changes, economic events, and demographic changes, so the prepayment rate will likely vary over the life of the MBS.

MBS Pricing
The price of an MBS is determined by several factors:

- the type of mortgage backing the security,
- the level of market interest rates,
- the coupon rate on the security,
- liquidity,
- the prepayment assumptions used, and
- the overall demand for MBS.

Generally, current production MBS bear a coupon rate close to the prevailing interest rates for similar investments at the time of issue. Therefore, these securities are priced at or close to par (i.e., 100%, or 100 percent of the face amount of the security). For MBS purchased at a price of par, the yield is not significantly affected by prepayments. For these securities, a yield based upon CPR or another standard assumption of prepayments provides a reasonably good indication of the actual yield even if prepayments do not perform as expected.

Value of Calendar — Month Prepayment Factors
Fannie Mae provides actual calendar month principal paydown factors. A factor represents the percentage of a Fannie Mae MBS pool’s original balance outstanding. Factors are used by Fannie Mae MBS investors to calculate cash flows and principal balances, which reflect both scheduled and unscheduled principal payments. Without these actual factors, investors must contend with a variable prepayment target using estimated factors that must be adjusted from month to month as cash flows fluctuate from the estimates. An investor in Fannie Mae MBS, working with actual factors, avoids these uncertainties.

Because the yield of a Fannie Mae MBS can be highly sensitive to prepayments, investors prefer to rely on actual knowledge of prepayments, not just estimates, to value their mortgage security properly.

Example: MBS Factor Calculation

<table>
<thead>
<tr>
<th>Factor Month</th>
<th>Factor</th>
<th>Balance Using $1,000,000 Original UPB</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>0.92851152</td>
<td>$928,511.52</td>
</tr>
<tr>
<td>October</td>
<td>0.92756215</td>
<td>$927,562.15</td>
</tr>
<tr>
<td>November</td>
<td>0.92646835</td>
<td>$926,468.35</td>
</tr>
<tr>
<td>December</td>
<td>0.81232344</td>
<td>$812,323.44</td>
</tr>
<tr>
<td>January</td>
<td>0.81137201</td>
<td>$811,372.01</td>
</tr>
<tr>
<td>February</td>
<td>0.81047051</td>
<td>$810,470.51</td>
</tr>
<tr>
<td>March</td>
<td>0.80941592</td>
<td>$809,415.92</td>
</tr>
</tbody>
</table>
Weighted Average Life

The length of time before principal is returned is an important consideration in analyzing a potential MBS investment. Because principal is returned throughout the life of the investment, the concept of a weighted average life (WAL) must be used to measure the length of time until principal is returned. Weighted average life is simply the weighted average time at which principal is fully repaid.

The WAL of MBS is an assumption that is useful to compare a potential MBS investment to alternative investments with comparable average lives. The average amount of time that each dollar is actually outstanding is influenced by, among other factors, the actual rate of principal payments on the loans backing the MBS. If an MBS pool with a principal balance of $1,200,000 was purchased and returned principal over the course of one year in twelve $100,000 increments, the WAL would be six months. This investment would be priced to yield an amount acceptable to the investor above the six-month U.S. Treasury security (the “spread-to-Treasury”).

Selecting an MBS Investment

Fannie Mae MBS may appeal to a wide variety of investors because of their ability to fit unique needs. Fannie Mae aims to be responsive to the needs of investors and market conditions in developing new securities, thus offering investors a variety of investment opportunities. Before making any investment, prospective investors may wish to consider:

- cash flow requirements balanced against their liabilities,
- average investment life requirements that fit their asset/liability matching strategy,
- expectations of the interest rate environment and economic factors that can lead to prepayments, and
- other factors affecting their portfolio hedging strategies.

Standard MBS Products

Fannie Mae MBS are categorized as either:

- Fixed Rate Mortgage (FRM) MBS, or
- Adjustable Rate Mortgage (ARM) MBS

FIXED RATE MORTGAGE (FRM) MBS

Fannie Mae’s FRM MBS are securities backed by pools of mortgages with interest rates that are fixed for the entire term of a mortgage. Fixed rate Fannie Mae MBS loan pools may include:

- fixed rate, equal payment, fully amortizing loans;
- fixed rate loans with monthly payments of interest only for a specified initial period, followed by fully amortizing equal monthly payments of principal and interest for the remaining loan term;
- fixed rate loans with a balloon payment due at maturity; and
- fixed rate fully amortizing loans with biweekly payment options.

