

MORTGAGE MONEY: THE SECONDARY MARKET

KEY TERMS AND PHRASES

Annual return	Originate-to-distribute model
Basis point	Pass-through
Collateralized debt obligation (CDO)	Point
Collateralized mortgage obligation (CMO)	Price
Discount	Private mortgage conduits
Mortgage-backed securities	Real Estate Mortgage Investment Conduit (REMIC)
Mortgage loan pools	Secondary market
Net yield	Tax-exempt bonds
	Yield

LEARNING OBJECTIVES

At the conclusion of the chapter, students will be able to:

- Describe the changes that caused most primary lenders to cease to be permanent investors in residential mortgage loans
- Describe how the development of uniform loan origination documents and expansion of the private mortgage insurance market impacted the growth of the secondary mortgage market
- Describe how yield on mortgages and market yield requirements affect the pricing of mortgages and mortgage securities
- Explain the basic differences between mortgages purchased for portfolio purposes and those purchased for underwriting
- Describe the concept of federal underwriting
- Understand the specific details of the major federal loan programs
- Describe the evolution of loan pooling and its importance to the other primary sources of securitization in facilitating real estate mortgage financing

INTRODUCTION

The previous two chapters focused on the primary market—the loan origination market. Prior to the mid-1970s, the loan origination market was dominated by regulated depository institutions. This group of lenders held the major source of deposit assets that could be used to fund long-term loans. Unless a lender had money on deposit to fund loans, there was little opportunity to enter the business except in a loan brokerage capacity. Mortgage companies handled the brokerage function.

Using deposits to fund mortgage loans worked fairly well for about four decades following the Great Depression of the 1930s. During this time, there was a federal limit on interest rates that never exceeded 5.5% paid to depositors (as per the Federal Reserve's Regulation Q). This restriction allowed lenders to make long-term mortgage loans at not more than 7% to 8% with reasonable protection for the lender of a stable cost of funds. Access by home buyers to this huge, low-cost source of funds began to unravel as interest rates started to escalate in the late 1970s, with 30-year, fixed-rate Freddie Mac mortgages hitting an all-time high interest rate of 16.63% in 1981.

While the real growth of the secondary market began in the early 1970s, its participants throughout that decade were generally limited to loan purchasers who normally invested in mortgage loans. These included large savings associations and savings banks, plus Fannie Mae and Freddie Mac, because the purchase of a mortgage loan by a secondary-market investor generally involved certain responsibilities for managing the loan itself. It was not until the development of the mortgage-backed security concept, which converted mortgage loans into a more acceptable type of security, that the secondary market was opened to investors throughout the international financial markets.

EXPANSION OF THE SECONDARY MARKET

Besides the earlier constraints of interest rates, there were other problems limiting the mortgage market prior to the 1970s. It was difficult to sell mortgage loans for two important reasons: First, the documents used for conventional loans were not uniform; second, there was no acceptable insurance protection against loan default. Only the FHA and VA were able to overcome these problems. Both of these agencies offered uniform documentation that enabled an investor anywhere in the country

to know in advance exactly how a note and mortgage instrument would be worded, and both offered a very acceptable underwriting guarantee (the VA terminology) or an insured commitment (the FHA term).

It was not until 1972 that steps were taken to create a class of conventional loans offering similar advantages to the FHA/VA loans. The move was undertaken by the Federal National Mortgage Association (FNMA, better known as Fannie Mae) in an effort to increase its market. Prior to that time, only FHA and VA loans could be purchased by Fannie Mae, and these amounted to only about 20% of the total residential mortgage market.

Introduction of Uniform Documentation

In 1968, Fannie Mae was partitioned by Congress; one part became the Government National Mortgage Association (Ginnie Mae), and the other remained as Fannie Mae but converted to a federally chartered private corporation, no longer a government-owned entity. Obviously, with 80% of the market, conventional loans offered a big opportunity for expansion for a private corporation. Thus Fannie Mae, joined by Freddie Mac (the Federal Home Loan Mortgage Corporation that was created in 1970), began a several-year process of devising uniform documents acceptable for conventional loans. Together, these three Government-Sponsored Enterprises (GSEs) dominated market leadership in the introduction of new uniform documentation as regulatory rules and market pressures evolved. The result has been the *conforming loan*, a loan written with uniform documents and loan qualification parameters that is readily marketable throughout the country.

