
Underwriting and Financing Residential Properties

This chapter deals with the process of seeking long-term mortgage financing for owner-occupied residential properties. Here, we focus on two aspects of this process: loan *underwriting* and *closing*. When discussing the underwriting process, we consider borrower and property characteristics and how loan terms are established. We also consider the size of the loan relative to property value, loan payments relative to borrower income, and default risk undertaken by lenders. We discuss the use of mortgage insurance or guarantees that may be necessary to grant a given loan request in cases where the total risk of lending to a specific borrower is too great for a given lender to undertake. Insurance may be provided by private insurers, or, depending on the property and borrower characteristics, insurance or guarantees may be available from various government agencies.

We look at the loan-closing process in terms of the necessary accounting between the borrower, lender, seller, and other parties to a transaction in which transfer of title and a loan closing occur simultaneously, and we consider federal regulations that require certain practices from the lender regarding uniform disclosure of interest charges, closing statements, and collection of credit and other information about the borrower.

Underwriting Default Risk

The process of evaluating a borrower's loan request in terms of potential profitability and risk is referred to as **underwriting**. This function is usually performed by a loan officer at a financial institution or mortgage banking company. The loan officer performs this analysis based on information contained in (1) the loan application submitted by the borrower and (2) an appraisal of the property. This analysis is made in the context of a lending policy, or guidelines, that a particular institution specifies. In some cases, lenders will require that borrowers obtain **default insurance**. The borrower purchases this insurance policy to protect the lender from potential losses, should the borrower default on the loan. In such cases, the lender is not willing to bear the total risk of borrower default, or the loan may be sold to a third-party investor (recall the process of assignment of the note and mortgage discussed in Chapter 2). In the latter case, the lender must consider underwriting standards required by such investors; otherwise, the lender may lose the option of selling

mortgages later. In deciding whether a loan application should be accepted or rejected, the loan officer follows some fundamental concepts in loan risk analysis.

Before beginning a detailed discussion of specific underwriting standards and policies, we first consider some basic relationships and terms used in mortgage underwriting. Two fundamental relationships that must be assessed by any lender when considering the risk of making a mortgage loan are the expected **payment-to-income ratio** and the **loan-to-value ratio**. The payment-to-income ratio is simply the monthly payment on the loan amount being applied for plus other housing expenses divided by the borrower's income. The loan-to-value ratio is the loan amount requested divided by the estimated property value.

The first ratio is important because the borrower will generally be personally liable on the note and must be able to make payments either as scheduled (in the case of a *fixed rate mortgage*) or as market conditions change interest rates (in the case of *adjustable rate mortgages*). Clearly, the greater the ratio of mortgage payment to income for a given borrower, the greater is the default risk. Hence, a higher risk premium must be earned by the lender. Similarly, because the property being acquired by the borrower also serves as security for the note, as the loan-to-value ratio increases, the likelihood of loss increases. This is because the property may not bring a sufficient price at a foreclosure sale to cover the outstanding loan balance, any past due payments, and foreclosure costs. Therefore, the major problems facing a lender when reviewing a loan request made by a borrower are: (1) assessing the many variables that affect default risk, (2) determining whether a fixed interest rate or adjustable rate mortgage can be made, and (3) if the total risk on a particular loan request is too great, deciding whether the loan should be refused or made with default insurance or guarantees from third parties.

Classification of Mortgage Loans

In previous chapters, we discussed and classified mortgage loans mainly in terms of interest rate risk, that is, whether a loan was a fixed rate mortgage (FRM) or an adjustable rate mortgage (ARM). While those chapters also included a basic discussion of default risk, specific methods and procedures for assessing borrower default risk are primary topics in this chapter.

Recall from the previous chapter that default risk was defined as a potential loss that could occur if the borrower failed to make payment on a loan. This failure could be caused by a borrower having insufficient income, or because the market value of the property fell below the outstanding mortgage balance, or both. There are several ways that default risk can be shared. Default risk may be fully assumed by the lender, shared by the lender and a third-party insurer, or fully assumed by a third-party insurer or guarantor. To facilitate discussion, we use the following classifications:

1. Conventional mortgages.
2. Insured conventional mortgages.
3. FHA-insured mortgages.
4. VA-guaranteed mortgage loans.

Conventional Mortgage Loans

Conventional mortgage loans are negotiated between a borrower and lender. From these negotiations, the loan-to-value ratio, interest rate (or ARM terms), and the payment-to-income ratio are established. The loan-to-value ratio establishes the

borrower's down payment, or equity. Should the borrower default on the loan, both the lender and borrower may incur losses. Losses usually include any past due interest, costs of selling the property, and the extent to which the sale price is less than the mortgage balance. In the event of loss, the borrower absorbs such losses first to the extent of any equity. If losses exceed the amount of borrower equity, the lender will then incur a loss, which then becomes a claim against the borrower and (depending on state law) may be used to attach other assets owned by the borrower (recall the discussion of deficiency judgments in Chapter 2).

Typically, if the borrower desires a conventional loan, the maximum loan amount will be 80 percent of the value of the real estate being purchased. Location of the property—for example, in a platted subdivision with city utilities—is also a key factor. Because the lender must look to the sale of the property for repayment of the mortgage loan, should the borrower default, regulations governing the operation of most savings institutions generally require that for conventional loans, equity of at least 20 percent of value must be provided by the borrower. Therefore, such losses must exceed 20 percent of the original property value before the lender would suffer a loss. Much of the lending activity in the conventional loan market is affected by the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC). See Concept Box 8.1 for a brief discussion.

Insured Conventional Mortgage Loans

In many instances, borrowers do not have the necessary wealth to make a down payment of 20 percent of value when purchasing a property. However, if the income-earning ability of the borrower and the location of the property being acquired are satisfactory, lenders may be willing to grant a loan request *in excess of 80 percent of value* with a condition that the borrower purchase **mortgage insurance** against default risk. Many firms provide this insurance for a premium, which is paid by the borrower and is based on the amount of risk assumed by the mortgage insurer. A useful way of thinking about mortgage insurance is to view the borrower as negotiating for a larger loan from the lender, and then paying an insurer to assume the increase in default risk above that taken by the lender on a conventional loan. In other words, only the amount of the loan in *excess* of 80 percent of the property value at the time of loan origination is usually covered under the mortgage insurance policy. Therefore, if a mortgage is made for 95 percent of value and private mortgage insurance is purchased, the borrower would make an equity down payment of 5 percent of the property value and the mortgage lender would make a 95 percent loan. However, the lender would have 80 percent of the loan amount at risk and the mortgage insurer would insure any losses to the lender in an amount equal to 15 percent of the property value. Borrowers evaluating a 95 percent loan must weigh the incremental cost of the additional 15 percent by considering the combination of a possibly higher rate of interest plus the cost of mortgage default insurance. (Recall the discussion of incremental borrowing costs in Chapter 6.) This incremental cost may be compared to the cost of acquiring second-lien financing or the opportunity cost associated with borrowers making a greater down payment.