Each fixed rate Fannie Mae MBS pool is composed of only one of these types of loans, but may have loans with varying fixed interest rates. The investor will receive interest at the single fixed pass-through rate of the security and Fannie Mae will make distributions to certificate holders on the 25th day of each month, or if the 25th day is not a business day, on the first business day following the 25th day of the month. We refer to this date as a distribution date. We will make the first payment for each issue of certificates on the distribution date in the month following the month in which the certificates are issued. For example, if an issue date occurs on March 1, the first distribution date for that issuance will be April 25 or on the following business day if April 25 is not a business day.

When fixed rate mortgages are pooled together, Fannie Mae generally allows the interest rates on the underlying mortgages to fall within a 200 basis point range. The weighted average coupon (WAC) of each security is the weighted average of the mortgage note rates and is provided to the investor to help evaluate the cash flows of the pool. Further, the weighted average maturity (WAM) is available as an indicator of the remaining terms (in months) of the mortgages underlying the Fannie Mae MBS as of the issue date. The weighted average loan age (WALA) and the weighted average loan term at origination (WALT) are also available to help analyze the potential cash flows of the pool.
Example: MBS Weighted Average Coupon (WAC) Calculation

<table>
<thead>
<tr>
<th>Loan #</th>
<th>Original Note Rate (%)</th>
<th>Original Unpaid Principal Balance ($)</th>
<th>% of Pool UPB</th>
<th>Weighted Average Coupon (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan 1</td>
<td>3.250</td>
<td>275,000</td>
<td>0.27500</td>
<td>0.8937500</td>
</tr>
<tr>
<td>Loan 2</td>
<td>3.125</td>
<td>150,000</td>
<td>0.15000</td>
<td>0.4687500</td>
</tr>
<tr>
<td>Loan 3</td>
<td>3.750</td>
<td>250,000</td>
<td>0.25000</td>
<td>0.9375000</td>
</tr>
<tr>
<td>Loan 4</td>
<td>3.875</td>
<td>325,000</td>
<td>0.32500</td>
<td>1.2593750</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>1,000,000</td>
<td>100.0%</td>
<td>3.56000*</td>
</tr>
</tbody>
</table>

* Subject to rounding

The pass-through rate is lower than the interest rates on the loans. This differential covers the guaranty fee paid to Fannie Mae and the fee paid to the servicer for collecting payments from homeowners and performing other servicing functions.

**ADJUSTABLE RATE (ARM) MBS**

Fannie Mae’s ARM MBS are securities backed by a pool of mortgages having adjustable rates. ARMs periodically adjust the interest rate on the basis of the movement of a specified index (e.g., LIBOR, CMT). The following section highlights common features of an ARM security.

**ARM Structure**

Fannie Mae ARM MBS feature the following:

- The Fannie Mae ARM MBS pass-through rate is reset in response to the interest rate changes on the mortgage loans in the pool.
- Fannie Mae guarantees timely payment of both principal and interest for all Fannie Mae ARM MBS.
- Fannie Mae offers a variety of adjustable rate products.

**Understanding ARMs**

Fannie Mae ARM pools will have a pool prefix which provides general characteristics of the underlying mortgage loans and a subtype that will provide further detail about the ARM structure. Having knowledge of the characteristics of ARMs, including their indices, is important to understanding the performance of an MBS.

**Common Indices**

- Treasury: A common Treasury based ARM index is the One-Year CMT (Constant Maturity Treasury) index. The One-Year CMT is the average yield of all treasury securities having one year remaining until maturity. The index is calculated weekly or monthly using market reports by five leading government securities dealers. The weekly index is published each Monday in the Federal Reserve Statistical Release H.15 (519) and can be found on the various wire services.

- LIBOR: LIBOR is the London Interbank Offered Rate, at which major international banks offer to place deposits with one another for maturities from overnight to five years. This rate has become a popular index worldwide and is used by U.S. institutions. Index options range from a one-month to one-year LIBOR. The most common securitized Fannie Mae ARM MBS are six-month and one-year LIBOR, as published in The Wall Street Journal.

- Cost of Funds: The most common cost of funds index (COFI), 11th District COFI, is determined by the monthly weighted average cost of savings, borrowings, and advances for member institutions of the 11th District Federal Home Loan Bank (FHLB). This district includes Arizona, California, and Nevada. The FHLB of San Francisco reports this index on the last business day of the month. Unlike the treasury indices, COFI indices have traditionally reacted more slowly to short-term market rate movements due in part to the varying maturities of the liabilities that make up the index.