Private Mortgage Insurance

In 1972, the problem posed by the lack of default insurance was resolved. At that time, the Federal Home Loan Bank Board approved the writing of 95% loans (formerly, the limit was a 90% loan-to-value ratio) by federally chartered savings associations. Loans with a loan-to-value ratio higher than 90% required insurance against default. Prior to that time, there had been no default insurance requirement. Within a matter of a few months, the private mortgage insurance industry, which had been rather dormant, suddenly came alive. Within two years of the FHLB approval, one insurance company—Mortgage Guaranty Insurance Co. (MGIC) of Milwaukee—was writing more default insurance than the entire FHA.

With conforming loans providing uniform documentation and private mortgage insurance offering protection for the lender, the secondary market was able to expand beyond the limited market of trading in FHA and VA loans.

The recent mortgage crisis and resultant housing downturn in the United States represents the most adverse scenario for private mortgage insurers since the Great Depression. The first small private mortgage insurer went into liquidation in 2008, followed by several more, including PMI Insurance Company of Arizona, a subsidiary of PMI Group. The PMI Group is a large, publicly traded private mortgage insurer that was placed in receivership on October 20, 2011. Many of these liquidated firms have paid off claims as a percentage of the claims put forth. Several firms were forced to raise capital in order to remain on the approved list of private mortgage insurers for Fannie Mae and Freddie Mac. The lack of capacity of private mortgage insurance was for a while an additional inhibitor lengthening the down cycle in residential real estate in the recent recession. Some private mortgage insurers engaged in writing policies that guaranteed private MBS underlying mortgages. Their uncertain future was one of the contributing factors to the virtual halt of private MBS issuance in 2009.

The lack of clarity in the fate of Fannie Mae and Freddie Mac makes it difficult for the remaining private mortgage insurers to gain footing going forward, as many are still reeling from losses sustained in the period 2008–2013.

SELLING MORTGAGE LOANS

So what is the **secondary market**? In essence, the secondary market is the market wherein loan originators are able to sell loans, thus recovering their cash for the purpose of originating more loans. But the secondary market uses a different terminology because its function differs from the market in which loans originate. Secondary market investors do not “lend” money; they “purchase” mortgage notes as investments to earn a return. The return is also called *yield* and it represents the money earned on an investment. In the mortgage market, yield is the combination of interest earned over the life of the loan plus the discount taken at loan origination. These are combined and expressed as an **annual return**. The following section explains this process more fully.

Procedures Used in Secondary Markets

Note the difference in terminology at this point. The originator of a loan speaks to customers/borrowers in terms of loaning money, and expresses the cost of the borrowed money as interest plus points of discount and fees. Once the originator closes the loan to the borrower, the note and mortgage instrument become marketable paper that can be assigned—and the terminology changes. The mortgage note is now a salable commodity and is negotiated as such. The originator of the loan becomes a seller, and the large investing institutions that deal in the secondary market for mortgage loans are called purchasers. Thus, when a mortgage loan is offered for sale, the potential purchaser is interested in only one factor for loans of similar type, size, and quality, and that is the **net yield**.

Pricing Loans to Adjust Yields

Since the interest rate on the loan or loans held by the originator has already been established, the only way a seller can change the yield to a purchaser is to adjust the **price** of the loan. For example, if the mortgage note is for \$10,000 at 7% interest, the yield would be 7%. If the seller must offer a yield higher than 7% to attract a purchaser, the loan must be sold for less than \$10,000; that is, the face value is discounted to increase the yield. By selling the \$10,000 loan for, say, \$9,500, the purchaser is putting up less cash but still collects the originally agreed interest and principal payment applicable to the \$10,000 loan at 7%. The result is a greater return, or yield, for the \$9,500.