Mortgage insurers are private companies that operate by collecting premiums from borrowers based on the incremental risk being assumed as loan amounts rise above 80 percent. These premiums are pooled and the insurers maintain reserves that are used to pay claims to lenders, should mortgage defaults occur. These companies can usually take this additional risk at a premium that would be lower than individual lenders would have to charge because they insure many different borrowers making mortgage loans nationally, whereas individual lenders make loans to fewer individuals in fewer geographic regions. Consequently, mortgage insurers are able to diversify the additional default risk more

The Secondary Mortgage Market and Increasing Standardization in the Mortgage Lending Industry

Concept Box 8.1

The influence of FNMA and FHLMC (Fannie Mae and Freddie Mac) goes far beyond the standardization of documents (appraisal forms, etc.) noted in Chapter 7. As will be described in detail in later chapters dealing with mortgage-backed securities, these two government-sponsored enterprises (GSEs) dominate the secondary residential mortgage market in the United States.

These organizations (1) purchase mortgages from lenders, (2) create large mortgage pools (often in the billions of dollars), and then (3) using these pools as collateral, issue mortgage-backed securities, which are sold to investors such as pension funds, insurance companies, and overseas investors. In order to accomplish this securitization process cost-effectively and efficiently, FNMA and FHLMC have instituted many requirements that lenders must adhere to and that have resulted in considerable standardization in the mortgage lending process.

GSEs classify loans that they are willing to purchase as (1) *conforming* or (2) *nonconforming* mortgages. The conforming category specifies the loan amount that Congress has authorized as the maximum mortgage loan that these GSEs may purchase from lenders and for which the U.S. Treasury will provide credit backing. These loans also must meet the underwriting standards of FNMA/FHLMC. FNMA and FHLMC dominate the conforming loan market because of their GSE status, which includes possible market support at the option of the U.S. Treasury. Because of the implied market support by the Treasury, FNMA and FHLMC can borrow at lower rates of interest than other entities and can buy conforming loans at lower yields than their competitors.[†]

Nonconforming loans are: (1) loans made in amounts *greater* than the loan maximums set for conforming loans or (2) loans that do not meet the underwriting standards used for conforming loans. Because jumbo loans are made in larger amounts and are not backed with government guarantees, FNMA and FHLMC must compete for them with non-GSE lenders. Because of this competition, jumbo loans are usually made by many lenders at higher interest rates than those of conforming loans.

Two additional nonconforming loan categories are *subprime* and *ALT-A* loans. As will be discussed further in the underwriting section of this chapter, **subprime loans** usually indicate situations where some aspect of a borrower's credit listing is deficient. The term **ALT-A** stands for "alternative to A paper," where "A paper" is a low risk, conforming loan. When **ALT-A loans** are underwritten, some aspect of the loan application cannot be verified, such as self-employment income. However, the borrower may have sufficient assets (cash, stocks, etc.) to be approved for a loan. ALT-A loans also are sometimes referred to as "low doc" (low documentation) loans.

[†]For a description of the U.S. Treasury Preferred Stock Purchase Agreement, see: <https://www.fhfa.gov/Conservatorship/Pages/History-of-Fannie-Mae--Freddie-Conservatorships.aspx>.

effectively than a single lender can. A single lender could be more adversely affected, should an economic decline occur in a particular region.

When an insured conventional mortgage is made, the maximum loan that a borrower is likely to obtain will be 95 percent of value, although some lenders will go even higher. Because a greater potential for loss exists and much of the risk of loss is being assumed by the mortgage insurer, underwriting requirements that the lender uses to evaluate the borrower are likely to be heavily influenced by the insurer. Lenders must rigidly adhere to these standards when this type of loan is considered. Premiums will be based on the extent to which the loan-to-value ratio exceeds 80 percent for any given borrower.

FHA-Insured Mortgage Loans

A mortgage loan can also be insured by the **Federal Housing Administration (FHA)**. Unlike conventional insurance, which protects the lender against some portion of the potential loan loss, FHA mortgage insurance insures the lender *completely* against any default losses. It should be stressed that *FHA does not make loans but provides insurance*. Because FHA accepts the entire risk of borrower default, it maintains strict qualification procedures before the borrower and property will be accepted under its insurance program.

The FHA was created in 1934 with the passage of the Federal Housing Act.¹ The original intent of the FHA was to stabilize the housing industry after the Depression of the early 1930s. It has also had a long-standing policy objective to make housing affordable to lower- and middle-income families. This has been accomplished by allowing such families to purchase homes with lower down payments than would be required under conventional lending standards. The FHA operates as an *insurance program*, collecting premiums from borrowers, usually as a part of their monthly payments. These premiums are pooled to create reserves for payment of lender claims. Because FHA mortgage loans are made with higher loan-to-value ratios than conventional uninsured loans and because the FHA assumes the entire risk of default, mortgage insurance premiums charged by FHA are usually higher than private mortgage insurance premiums. This is because private mortgage insurance is usually limited to a fixed percentage of the loan amount (e.g., 15%). FHA insures lenders against all losses caused by borrower default, and this could be greater or less than a fixed percentage of the loan amount originated.

Why is there a need for both FHA and private mortgage insurance? Regulations place loan maximums on FHA-insured mortgage loans which may not be sufficient for many borrowers who purchase higher-priced properties.² Hence, qualified borrowers will normally choose a conventional, privately insured loan when a larger loan is necessary to purchase higher-priced property with a low down payment. In general, borrowers with higher incomes, who desire to purchase higher-valued properties with low down payments, opt for private mortgage insurance because the loan amount can be greater than the maximum available under FHA at a lower insurance cost. FHA borrowers are likely to have lower incomes and purchase properties in lower price ranges, within the maximum loan limits set by FHA. Because of the borrowers' lower incomes, lenders may insist that the entire mortgage loan be insured; consequently, these borrowers will pay higher insurance premiums to FHA.

FHA extends insurance to buyers under a number of programs. The most common is Section 203b, which insures loans on one- to four-family detached residences. This program requires fixed interest rate financing with a term of between 15 and 30 years. Other FHA loan programs include Section 251, an ARM program; Section 234c, a condominium insurance program; and Section 245, a graduated payment mortgage insurance program.³

VA-Guaranteed Mortgage Loans

Qualified veterans who desire to purchase a residential property and who meet certain length-of-service tests may obtain a mortgage loan guarantee from the **Department of Veterans Affairs (VA)**. The VA provides **guarantees** that compensate lenders for

¹ The National Housing Act of 1934, as amended.

² For a discussion of FHA maximum insurable loan amounts, see *HUD Handbook 4000.2* and subsequent revisions. FHA maximum insurable loan amounts depend on the geographic region in which the loan is made. These amounts also change from time to time.

³ For a detailed listing of FHA mortgage insurance programs, see *HUD Handbook 4000.2*.

losses on loans made to veterans (borrowers). The amount of the guarantee varies with the home loan amount and the veteran's remaining entitlement. The amount of the guarantee varies over time and usually cannot exceed 25 percent of FNMA-FHLMC conforming loan limits. As is the case with the FHA program, VA does not make mortgage loans. It does, however, make direct loans to the public in connection with the sale of repossessions. *Unlike the FHA program, the VA provides a loan guarantee, not default insurance.* The certificate of guarantee is provided at no charge to the lender. Unlike FHA and private mortgage default insurance, the borrower does not pay any monthly or other insurance premiums for the VA guarantee. All losses incurred by VA under this program are paid by the U.S. government through its budget allocation to the Department of Veterans Affairs. Because of this guarantee, VA underwriting is very structured, particularly regarding appraisals and property inspections.