**Margin**

There are two types of margins applicable to ARM MBS pools, the mortgage margin and the MBS margin. The mortgage margin is the extra portion of interest spread above the ARM index that the borrower pays as part of the ARM mortgage interest rate. The mortgage margin is generally constant over the life of the mortgage. The MBS margin is equal to the mortgage margin minus certain fees. For an MBS security, the MBS margin represents an extra yield amount over the ARM index that an MBS investor receives from the security.
**Interest Rate**
The interest rate on an underlying ARM loan typically is determined by adding a spread or gross mortgage margin to a specified index. The interest rate is the sum of the index plus the mortgage margin, the “fully indexed” rate, which is then typically rounded to the nearest eighth. However, there are other contractual ARM features, such as caps and floors that can restrict the interest rate on an ARM and cause the rate to fall short of the fully indexed interest rate on its initial adjustment.

**Caps and Floors**
Fannie Mae ARM loans typically contain caps and floors that set maximum and minimum adjustments to the interest rate allowable on each adjustment date. Mortgages that have reached their periodic or lifetime caps, at any adjustment date, are considered “capped out.” The most common caps are:

- Initial adjustment rate cap: This cap restricts maximum upward and/or downward movement on the interest rate at the first reset date.
- Subsequent adjustment rate cap: This cap restricts the maximum upward and/or downward movement of the interest rate at each subsequent interest rate reset date.
- Lifetime cap: This cap defines the maximum interest rate of an ARM, over the entire life of the loan regardless of any other caps. For example, an ARM with an original 3% rate and a 5% lifetime cap (sometimes called a “ceiling”) can never adjust to a rate above 8% over the life of the loan.
- Stated life floors: This floor restricts the interest rate from adjusting below a predetermined level, over the life of the loan.

These caps constitute a “cap structure” of an ARM, and are generally represented in the investor community, in the same order — initial, subsequent, lifetime cap and stated life floor. For example, the table below identifies some common cap structures for Fannie Mae’s most popular ARM MBS.

**Adjustment Frequency**
ARMS using a one-year Treasury index typically have annual adjustment dates. For initial fixed rate period ARMs, the annual adjustment frequency occurs after the initial fixed interest rate period, which can range from three to ten years. COFI ARMs usually fix the initial interest rate for six months. Thereafter, the interest rate resets monthly or semiannually. Fixed period ARM MBS generally behave more like balloon MBS, in that prepayments tend to increase as the initial fixed interest rate approaches expiration.

**Fixed Period (Hybrid) ARMs**
An increasingly popular type of ARM product is the fixed period (Hybrid) ARM, which features an extended fixed rate interest period ranging from three to ten years. At the end of the initial fixed period, the ARM adjusts periodically — typically on an annual basis. Fixed period ARMs with three- and five-year initial fixed periods are popular short-term investment alternatives to comparable fixed income investments.

**Convertibility**
Some ARMs have a convertibility feature that allows borrowers to convert their ARM loans to fixed rate loans during specific periods. The exercise of this option represents a prepayment for the security to the investor. This feature generally is thought to be of little significance when interest rates are stable, declining, or the economics of the transaction are equivalent to a refinancing.

### Common Fannie Mae ARM MBS

<table>
<thead>
<tr>
<th>Initial Fixed Interest Rate Period/Adjustment Frequency</th>
<th>Indices Available</th>
<th>Cap Structure: % @ Initial Adjustment/ % @ Subsequent Adjustment/ % over Life of Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Month (six months/semiannual)</td>
<td>6-Month Wall Street Journal LIBOR</td>
<td>1/1/6</td>
</tr>
<tr>
<td>1/1 (one year/annual)</td>
<td>1-year LIBOR, 1-year (CMT) Treasury</td>
<td>2/2/6</td>
</tr>
<tr>
<td>3/1 (three years/annual)</td>
<td>1-year LIBOR, 1-year (CMT) Treasury</td>
<td>2/2/6</td>
</tr>
<tr>
<td>5/1 (five years/annual)</td>
<td>1-year LIBOR, 1-year (CMT) Treasury</td>
<td>5/2/5, 2/2/5, 2/2/6</td>
</tr>
<tr>
<td>7/1 (seven years/annual), 10/1 (10 years/annual)</td>
<td>1-year LIBOR, 1-year (CMT) Treasury</td>
<td>5/2/5</td>
</tr>
</tbody>
</table>
**Lookback**

The frequency and timing of the rate reset can be crucial in determining the rate of interest paid on an ARM MBS. Lookback refers to the number of days prior to the rate reset date; it is required to calculate the correct interest accrual rate for the forthcoming period. Use the lookback to count backward from the first day of the accrual period to determine the effective index value. Typical lookbacks are 45 days for most Treasury indexed ARM MBS.