The principal balance due on an existing mortgage loan normally changes each month as installments are paid, making it difficult to quote a price in dollars as is commonly done in the bond market. (Unlike the mortgage note, for a bond with a fixed denomination of, say, \$1,000, the principal is normally not paid until the bond matures.) For this reason, the price on a mortgage note is quoted as a percentage figure. The price is that percentage of the loan balance for which the loan is sold. One hundred is, of course, par. If we were quoting the \$10,000 loan just mentioned to sell for \$9,500, the price would simply be “95.” This indicates a 5% reduction in whatever the principal balance due on the mortgage note may be, or a five-point discount. (One point is 1% of the loan amount.)

TABLE 5-1 Price/Yield Table Calculated at 7% Interest for Term of 30 Years

Price	Discount	Yield if Prepaid 8 Years	Yield if Prepaid 10 Years	Yield if Prepaid 12 Years	To Maturity
102	+2 (premium)	6.66	6.71	6.74	6.81
100	0	7.00	7.00	7.00	7.00
96	4	7.70	7.61	7.54	7.41
92	8	8.44	8.24	8.12	7.85

Source: © 2016 OnCourse Learning

In times of falling interest rates, a loan calling for a higher-than-current market interest can sell for a premium¹ of as high as 102%, or even 104%, of its face value. Examples of prices and yields are shown in Table 5-1 to illustrate their relationship.

A simple reading of the table shows that the length of time a loan is outstanding has a direct effect on the yield for that loan. Since loans vary considerably in the time to payoff, it is necessary to use some standard payoff time in order to compare yields when a loan is originated. The reason is that the discount is a lump-sum amount paid at closing and must be spread over the life of the loan to calculate an expected annual yield.

Yield and Discount

Yield can be defined as the return to the investor expressed in a percentage of the price paid for the note. **Discount** is the difference between the face value of the note and the price the investor paid for the note. Yield includes both the interest earned and the discount taken. So to express the discount as a part of the yield, it must be converted to an annual percentage rate. The discount is a one-time charge, a lump sum taken at the time the loan is funded. To determine how much it adds to each year's earnings, or yield, the discount must be converted to an annual amount spread over the life of the loan. But what is the life of the mortgage loan? While most residential loans, including FHA- and VA-supported loans, are granted for a term of 30 years, the realistic life of a loan is approximately 10 to 12

¹Paying a premium for higher-than-market interest rate debt instruments is a common practice in the bond market. However, many investors in mortgage loans refuse to pay any premium because of the ease with which mortgage loans can be refinanced at lower rates when the market declines.

years; that is, within 10 to 12 years the average loan is paid off, usually by resale or refinancing. Fannie Mae and Freddie Mac use a time span of 12 years to determine the yield value of a discount. In round figures, this means that one-twelfth of the discount amount would be considered as earned each year.

The purchase requirements for Fannie Mae to buy a loan are expressed in terms of a net yield, usually carried to two decimal places. The accepted yield can be converted to a discount mathematically or more easily by means of a standard conversion table. Table 5-2 shows several typical yield figures. The sequence of steps in the table shows the fixed interest rate for the note, the price that is used to achieve the yield, and the discount needed to achieve the price.

The mortgage banking industry is able to use both Fannie Mae's and Freddie Mac's daily posting of required yields as solid criteria on which to base its own handling of individual mortgage loans. For example, assume a mortgage company is making mortgage loans at 9.5%, which is competitive in its current market, and must meet a yield of 9.80% to sell the loans. Using Table 5-2, we determine that the price must be 97.45, which requires a discount of 2.55 points to achieve. The mortgage lender would probably quote a discount of 2.75 points as a rounded-out figure if the market is strong. Added to the quoted discount is the origination fee of about 1% for a total of 3.75 points taken at closing.

Consider the 9.5% interest rate just quoted as a *net basis rate*—the rate applied to dealing with a secondary-market purchaser. The *gross rate*—that applied to the borrower—must include two additional charges: One is a servicing fee of about 0.25%, and the other is for private mortgage insurance, if applicable—say, another 0.25%. Thus, the market rate paid by a borrower in this transaction would amount to 10% interest plus 3.75 points.