The amount of the loan that may be guaranteed is generally limited to the amount shown on the **Certificate of Reasonable Value (CRV)**. Veterans also may use their VA home loan entitlement more than once. The amount of entitlement available to a borrower at any given time depends on the current guarantee maximum, amounts of previously used entitlement, plus any amounts restored from previously used entitlement. For example, if the current maximum entitlement is \$36,000 and a borrower purchases a property for \$80,000, the VA will issue a certificate of guarantee for 40 percent, or \$32,000, leaving \$4,000 of entitlement for future use by the borrower. If after a time the borrower meets the legal requirements for *restoration*, the \$32,000 of previously used entitlement would be added back to the remaining entitlement, making the full entitlement \$36,000 once more.

If the borrower sells the property on assumption to another qualified veteran borrower with entitlement who agrees to substitute his entitlement for the entitlement used by the original borrower on the loan, the original borrower's entitlement would be restored.

Many other influences affect the amount of entitlement for which a borrower may qualify, for example, when both husband and wife are qualified veterans.⁴

The Underwriting Process

Regardless of the type of mortgage (conventional, conventional insured, FHA, or VA), much of the underwriting process is common to all types of mortgage loans. The underwriter begins by collecting data to determine whether credit should be extended. The goal of this process is to determine whether the loan-to-value ratio, the payment-to-income ratio, assets of the borrower, and borrower credit history are acceptable to the lender or the lender and insurer. Next, we discuss (1) how borrower income is estimated and the relationship of that income to the proposed mortgage payments and other obligations of the borrower and (2) how the value of the property is established through an appraisal.

Borrower Income

The underwriting process usually begins with the underwriter obtaining the data needed to determine whether credit should be extended. An item of primary importance will be *borrower income*. To gather the necessary data regarding income, the borrower is requested to

⁴ For a discussion of VA loan guarantee eligibility requirements, see Title 38, U.S. Code, Section 3701.

allow the lender to (1) verify place of employment, (2) verify wages (via W-2 forms, paycheck stubs, etc.), and (3) inquire as to whether employment is likely to continue into the future. Typically, where a borrower is employed on a full-time basis and obtains regular income from this employment, there is little problem in verifying income. In cases where a borrower's income is derived from more than a single source, the process of verifying the amount and the likelihood of that income continuing is more difficult.

Other possible income sources include

- Part-time employment
- Working spouse
- Rentals
- Alimony or child support
- Commissions
- Self-employment
- Bonuses
- Dividends or interest
- Retirement annuity
- Social Security
- Public assistance

Generally, two tests must be met before any of these sources will be included in establishing borrower income in the underwriting process. First, the underwriter must judge that the income is likely to continue. This usually means that a source of income must have already occurred continuously for a sufficient time for the underwriter to judge whether that income will continue. Second, the income must be verifiable, usually by reviewing the borrower's federal income tax returns for at least two years. When the income is nontaxable, such as distributions from retirement annuities, canceled checks or verification of deposits may be used to verify the existence of the income.

In addition to deciding what sources of income should be included, difficulties also arise when determining how much income should be used in the underwriting process. For example, the amount of income from a particular source may vary from period to period. When income is variable in nature, such as the earnings from commission sales positions, rentals, or self-employment, a borrower's income will generally be averaged over a period of at least two years from amounts shown on tax returns. Any expenses incurred in earning that income will be deducted from the amount of income earned.

When two individuals are employed, the question arises of what constitutes income. The general rule applied by the lender takes a long-run viewpoint; that is, it asks whether both individuals will remain employed indefinitely, or at least until the income of one is sufficient to meet the monthly mortgage payments. This question often presents difficulty when the value of the property and the loan amount being requested are high in relation to the income of only one of the earners. Obviously, the lender will have to exercise judgment about the future stability of the joint incomes. Generally, if both parties have been employed for several consecutive years, future income stability is more likely. If the intent of one of the parties is to end employment after a given number of years and this individual is presently employed in a professional activity with employment stability, both incomes may be included for the time both expect to remain employed. An estimate may be made as to what the primary worker's total income will be at the time the other party ceases employment.

Although income forms much of the basis for risk analysis by the lender, recent federal regulations have limited the extent to which lenders may obtain information or make

inferences concerning a loan applicant's background. Regulation B of the Board of Governors of the Federal Reserve System provides guidelines that lenders must comply with when gathering information about potential borrowers.⁵

Verification of Borrower Assets

Another step in the data collection process is the *verification of borrower assets*. Assets of the borrower must at least be sufficient to close the transaction. This means that borrower assets must be sufficient to pay closing costs and make a down payment. Moreover, lenders usually do not allow borrowed funds to be used as the borrower's down payment. Thus, how long a borrower's assets have been on deposit will be used as an important indicator of whether the borrower is planning to use borrowed funds to make a down payment. Gifts, on the other hand, are usually allowed for all funds necessary to close. A gift letter stating that no repayment is required, signed by both the borrower and gift donor, is usually required. The lender will usually document the transfer of funds from the donor's account to the borrower's account. Any assets that are not required to close the lending transaction will reflect favorably upon the creditworthiness of the borrower.

Other assets of the applicant also play an important role in rating the loan quality by the lender. The rating is improved if the applicant has demonstrated a consistent ability to save as evidenced by savings accounts or investments in other property, ownership of life insurance (cash value), purchase of securities, and the like, as well as the ability to carry the obligations associated with the acquisition of these assets. For example, an older applicant whose remaining life expectancy is less than the term of the mortgage being sought may be granted a loan with the desired maturity, even though it exceeds the years of life expectancy remaining, if adequate life insurance exists to pay off the mortgage loan in the event death occurs before the loan is repaid. In most cases, the lender will request that the applicant sign a request allowing other financial institutions, investment companies, and credit agencies to disclose to the lender the nature and amount of the applicant's assets. These could include stocks, bonds, savings accounts, and any recent activity in the accounts.

Assessment of Credit History

Typically, the underwriter will also make a judgment about the acceptability of the borrower's past payment history on other obligations. Credit reports from a central credit

⁵ (1) The use of sex, marital status, race, religion, age, or national origin in a credit underwriting procedure is prohibited. (2) Creditors may not inquire into birth control practices or into childbearing capabilities or intentions, or assume, from her age, that an applicant or an applicant's spouse may drop out of the labor force due to childbearing and thus have an interruption of income. (3) A creditor may not discount part-time income but may examine the probable continuity of the applicant's job. (4) A creditor may ask and consider whether and to what extent an applicant's income is affected by obligations to make alimony or child support or maintenance payments. (5) A creditor may ask to what extent an applicant is relying on alimony or child support or maintenance payments to repay the debt being requested, but the applicant must first be informed that no such disclosure is necessary if the applicant does not rely on such income to obtain the credit. Where the applicant chooses to rely on alimony, a creditor shall consider such payments as income to the extent the payments are likely to be made consistently. (6) Applicants receiving public assistance payments cannot be denied access to credit. If these payments and security provided for the loan meet normal underwriting standards, credit must be extended. (7) An individual may apply for credit without obligating a spouse to repay the obligation, as long as underwriting standards of the lender are met. (8) A creditor shall not take into account the existence of a telephone listing in the name of an applicant when evaluating applications. A creditor may take into account the existence of a telephone in the applicant's home. (9) Upon the request of an applicant, the creditor will be required to provide reasons for terminating or denying credit.

bureau, located in most cities, will give a history on a borrower's payment habits for up to 10 years. Such things as slow payment of past borrower obligations may reflect unfavorably upon the loan applicant. Many examples of adverse credit experience will surely cause the loan application to be rejected. However, a brief interruption in an otherwise acceptable credit history caused by explainable events such as divorce or interruption in income will sometimes be overlooked by the underwriter if an explanation is provided—assuming that the borrower has recovered financially from the adverse circumstances that caused this problem. Even bankruptcy may not automatically cause a loan application to be rejected if there were extenuating circumstances and the borrower has had several years of acceptable history since the problem occurred. For developments in analysis and credit scoring, see Concept Box 8.2.