A sample timeline for identifying the new interest accrual rate with a 45-day lookback is illustrated in the example below, but the concept is the same for all ARM indices.

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**Example: Lookback Timeline**

![Timeline Diagram]

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**Fannie Mae MBS Prospectuses and Related Documents**

Periodically, Fannie Mae updates certain information for all fixed rate and ARM securities. Investors in Fannie Mae MBS have the advantage of being able to assess the value and performance of their securities over time. Updated data is available through Fannie Mae's PoolTalk® and other resources.

Fannie Mae publishes documents related to each Fannie Mae MBS. For a particular Fannie Mae MBS, the disclosure documents include:

- The relevant **MBS Prospectus** — Each MBS Prospectus contains general information about pools issued during its effective period. The information includes the nature of the guaranty, yield considerations, and the mortgage purchase programs. For example, the March 1, 2013 Single-Family MBS Prospectus pertains to Fannie Mae MBS pools issued on or after March 1, 2013.

- The relevant **Prospectus Supplement** — The Prospectus Supplement contains information about a specific issuance, the mortgage loans and information about the security. A pool’s prospectus supplement is generally available two business days before the settlement date of the Fannie Mae MBS pool.

- The most recent **Annual Report** on Form 10-K — The Annual Report on Form 10-K describes the business and operations of Fannie Mae and our financial condition as of a specified date. It contains audited financial information and is filed with the SEC annually.

- Disclosure documents also include certain other reports filed with the SEC subsequent thereto (including, for example, the quarterly 10-Q reports and 8-K reports filed from time to time).

Fannie Mae also publishes certain Trust Documents related to its MBS, including:

- The Master **Trust Agreements** or the Trust Indentures creates the trust holding the assets backing the MBS. The Master Trust Agreement, or the Trust Indenture, including its exhibits and supplements, generally sets forth the terms relating to an issuance of MBS, the loans or participation interests in the pool, and the payment terms on the MBS.
Additional Fannie Mae MBS Products

Fannie Majors®
Fannie Majors are typically multi-lender Fannie Mae MBS comprised of current production 30-, 20-, 15-, or 10-year fixed rate mortgages. Each Majors pool is comprised of a single mortgage type and can include loans with no more than 12 months of seasoning. Fannie Majors vary in size and often have a minimum original issued amount of $1 million, with some original issuance amounts well in excess of $1 billion. Majors may offer investors a more diversified pool of loans since lenders from all around the country can participate in a single issue. Fannie Majors pools are identified by the same prefixes assigned to their single issuer pool counterparts.

Additional information may be found at the following documents, Fannie Majors Open Pools and Learn More About Fannie Majors.

To learn more about Fannie Mae other MBS products, we make available the following documents:
• Basics of Multifamily MBS;
• Basics of Megas;
• Basics of REMICs;
• Basics of Grantor Trusts; and,
• Basics of SMBS.

Helpful Tools
The following documents provide general underlying characteristics for the mortgage loans underlying the security in an MBS pool.
• The Pool Prefix Glossary provides access to the pool prefixes for each individual issue of Fannie Mae MBS. The prefix is a two character prefix that identifies the type of mortgage loans in that pool and the basic terms of the certificates.
• The Single-Family ARM MBS Subtypes are alphanumeric codes that identify ARM product characteristics such as index, initial fixed rate period, rate and payment adjustment frequency, caps, convertibility, and other features.

MBS Business Applications
The following online Fannie Mae business applications provide specific pool, or CUSIP, disclosure information for both “at-issuance” and ongoing.
• PoolTalk®, allows users to retrieve pool-level information on Single-Family MBS, SMBS, and REMIC securities. PoolTalk is the single repository for Fannie Mae MBS data.

Contact Information
For additional information or assistance, please call the Fannie Mae Fixed Income Investor Helpline at 1-800-237-8627 or via email. The Helpline is available from 8:30 a.m. to 5:30 p.m., ET, every business day.

Investors can also obtain Single-Family MBS documents from our Web site at www.fanniemae.com.