TABLE 5-2 Example: Conversion of Yield to Price

For a Yield Amount	At Interest Rate	Price Must Be	Points to Achieve
9.500	9.500	100	0
9.800	9.500	97.45	2.55
10.600	9.500	91.12	8.88

Source: © 2016 OnCourse Learning

Loan originators using Fannie Mae/Freddie Mac yields as a guide to trends would be watching for an upward or downward movement to further influence decisions as to what interest rate and discount might be needed to make loans that could be profitably sold.

POINTS

A **point** is one percent of the loan amount. In the jargon of mortgage lending, discounts are sometimes identified as “points.” This is accurate insofar as a discount is usually measured in points. But the two words, point and discount, are not synonymous. A point as a unit of measure is frequently used to identify other costs such as mortgage insurance premiums, an origination fee, a finance charge, and various other charges. Yet it is not uncommon to lump all the costs of financing—even attorney’s fees and title insurance—into one lump sum and call it “points.” This practice can be confusing to the borrower/consumer and is not a compliant disclosure methodology under the Real Estate Settlement Procedures Act as amended by the Dodd-Frank Act.

From a practical standpoint, the borrower should demand that each cost be identified. Such insistence on disclosure may help to uncover an error or possibly an overcharge. Former tax law distinguished between points taken as discount—which was considered a deductible cost of borrowed money the same as interest—and fees charged—which were considered nondeductible expenses. However, the difference in the makeup of points taken at closing is no longer a tax question. Recent rulings by the IRS (involving several revisions) allow a home buyer to take a tax deduction on all discount points paid as these are considered financing costs in the tax year incurred, regardless of the purpose involved, whether paid by buyer or seller. (Commercial loans and refinanced home loans must amortize point deductions over the life of the loan.)

Basis Points

To identify fractions of a point, the financial markets use a finer measure. A **basis point** is one one-hundredth of 1% (not of the loan amount, as is a point). This unit of measure has long been used to report the small daily fluctuations in Treasury bill rates and is now moving into the mortgage language. For example, a servicing fee of, say, 0.25% can also be called “25 basis points.”

LOAN PURCHASERS

As noted earlier, the secondary market is where loan originators can sell their loans—where they can convert their loans back into cash in order to originate more loans. Loan purchasers operate in two different ways:

1. **Purchase for portfolio.** Purchasers of loans may acquire them as a sound investment for the purpose of earning interest. This would include some savings institutions, insurance companies, pension funds, housing agencies, Fannie Mae, and, to a lesser degree, Freddie Mac.
2. **Acquisition for underwriting.** Some loan purchasers do so with the intention of creating mortgage pools that can be used as collateral for the issuance of mortgage-backed securities. These purchasers, as well as some loan originators, use their own funds to create the mortgage pools, and then recover their cash through the sale of securities. Among those active in this field are large investment bankers such as Morgan Stanley and Goldman Sachs, large commercial banks such as Bank of America and JPMorgan Chase, and Fannie Mae and Freddie Mac.

Purchase for Portfolio

The secondary market originated with the idea of purchasing mortgage loans to be held in portfolio. It began when Congress created the Federal National Mortgage Association (Fannie Mae) as part of the act that also created the Federal Housing Administration in 1934. The original purpose was a simple one—to provide a market for FHA loans. As an agency of the federal government, Fannie Mae was able to sell debenture bonds (unsecured promises to pay) that paid a fairly low rate of interest, such as 4% to 5%. The money derived from the sale of bonds was then used to buy FHA mortgage loans that paid 6% to 6.5% interest. That gave Fannie Mae a margin of 1% to 2% over its cost of funds. In 1968, Fannie Mae held \$7 billion in such loans.