Estimated Housing Expense

Determining the housing expense used to establish the payment-to-income ratio that a borrower is proposing to undertake is relatively straightforward. The following is a list of items that are likely to be included in the estimate of monthly housing expense:

- Principal and interest on the mortgage being applied for.
- Mortgage insurance (if any).
- Property taxes.
- Hazard insurance.
- Condominium or cooperative homeowners association dues (if applicable).

The underwriter will have to estimate many of these items because their exact amounts will not be known at the time of underwriting. Very often, the lender may require that the borrower pay monthly, prorated installments toward mortgage insurance, hazard insurance, and property taxes, in addition to the mortgage payment. Judgment concerning the risk associated with making the mortgage loan will depend upon the total cost of home ownership relative to borrower income. If this total cost of home ownership is too high, then an applicant's loan application may be rejected. Specific examples of how these expenses are estimated and related to income will be discussed later in the chapter.

Other Obligations

In most cases, borrowers will have other obligations in addition to the mortgage loan being applied for. Obvious examples include auto loans, credit card accounts, other mortgage debts, or alimony and child support payments. The underwriter will request that the borrower disclose all debts at the time of application, and then verify these commitments by obtaining a credit report with the approval of the borrower. Courthouse records in the borrower's county of residence also may be checked to determine whether there are any judgments outstanding against the borrower for unpaid debts. Another item on the credit report of importance to the underwriter will be whether the borrower has ever filed for bankruptcy.

Compensating Factors

It is possible that the underwriter will find other favorable factors about the borrower that can offset certain unfavorable factors during the underwriting process. Typically, it is considered favorable for a borrower to have liquid assets that could be used to make monthly mortgage payments should the borrower's income be interrupted. Another favorable factor is if the borrower is employed in a field in which his or her skills are in high demand and the likelihood is that the borrower's income will increase over time. These factors may prove sufficient to allow a borrower to devote more income to housing expenses, even

The evolution of credit scoring models has had a profound impact on all areas of lending, including mortgage lending. When underwriting mortgage loans, lenders usually require that a credit report be obtained on borrowers. Most credit reports contain *credit scores*.^{*} This credit score is a three-digit credit rating that represents an estimate of an individual's financial creditworthiness as determined by a statistical model. Lenders use the borrower/applicant's credit score as *one of many inputs* in the underwriting process. The credit score attempts to quantify the likelihood that a prospective borrower will fail to repay a loan during a specified period of time. Credit scores have an important influence on (1) loan approval and (2) the interest rate that will be quoted on a loan. The maximum credit score is usually in the range of 850. High credit scores increase the probability that the loan will be approved and that it will be made at a lower interest rate than may be quoted to borrowers with lower credit scores. Scores below 600 to 700 may result in rejection of the loan application, unless the lender has additional compelling information, such as other assets owned by the loan applicant that may serve as security.

While the contents of credit-scoring models are private, it is generally believed that the major variables used in the models to determine the final credit score include the following (approximate weights are shown in parentheses):

- A. Punctuality of past payments (35%).
- B. Capacity used: the ratio of current debt (credit card balances, etc.) to total available credit card limits (30%).
- C. Years of credit experience (15%).
- D. Types of credit used (10%).
- E. Recent searches for credit and/or the number of credit cards/accounts applied for recently (10%).

A. Punctual payment. A prompt payment history has a very positive effect on credit scores. Any payments reported more than 30 days late have a negative affect on credit scores. Any account placed in "collection status" (usually after it is six months past due) has a very negative effect on scores. (To increase credit scores, borrowers should strive to pay: (1) an amount greater than the minimum payment due each month on credit cards and installment loans or (2) an amount greater than the interest due for the month, which will reduce the loan balance. If possible, borrower should repay the outstanding loan/credit balance in full each month.)

B. Capacity used. Large total outstanding loan balances as a percentage of total credit limits available on all credit cards used by a borrower will generally have a negative effect on the credit score. Capacity used is calculated as the maximum credit balance used anytime during the billing cycle divided by the total credit limit available. When consolidating the credit card debt, borrowers should be aware that the capacity used ratio may increase if some credit accounts are closed and outstanding credit balances are transferred to fewer accounts. Unless the total credit limit is increased on the remaining credit accounts when consolidation takes place, this could result in a lower total credit limit relative to total credit outstanding and, therefore, a greater percentage of capacity used. This would have a negative effect on the credit score.

C. Length of credit history experience. A lengthy experience with managing credit usually has a positive influence on borrower credit scores. Individuals with less credit experience will not score as well. This tends to favor older individuals with a long history of successful credit management.

D. Types of credit used. Loans made with consumer finance companies or other entities that make loans to high-risk individuals at high interest rates have a negative effect on scores.

E. Searches/inquiries. The number of applications, credit cards issued, and inquiries to credit bureaus regarding the status of the borrower's credit tend to have a negative impact on credit scores. Frequent inquiries regarding borrower credit reporting balances may also adversely affect scores.

^{*} The basis for most credit scores is the so-called *FICO* score, developed by the Fair Issac Corporation and based on a statistical default risk model. Such models have been used by the three major credit reporting agencies (TransUnion, Equifax, and Experian). However, the suppliers of credit data (retailers, etc.) to these three agencies are not all the same. Consequently, depending on the credit reporting agency chosen, credit scores may differ for the same applicant.

Borrower Strategies to Consider during the Loan Underwriting Period

Concept Box 8.3

- *Lock-in period and fee.* Most lenders will provide a firm interest quote usually for 30 days prior to closing. This “lock in” period is a commitment by the lender to make a loan at a specific rate of interest for a specified number of days, even though market interest rates may change prior to the actual loan closing. Some lenders may charge a fee to lock this rate in. Lock-in periods may also be extended to 45 or 90 days, usually for a higher fee.
- *Private mortgage insurance (PMI).* This is usually required for loans that are over 80 percent of value. However, borrowers who need loans in excess of 80 percent of value may consider a first lien for 80 percent, and then add a second lien for the additional amount needed. By keeping the first lien at or below 80 percent, borrowers may avoid PMI. However, interest rates on second liens are usually higher, and this higher rate must be compared to PMI premiums.
- *Option to eliminate PMI or FHA insurance after closing.* These requirements may be dropped, usually when loan-to-value ratios fall below 80 percent. This will reduce monthly payments by the amount of the monthly insurance premium. Elimination of this insurance will usually require a new appraisal conducted by an appraiser who must be approved by the lender.
- *Buying down interest rates.* This option may be compared with making larger down payments. As larger down payments are made, interest rates quoted on a loan should be compared to the interest rate available if the borrower buys down the rate from the lender.
- *Subprime loans.* When a deficiency is discovered (e.g., low credit score) during the underwriting phase of the loan application process, lenders may be willing to make a **subprime loan**. These loans are usually made at higher rates of interest than would otherwise be available and may also include prepayment penalties and significant penalties for late payments. Subprime borrowers may attempt to negotiate a provision in the loan that, if such a deficiency is cured (e.g., the borrower achieves a higher credit score) after closing, the interest rate will be reduced.

if the borrower's proposed housing expense ratio is higher than for other borrowers with similar incomes. Of course, making a substantial equity down payment as part of the purchase price is considered favorable as well. When any or all of these conditions exist, it is possible that underwriting policies may be relaxed to some degree.

After all of the factual data described above have been determined, the loan underwriter will consider whether or not the loan in question should be granted. The process of making this evaluation varies, depending upon the kind of loan the borrower is seeking. The following examples of the underwriting process in conventional, insured conventional, FHA, and VA loan transactions should help to illustrate this point. For a list of other important issues and strategies, see Concept Box 8.3.

The Underwriting Process Illustrated

This chapter section illustrates how each of the four types of mortgage loans described above are generally underwritten by lenders. As indicated earlier, one goal of underwriting is to establish whether the risk of borrower default is acceptable and whether the loan should be granted. We will consider each type of mortgage (conventional, insured conventional, FHA, and VA) separately. In this section, we look at how the maximum mortgage amount is established, how it is related to property value, and how that relationship varies

with each type of mortgage. We also discuss (1) proposed housing expenses and other obligations relative to borrower income, (2) the criteria used to establish acceptable relationships between expenses and income, which will serve as the basis for the lending decision, and (3) the role of appraisals in establishing the loan-to-value ratio.

To facilitate the discussion, we use the sample borrower information in Exhibit 8–1 to illustrate the underwriting process for each category of mortgage loans. Details about the underwriting criteria will be sufficient to allow generalizations beyond the cases used in our discussion.

Underwriting Standards—Conventional and Insured Conventional Mortgages

Looking at the data shown in Exhibit 8–1, we see that in addition to the verification of income and outstanding debts, the lender has estimated both property taxes and hazard insurance (fire, storm, etc.), which are also used in estimating housing expenses. These expenses establish the monthly payment-to-income ratio for the borrower-applicants. Looking at Exhibit 8–2, we see some of the general underwriting standards that lenders will apply in making the decision to grant or deny the loan request. In other words, after assembling the facts necessary to establish monthly housing expenses and other obligations, the lender will compute the necessary ratios and compare them to the general standards used by the lenders and mortgage insurers. This will help determine whether the default risk is acceptable, given the prevailing rate of interest. Lenders and insurers establish these underwriting standards, or maximum allowable ratios, based on loss experience from previously underwritten loans. Interpret these ratios as a general guide, however, because there may be other assets or compensating factors to be considered as part of the underwriting process.

Also note in Exhibit 8–2 that, in the case of ARMs, more stringent underwriting standards may have to be met in certain cases. This is because an increase in interest rates could result in either an increase in payments or an increase in the loan balance due to a payment cap and negative amortization. Lenders refer to cases where negative amortization is expected as *scheduled amortization* and usually take it into account when underwriting the ARM by requiring a *lower* loan-to-value ratio. If payments are likely to be adjusted because the composite rate (current ARM index plus margin) at the time of origination is higher than the initial interest rate, the underwriter will probably consider the scheduled payment increase when reviewing the payment-to-income ratio.⁶ Note that

EXHIBIT 8–1
Sample Underwriting
Illustration:
Borrower
and Property
Characteristics

Name of borrower:	John and Jane J. Jones
Income:	\$3,542 monthly from salaried employment of both spouses, \$42,500 annually
Debts:	Installment obligation of \$181 per month with 35 months remaining Credit card obligations, \$50 per month with more than 12 months remaining
Sale price:	\$76,700
Appraised value:	\$77,000
Estimated property taxes:	\$797 annually
Hazard insurance:	\$552 annually
Desired mortgage:	FRM with a 30-year term, constant payment

⁶ When the composite rate is higher than the initial rate at the time of origination, the initial, or start rate, is referred to as the *teaser rate*, because lenders may be using it as an incentive for borrowers to make ARMs. In some cases, the loan agreement may specify that at closing, any difference between the start rate and the composite rate represents accrued interest and is added to the loan balance. When the first payment adjustment occurs, payments will then increase if the composite rate remains higher than the initial rate. Should the composite rate increase substantially on the payment reset date, the increase in ARM payments may be substantial and is referred to as *payment shock* in the lending industry.

EXHIBIT 8-2
General Industry
Standards for
Underwriting
Conventional and
Insured Conventional
Loans

	Conventional		Insured Conventional	
	FRMs	ARMs	FRMs	ARMs
Maximum ratios allowed (%):				
Loan-to-value	80%	80%	95%	90*-95%
Payment-to-income	28	25'-28	28	25'-28
Total obligations to income	36	33'-36	36	33'-36

*Conventional ARMs with loan-to-value ratios in excess of 90 percent are generally not available, although some lenders will loan in excess of 90 percent at a higher interest rate. Graduated payment mortgages (GPMs) are usually limited to 90 percent loan-to-value ratios because of scheduled negative amortization.

'Generally, the higher ratios are allowed; however, if the conventional ARM or GPM allows for the possibility of maximum increases in monthly payments beyond prescribed limits, the lower ratios must be met for the loan to be insured.

See: Bankrate.com for current information on underwriting standards.

conventional GPMs are usually underwritten on the basis of scheduled amortization, which is known at the time of origination, and the loan-to-value ratio is usually restricted to 90 percent. Also, in the case of ARMs, initial maximum payment-to-income ratios may be lowered if the mortgage agreement provides for the possibility of monthly payments exceeding prescribed maximums. For example, if an ARM is made with a payment cap greater than 15 percent annually, or if the interest rate cap exceeds 2 percent annually or 5 percent over the life of the mortgage, lower ratios will usually be required. This latter restriction also applies to GPMs.

When computing these ratios for the conventional and insured conventional cases, we take relevant information from Exhibit 8-1 and compute the necessary ratios shown in Exhibit 8-3. Note that in the two cases being considered, the insured conventional loan is larger (95% vs. 80%) and is made at a higher interest rate. Also, the insured loan requires a monthly mortgage insurance premium, and the conventional loan does not. The ratios calculated and shown at the bottom of the exhibit indicate that the borrower would probably qualify for either a conventional loan or an insured conventional loan, given that those ratios fall well below the maximum ratios allowed under the general underwriting standards shown in Exhibit 8-2. Whether the borrower will prefer the conventional or insured conventional loan depends on the amount available for a down payment (20% or 5% of appraised value) and whether the borrower wants to pay additional interest and insurance charges. The latter choice also depends on whether the borrower has sufficient funds to make either down payment requirement.⁷ If the borrower could afford to make either down payment, the borrower must decide whether the difference (15%) can be reinvested at a rate of interest in excess of the added interest and insurance charges. (A procedure that may be used to choose between loans that differ in amount and interest rates was presented in detail in Chapter 7.)