The risk to Fannie Mae lay in maintaining that margin. If its cost of funds increased, there was no way it could increase the interest earned on its investment in fixed-interest, long-term loans. To finance its mortgage loan purchases, Fannie Mae sold short-term debenture bonds (with 3- to 5-year maturities) because the interest paid to short-term investors is customarily lower than that paid for long-term money. For many years, the

system worked very well. In industry jargon, Fannie Mae was borrowing money on the short term and lending it on the long term. It was not until market interest rates began to escalate between 1979 and 1981 that the cost of funds exceeded the interest earned. Losses ensued for all holders of mortgage loans, not just Fannie Mae.

During this same time period, savings institutions made up the largest group of loan purchasers holding mortgage loans. Their cost of funds had been protected by the federal limitation on interest rates paid to their savings account depositors. While the federal limit was not removed until March of 1986, it was substantially undermined in the late 1970s by the introduction of a variety of savings certificates that paid higher interest rates. To hold deposits, savings associations had to pay higher rates to their depositors, as they could not call in their long-term mortgage loans. The result was devastating losses for savings institutions and a general dissatisfaction with the “portfolio approach” to mortgage loans. (Remember our earlier discussion of the RTC in Chapter 3.)

Nevertheless, there remains a substantial market for mortgage loans purchased by those who hold them as investments. Some of the risk of fluctuating interest rates has been reduced by the introduction of adjustable rate mortgage designs. Also, mortgage rates that were once held low by an artificial restraint on lenders’ cost of funds are now free to fluctuate in a competitive market that has produced a near steady decline from earlier peaks. Indeed, in 1982, home loan rates reached in excess of 16%. In 2014, 30-year, fixed-rate, conventional mortgage interest rates fluctuated between 3.8% and 4.41% below the long-term average of 8.48% (1976–2013).²

Purchase for Underwriting

“Purchase for underwriting” is actually an overly abbreviated title for this section. It is meant to explain the process through which loans are purchased, or otherwise acquired, for the express purpose of creating **mortgage loan pools**. A mortgage pool is a collection of loans, or a block of loans. The pool can be made up of a particular kind of mortgage loan distinguished by its collateral, such as all condominium loans. It can be a geographically diversified block of residential loans, as is most commonly

²“US 30 Year Mortgage Rate Chart.” YCharts.com, 2014. Accessed Dec. 29, 2014 at http://ycharts.com/indicators/30_year_mortgage_rate

found in the Freddie Mac offerings. It can be exclusively FHA/VA, as is required for a Ginnie Mae-type pool, or it can be a block of commercial loans.

Participants in this type of secondary-market activity are mostly investment bankers, commercial banks, Fannie Mae, Freddie Mac, hedge fund managers, and foreign sovereign wealth funds. These companies have the cash to acquire huge blocks of loans and establish the specific mortgage pools with identification of the individual mortgages assigned to them, and then issue a series of securities that are backed by the mortgage pool. The securities are then sold to various investors.

All pools are organized in a manner that collects and accounts for the payments received on the individual loans, then passes this "cash flow" on through to the investors who have bought the securities. The intricacies involved in the proper handling of these huge cash flows could not be managed without the recent advances in computer technology. Just how the cash flow is handled as it passes through to the security holders differs in a number of ways. It is these differences that distinguish one kind of mortgage-backed security from another, as will be explained later in this chapter.

How do the participants in the creation of mortgage pools make money? It is easier to understand if you think of the process as selling the cash flows rather than selling the mortgages. In fact, the mortgages remain locked up in the care of a trustee. The trustee may be a bank's trust department, or it could be the creator of a pool if properly authorized to hold the mortgages in trust. (The pooler is the company that issues the securities backed by the mortgages.) The point is that the mortgages themselves are not "delivered" to the purchaser of a mortgage-backed security; just the cash flows generated by those mortgages are passed through to the purchaser/investors.

There must be a margin between what the mortgages deliver in cash flows to the pool and what is passed on to the holders of the securities or there would be no benefit to loan poolers. That margin is generated by **three factors:**

1. Investors in high-grade securities accept lower interest rates than those produced by the mortgages because of lower risk for the investments. In spite of some adverse publicity about foreclosures, home loans are classed as a low-risk investment, and when converted to a security, they can command lower interest rates than more risky investments.