Underwriting Standards—FHA-Insured Mortgages

If the borrower in our example is considering an FHA-insured mortgage, a similar approach is used to underwriting, with some notable exceptions. To begin our general discussion of FHA underwriting, we point out that unlike the conventional underwriting process, which provides for loan amounts as a percentage of appraised value (80%, 95%, etc.), FHA has a specific procedure that is used to establish the *maximum insurable loan*

⁷ Examples of various closing costs to be discussed later in the chapter include origination fees, appraisal fees, credit report fees, and transfer taxes.

EXHIBIT 8-3
General Approaches
to Computation
of Borrower
Qualification
(Conventional and
Insured Conventional
Loan Examples)

	Conventional	Insured Conventional
Loan amount requested	\$61,360	\$72,865
Terms	FRM 30 years 9.25%	FRM 30 years 9.5%
Loan-to-value ratio	80%	95%
Borrower income (A)	\$ 3,542	\$ 3,542
Housing expenses:		
Principal and interest	\$ 505	\$ 613
Property taxes	66	66
Hazard insurance	46	46
Mortgage insurance	-	21
Housing expense (B)	617	746
Add:		
Installment debt*	181	181
Credit cards	50	50
Total obligations (C)	\$ 848	\$ 977
Housing expense ratio (B ÷ A)	17%	21%
Total obligation ratio (C ÷ A)	24%	28%

*Usually defined as an obligation with at least 11 remaining monthly payments. However, any obligation that in the judgment of the underwriter requires a large monthly outlay relative to income may be included, even if the number of remaining payments is less than 11.

amount for which it is willing to issue an insurance binder.⁸ This process is generally described in Exhibit 8-4.

It should be stressed that FHA has historically established its own standards for both of these qualifying ratios (see bottom of the exhibit), which it uses uniformly for FRM, GPM, and ARM loans. This practice of computing ratios based on *current income* at the time of loan origination is followed even though monthly payments with a GPM or ARM may change in future periods.

As in the case of conventional lending, the underwriter is likely to take into account other assets, credit history, and offsetting factors when deciding to accept or reject a loan application. Qualifying ratios used as standards in determining the adequacy of borrower income are based on FHA's loss experience in the operation of its insurance fund. Our hypothetical borrower-applicants, then, would likely qualify for an FHA-insured loan. FHA uses one additional underwriting test, however, which is discussed in the next section.

Underwriting Standards—VA-Guaranteed Mortgages

The underwriting process followed by the Veterans Administration (VA) differs considerably in its approach to establishing the adequacy of borrower income in relation to the loan request. The VA procedure stresses the notion of **residual income**, which is a process, whereby gross income is reduced by all monthly outlays for housing, expenses, taxes, all debt obligations, and recurring job-related expenses (see Exhibit 8-5). The difference, or residual income, is then examined to establish whether VA deems it adequate for supporting the borrower's family.

A few items are of particular importance. The mortgage loan amount is equal to the sale price, \$76,700, plus a funding fee ranging from .5 percent to 3.0 percent of the loan request

⁸ The maximum loan-to-value limits are subject to change at any time.

Web App

First-time homeowners often use FHA loans to finance their home. Go to www.fha-home-loans.com and find out the *current* requirements to qualify for an FHA loan. They may differ slightly from that described in

the book because the underwriting requirements frequently change. Summarize the types of loans that are currently available. What is the highest loan-to-value ratio that you could obtain?

EXHIBIT 8-4 General Approach in the Determination of Maximum Loan Amount and Borrower Qualification Ratios (General FHA Example)

SECTION I. Maximum Loan Amount Calculation

First Calculation

Lower of price or appraised value	\$76,700	
Plus: Closing cost allowance*	1,350	
	<u>\$78,050</u>	
Acquisition cost		\$78,050
97 percent of the first \$25,000		\$24,250
95 percent of the remainder		<u>50,397</u>
Maximum loan amount under first calculation		\$74,647

Second Calculation

Lower of price or appraised value		\$76,700
Times: Maximum loan-to-value ratio—Value > \$50,000		<u>97.75%</u>
Maximum loan amount under second calculation		\$74,974
Maximum loan amount [†] —lesser of the first or second calculation		\$74,647
Plus: Financed mortgage insurance premium [‡] of 2.25 percent [‡]		<u>1,679</u>
Amount financed		\$76,326

SECTION II. Computation of Qualifying Ratios

Gross income (monthly) (A)		\$ 3,542
<i>Housing Expense</i>		
Principal, interest, and up-front mortgage insurance premium (\$76,326, 9.5%, 30 years)		\$ 642
Property taxes		66
Hazard insurance		46
Annual mortgage insurance premium [‡]		<u>31</u>
Total housing expense (B)		\$ 785
<i>Other Obligations</i>		
Installment debt [§]		\$ 181
Credit cards		<u>50</u>
Total obligations (C)		\$ 1,016

Qualifying Ratios (percent)	Applicant Ratios (%)	FHA Maximum Ratios (%)
Housing expense ratio B/A	22	29
Total obligations ratio C/A	29	41

*The FHA may provide a closing cost allowance in determining the loan amount. Limits on this amount vary by region.

[†]The maximum loan amount may not exceed limits set by FHA regulations. These limits vary by city and change over time.

[‡]The mortgage insurance premium is composed of two components, an up-front insurance premium, which may be financed or paid in cash, and an annual fee, which varies in terms of amount and term according to the loan-to-value ratio. See U.S. Department of Housing and Urban Development *Mortgagee Letter 94-14* and revisions for a complete discussion on mortgage insurance premiums.

[§]Usually, debt with 10 installments remaining. However, the underwriter can increase or decrease the number of installments depending on the total number of obligations outstanding and the relationship to borrower income.

EXHIBIT 8-5
Determination
of Borrower
Qualification
(General
VA-Guaranteed
Loan Example)

Residual income technique	
Gross income	\$3,542
Less federal income taxes	602
State income taxes	106
Social Security taxes	266
All debts*	231
Maintenance	58
Utilities	134
Principal and interest payment†	657
Property taxes	66
Hazard insurance	46
Job-related, or child care expense	50
Residual income	<u>\$1,326</u>
Minimum residual income for family of	
	1 424
	2 710
	3 855
	4 964
	5 999
	6 1,079
	7 1,159

*Usually includes obligations with six monthly installments remaining; however, the underwriter may include any obligations considered material relative to the borrower's income.

†Based on a loan amount of \$78,138 at 9.5 percent for 30 years (rounded).

‡Residual income figures are determined by the region of the country and the loan amount.

to help the borrower fund closing costs (to be discussed).⁹ Because the loan request is equal to or less than the maximum loan amount, it would qualify for a guarantee.¹⁰ In addition, because the VA is providing a *guarantee*, no monthly mortgage insurance premium is required of the borrower. Based on the borrower-applicant information in Exhibit 8-1, with a family size of two and no minor dependents, our hypothetical borrowers should qualify for a VA-guaranteed loan. They would also meet the supplemental test as used as a secondary underwriting tool by the FHA.