2. Larger investments are usually made for lesser rates than are small ones, so long as the risk justifies it. Mortgage-backed securities are generally offered in large denominations.
3. By segmenting the cash flows to the security holders, issuers can attract even lower cost money from the short-term money market. This is the purpose of the “collateralized mortgage obligation,” which is explained later.

The handling of cash flows differs, and the margins between what mortgages pay and what is delivered to the security holders vary slightly with almost every issue. The following example illustrates a hypothetical profit margin for an issuer of a mortgage-backed security.

Example

Assume a residential mortgage pool of \$1 million with each of the mortgages in the pool paying 10% interest. The result is a cash flow of \$100,000 in interest plus whatever is repaid on principal each year. Say the issuer of the security backed by this block of mortgages offers to pay 9% interest to the security holder. A logical purchaser of such a security could be a pension fund. Say the pension fund pays \$1 million for the security and accepts \$90,000 a year in interest. The \$10,000 difference between what is paid into the pool by home buyers in interest and what is paid to the security holder/pension fund must be shared. The loan servicer (usually the loan originator) will earn between one-quarter and three-eighths of that 1% differential; if a trustee is involved, it would earn perhaps 20 basis points (one-fifth of 1%), and the rest, perhaps 45 to 55 basis points, would belong to the security issuer.

This example is deliberately reduced in size to \$1 million for easier comprehension. In practice, the amount of \$1 million would be much too small to attract any issuer of securities. Loan pools range from \$250 million up to more than \$1 billion. With those kinds of numbers, the margins become far more interesting. To attract investors, interests in the huge pools are sold through a series of securities in smaller denominations, such as \$100,000 units. Mutual funds may offer much smaller denominations for individual investors.

A key point in this kind of transaction is that the risk of interest rate fluctuation passes to the holder of the mortgage-backed security. In the past, those who held mortgages in portfolio were exposed to the risk of rising interest rates, meaning that their cost of funds might increase to an amount greater than the earnings on the loan portfolio. While this fact has not changed—those who hold mortgage loans in portfolio are still exposed—there is now another option. By converting mortgage loans to securities, the risk is passed on to the security holder.

To explain the meaning of this “passing of the risk,” let us take another look at the example of the \$1 million block of loans, and say it is converted to a single \$1 million denomination security. Assume that security was sold to a pension fund. What the pension fund now holds as an asset is a \$1 million security (call it a mortgage-backed bond) that pays 6% each year on the principal balance. What happens if the market interest rate now moves from 6% to 8%? This shift would reduce the pension fund’s \$1 million asset value by about a 12-point discount, to an asset value of approximately \$880,000. If the pension fund has to sell that mortgage-backed bond for some reason, it would take a \$120,000 loss. However, unlike savings associations, pension funds and similar investors do not face depositors who can withdraw their cash whenever they want, so it is very unlikely that such an investor would be forced to accept such a loss. If held to maturity, the underlying mortgage pool would eventually repay the full \$1 million in principal plus interest, and all parties would recover precisely what they expected when the investment was made.

In fact, the attraction of mortgage-backed securities has encouraged savings institutions to exchange their portfolios of mortgages for securities. This was the cause of the massive “swaps” that boosted pool underwriting between 1982 and 1984. A swap occurs when an institution trades its own portfolio of mortgages to, say, Freddie Mac, in return for a series of mortgage-backed securities. This may appear to be an unrealistic exchange. After all, does the savings institution not still carry the risk of interest rate fluctuation if it holds a security tied to the mortgages? The answer to this question has to be “yes,” in that the principal value of a mortgage-backed security may rise or fall depending on the fluctuation of market interest rates as described in the previous paragraph.

But there are two differences that account for the attraction of mortgage-backed securities over holding mortgages themselves: First, a security is more easily sold than a mortgage loan, thus providing greater liquidity should cash be needed. Second, the security can carry an additional protection against loss that was not available for the individual

mortgage loan. The additional protection is an underwriting guarantee of the mortgage-backed security by a federal agency. About half of the mortgage-backed securities backed by residential mortgage loans have this protection. This kind of underwriting is the subject of the next section.