Underwriting and Loan Amounts—A Summary

It is useful at this point to summarize some pertinent data before moving on to the next topic, closing costs. Exhibit 8-6 provides a summary breakdown of some of the more important characteristics considered thus far. The first item to be noted is that although we begin with the same appraised value in all cases, the loan amount will vary by mortgage category. This variation is based on the fact that we have assumed that a loan-to-value ratio of 80 percent

⁹ VA has typically allowed the funding fee (which is paid to VA) to be included in the veteran's loan amount. However, the VA monitors what it considers to be excessive closing costs when considering whether to extend its guarantee.

¹⁰ The down payment plus VA guarantee are subject to change at any time, depending on congressional action. VA loans also may be assumable. There are two types of assumptions: (1) nonqualifying assumptions, where the buyer may or may not be a veteran or qualify with VA before assuming the loan and (2) qualifying assumptions, where the buyer assumes the loan with VA approval. When a VA mortgage loan is assumed, the buyer is not required to be a veteran and is not charged for the mortgage guarantee. If, however, the buyer is a veteran and the seller can induce him to substitute his guarantee for the guarantee used by the seller, then the seller's VA entitlement can be restored and used again. Also, in many instances, increases in VA guarantees provided for by Congress are retroactive. As a result, a veteran who used his maximum VA guarantee in one period may have an additional VA guarantee in a subsequent period.

is to be used in the case of the conventional loan and a 95 percent loan is to be made in the insured conventional loan case with any additional closing costs to be paid by the borrower in both cases. In the FHA case, the loan amount is higher because of the higher loan-to-value ratio allowed by FHA (97% and 95% of portions of the loan request) and because a closing cost allowance may be financed under this program. In the case of the VA, the loan amount is 100 percent of the lower of price or appraised value, plus an allowance for closing costs. Also note that an additional term, *amount financed*, is used in the exhibit. This is the amount upon which the monthly interest and principal will be calculated. In two of the cases it is equal to the loan amount. In the FHA case, the amount financed includes the total insurance premium, or 2.25 percent of the loan balance (or an additional \$1,679), that the lender is also financing and that must be repaid as a part of monthly principal and interest on the total loan amount. In the case of the VA loan, the funding fee also may be borrowed, making the amount financed greater than the loan amount.

Other items of importance in Exhibit 8-6 are the interest rates and notes regarding insurance costs. In our example, we have assumed that the interest rate on the conventional loan will be 9.25 percent, or lower than the rate charged in the other three cases. This is because the amount of funds being loaned is lower than in the other cases. Another important item about interest rates in the exhibit is that all of these rates are competitively determined through negotiation between borrower and lender and will change over time. Do not infer from our example that there is a fixed spread between interest rates on conventional and other loan types. These illustrations are used as *examples only*. Similarly, we assume the terms of the mortgages to be 30 years. While FHA and VA loans are available in 15- to 30-year terms, 30-year loans are used most frequently under these programs. Conventional mortgages, however, are frequently made from 15 to 30 years. Finally, keep in mind that in developing the estimates of housing expenses, total obligations, and other expenses used in underwriting, we have assumed the same estimates in many of our examples for similar expense categories (utilities, maintenance, debts, etc.). In reality, these estimates may differ, depending on the specific regulations, policies, cost manuals, and guidelines that the various insurers and lenders involved in the underwriting process use.¹¹ While there are many other peculiarities associated with underwriting each type of loan, we have attempted to limit the administrative and regulatory detail and to focus on the major differences between underwriting approaches and regulations in order to help the reader understand the more important attributes of the process.

EXHIBIT 8-6
Summary of
Underwriting Results

	Conventional	Insured Conventional	FHA Insured	VA Guaranteed
(a) Lower of price/ appraised value	\$76,700	\$76,700	\$76,700	\$76,700
(b) Loan amount	\$61,360	\$72,865	\$74,647	\$76,700
(c) Amount financed	\$61,360	\$72,865	\$76,326	\$78,234
(d) Interest rate	9.25%	9.5%	9.5%	9.5%
(e) Term	30 years	30 years	30 years	30 years
(f) Insurance fee	N.A.	-	+	N.A.

^a For example: .8 percent of loan at closing, .35 percent per year, payable monthly.

⁺ Two components: an up-front mortgage insurance premium that may either be financed or paid at closing and a monthly insurance premium that varies according to the loan term, loan-to-value ratio, and date of loan closing.

¹¹ FHA and VA closing cost estimates may vary regionally, or even locally, and are updated continuously. In some instances, an appraiser may even make specific estimates of utilities and maintenance items for a given property.

The Closing Process

When a property is being acquired, all interested parties gather, execute, and exchange the documents necessary both to *close the buyer's loan* and to *transfer title to the property* from the seller to the buyer. Generally, such closings are attended by (1) the buyer and seller (perhaps each with legal counsel), (2) any real estate brokers involved, and (3) the settlement agent. The settlement agent is usually a representative of a title insurance company, if such insurance is being purchased, or a representative of the lender, if no title insurance is purchased. The purpose of the closing, then, is (1) to make final settlement between the buyer and seller for costs, fees, and prorations associated with the real estate transaction prior to the transfer of title and (2) to finalize the loan agreement between the buyer/borrower and the lender.

To summarize the disbursements, charges, and credits associated with the closing, a settlement of closing statement is prepared by the settlement agent. This statement summarizes the expenses and fees to be paid by the buyer and seller, and it shows the amount of funds that the buyer must pay and the amount of funds that the seller will receive at closing. The loan and title closing occur simultaneously because the new lender wants assurance that his lien is established (1) as soon as the seller's lender is repaid and that lien is canceled and (2) when the buyer's title company provides title insurance, thereby providing assurance that there are no outstanding liens and/or imperfections in the title being transferred to the buyer. In this event, the new lender will have first lien on the property.

Fees and Expenses

Expenses associated with loan closings must be paid either by the buyer or by the seller, depending on negotiations between the buyer and seller and to some extent on custom in a particular lending area. There is no generally established practice in the area of expense settlement, and in many cases payment of any, or all, expenses is negotiated between the buyer and the seller. What follows is an identification of various expenses associated with real estate closings, followed by an illustration of a settlement statement.

Financing Costs

These charges are generally paid by the buyer/borrower to the lender and are made in connection with services performed by the lender when underwriting and approving the loan. What follows is an extensive list of possible charges that may be made by the lender.

1. Loan application fee. Charge made for processing the borrower's loan application.
2. Credit report fee. Charge made for compilation of the borrower's credit statement.
3. Loan origination fee. Charge that compensates the originator of a mortgage loan for handling paperwork, preparing mortgage documents, and dispensing funds to the borrower.
4. Lender's attorney's fees. For preparing loan documents—mortgage/note; also for examining title documents presented to the lender.
5. Property appraisal fee required by the lender. (In many cases, this fee is paid directly by the buyer outside of the closing.)
6. Fees for property survey and photos when required by the lender. (This fee may also be paid by the buyer/borrower directly to the surveying company outside of closing.)