FEDERAL UNDERWRITING OF MORTGAGE POOLS

The concept of a block of loans serving as collateral for the issuance of a security is not new. And it is not limited only to mortgage loans. It is used in other areas of supplying credit, such as with car loans, student loans, and even for credit cards. In market jargon, it is called an “asset-backed” security (ABS). Those who issue securities backed by blocks of loans can range from banks to home builders, from investment bankers to finance companies, and from retail merchants to real estate brokers.

A trend that has substantially enhanced the wide acceptance of **mortgage-backed securities** has been the rapid growth of federal agency underwriting. Remember that the issuers of mortgage-backed securities earn a margin between what the individual mortgages pay each month and what the issuers have to pay the holders of the securities. Therefore, the larger the margin, the greater the profit; and the lower the risk, the lower the rate that has to be paid security investors. What federal underwriting has added is an element of reduction in the risk for holders of mortgage-backed securities.

Since reducing the risk for the investor encourages lower interest rates, the long-range results are not only slightly higher margins for the issuers, but also lower interest rates for home buyers. In fact, the reduction in risk was quantified by the Federal Reserve Bank Board with a ruling effective in 1989. That rule increased banks' capital requirements from 6 to 8%, tied to the risk level of their assets (meaning loans outstanding). For most kinds of commercial loans held in portfolio by a bank, capital required is 100% of the 8% requirement, or \$8 for every \$100 of loans outstanding. For approved residential mortgage loans, the risk-based capital requirement is reduced to 50%, or \$4 for every \$100 of such loans. If the investment is made in mortgage-backed securities that are federal agency insured, the risk drops to 20%, or \$1.60 for every \$100, and to zero for federal government-guaranteed loans (which includes government bonds and Ginnie Mae mortgage-backed securities).

So who are the federal underwriters offering these benefits? There are four involved with mortgage loans: Ginnie Mae, Freddie Mac, Fannie Mae,

and Farmer Mac, the newest entrant in the field as of July 1989. None of these agencies is limited in its activities solely to underwriting mortgage loan pools. The following section describes the origin, ownership, underwriting requirements, and other functions of each agency.

Government National Mortgage Association (Ginnie Mae)

Ginnie Mae was created by partitioning the Federal National Mortgage Association in 1968. As a result, Fannie Mae became a federally chartered public corporation (listed on the New York Stock Exchange) and Ginnie Mae was assigned to the Department of Housing and Urban Development (HUD). Of the four federal underwriting agencies, Ginnie Mae is the only one that belongs to the government and thus carries unique powers.

Ginnie Mae was assigned two of the three functions formerly handled by Fannie Mae: (1) to implement special assistance for housing as may be required by Congress or the president, and (2) to manage the portfolio of loans assigned to it by the partition from Fannie Mae. (The third function—stabilizing the mortgage market through the purchase of loans—remained with Fannie Mae.) To minimize duplication of facilities, some of Ginnie Mae's operations are handled by agreement through the offices of Fannie Mae.

What has overwhelmed the original intent in creating Ginnie Mae is the success it has had with "managing" its loan portfolio. To liquidate some of the loans acquired in its partition from Fannie Mae, Ginnie Mae created pools of these loans and issued a guarantee certificate backed by the pools as a type of security. The pool guarantee concept became the mechanism by which mortgage loans are converted into more salable securities. Ginnie Mae pools today are limited to FHA, VA, and certain USDA Rural Development Agency loans. (The Farmers Home Administration, FmHA, was eliminated in 1996 and the name has changed to USDA Rural Development at this time. It remains under the administration of the Department of Agriculture.)

However, Ginnie Mae does not purchase mortgage loans to create its pools. It approves "loan poolers," usually investment bankers such as Deutsche Bank and JPMorgan Chase, who purchase mortgage loans from loan originators across the country. These loans must comply with Ginnie Mae requirements. Then Ginnie Mae issues its guarantee certificates, which are backed by specific loan pools. The loan poolers then sell the Ginnie Mae certificates. As the individual mortgage loans produce