7. Fees for preparation of loan amortization schedule by the lender from the borrower.
8. Loan discount points. Additional charge paid to the lender to increase the loan yield (per discussion in Chapter 4).
9. Prepaid interest. Interest charged from the date of closing until the date that interest begins accruing under the terms of the note. The latter date usually coincides with the day of the month that the borrower and lender prefer to make payments, which may be different from the day of the month that the closing occurs.

Prorations, Escrow Costs, and Payments to Third Parties

Property Taxes, Prorations, and Escrow Accounts

Because the dates on which property taxes are due to a particular governmental unit rarely coincide with the title closing date, a *portion* of the annual property taxes is usually prorated between the buyer and the seller. For example, if a county collects taxes due on January 1 of each year, and the loan-closing is April 1, the seller should pay taxes (January through March), because the seller owned the property for part of the next tax period. A proration of taxes is usually made at closing by refunding to the buyer that portion of the taxes that the buyer will be responsible for on the next January 1st, but related to the period that the seller owned the property. In this way, the seller pays taxes up until the closing date.

Depending on the loan-to-value ratio in the transaction, the lender may require that an escrow account be established. An escrow account is a non-interest-bearing account into which are deposited prorated taxes from the seller and into which the borrower prepays a monthly share of property tax along with the monthly mortgage payment. These funds are accumulated until taxes are due; then, a disbursement is made by the lender to pay the tax bill when due. In addition to these monthly payments, the lender may also require that two additional monthly payments be prepaid and escrowed at closing. This is done to ensure the lender of a "cushion," or reserve, in the event that the borrower falls behind in payments or is in default. This provision assures the lender that no tax liens will be attached to the property as a result of the borrower's failure to pay property tax, and is usually required in cases where the loan-to-value ratio exceeds 80 percent.¹²

Mortgage Insurance and Escrow Accounts

When mortgage default insurance is made a requirement of obtaining a loan, it will be paid in one of two ways. Either the full policy premium will be paid by the borrower at closing, or if the borrower plans to make premium payments over time, the premium for the first year will be prepaid by the borrower at closing and then disbursed to the insurer. The premium for the second year is also determined at closing, and the borrower will be required to prepay an amount equal to two monthly premiums into escrow. Monthly premium payments are then prepaid into escrow each month after the closing. In this way, when the annual policy premium comes due each year after closing, the lender will always have a full year's premium for payment plus premiums for two additional months in escrow. The escrow or reserve may be needed, should the borrower fall behind in mortgage payments and default becomes a possibility. The escrow ensures that the default insurance policy will not lapse, should the borrower be in danger of default. This is the objective of requiring a default insurance policy, and the lender wants to be

¹² A lender may require that escrow accounts be established on any mortgage regardless of the loan-to-value ratio, but loans with loan-to-value ratios above 80 percent will always require escrow accounts; see Title 12 CFR, Section 54532(b)(6).

certain that it does not lapse and coverage is not lost while the loan is about to go into default. In most cases, mortgage insurance will no longer be required by the lender after the loan balance falls below 80 percent of its original balance, and under certain other conditions.¹³

Hazard Insurance and Escrow Accounts

Hazard insurance against property damage is required by the lender as a condition for making the loan, and the mortgage usually carries a provision to that effect. For loans made in excess of 80 percent of value, however, the lender usually requires evidence that the borrower has obtained a commitment or "binder" showing that the premium for the first year will be collected by the date of closing. An escrow account will also be established for pro rata payments made by the borrower toward the next annual premium due on the policy renewal date. In other words, like the collection of property taxes and mortgage insurance premiums, the lender collects monthly installments equal to 1/12 of the annual premium, along with the mortgage payment, and credits the insurance payment to the borrower's escrow account. When the policy renewal date arrives, the lender then disburses the 12 monthly payments accumulated to the property insurance company. In this way, the lender is certain that the property is always insured against damage. This in turn insures the loan collateral. In addition to these requirements, the lender will also require that two months' premiums be prepaid at closing and escrowed. In this way, the lender has a hazard insurance reserve with which to pay premiums, should the borrower default.

Mortgage Cancellation Insurance and Escrow Accounts

Mortgage cancellation insurance is usually optional, depending on whether the borrower desires it. Essentially, it amounts to a declining term life insurance policy which is taken out at closing and runs for the term of the mortgage. Because the outstanding loan balance declines as monthly payments are made on a fully amortizing mortgage, the insurance coverage also declines with the loan balance. In the event of the borrower's death, the insurance coverage is equal to the outstanding loan balance. The mortgage loan is repaid with insurance proceeds. Premiums are usually paid monthly and are added to the monthly mortgage payment. The lender then disburses those payments to the life insurance company. Although mortgage cancellation insurance is usually bought at the borrower's option, if the borrower's age is a critical factor in the lender's loan analysis, purchase of such insurance may be necessary to obtain the loan.

Title Insurance, Lawyer's Title Opinion

Premiums are charged by the title insurance company to search, abstract, and examine title to a property and to issue an insurance policy that indemnifies the buyer against loss arising from claims against the property. Attorneys may perform a similar service for a fee and render an opinion as to the validity of the title held by the seller and whether it is merchantable. Normally, *either* the full premium for the insurance policy or the fee for the title

¹³ Mortgage insurance may no longer be required by the lender: (1) after the borrower pays the mortgage down to less than 80 percent of its original loan amount, (2) if the property appreciates in value such that the outstanding loan-to-current-value ratio falls below 80 percent, (3) if permitted by the loan agreement, borrowers are allowed to prepay or make a partially amortizing payment reducing the loan balance to less than 80 percent of value, or (4) in some cases, when the mortgage loan reaches the midpoint of its amortization schedule. Assuming that it is allowed in the mortgage insurance policy, the borrower should request that monthly premiums no longer be required at that time.

opinion is paid at closing. Depending on the policy of the lending institution and government regulations, either title insurance or an attorney's opinion is required as a condition for granting a loan.

Release Fees

Release fees are associated with canceling outstanding liens, such as the seller's mortgage lien, mechanics' liens, and so on, and for services rendered by third parties in negotiating and obtaining such releases.

Attorney's Fee

When incurred by the buyer or seller, legal fees may be paid directly by each party outside of the closing or may be included in the closing.

Pest Inspection Certificate

A pest inspection may be made at the insistence of the lender or buyer. In some states, such as Florida, an inspection is required before title is transferred. The inspection fee may be paid directly or included in the closing settlement.

Real Estate Commission

When a seller of a property engages the service of a real estate agent to sell a property, the seller usually pays the commission for such service at the closing.

Statutory Costs

Certain costs may be imposed by a local or state government agency and must be paid before deeds can be recorded. These costs include

1. Recording fees. Fees paid for recording of the mortgage and note in the public records.
2. Transfer tax. A tax usually imposed by the county on all real estate transfers.

Requirements under the Real Estate Settlement and Procedures Act (RESPA)

RESPA is a law passed by Congress to provide a uniform set of procedures and documents for buyer/borrowers of residential real estate. It includes many provisions; however, only those directly associated with the closing are covered here. The essential aspects of RESPA fall into seven areas that are used here to facilitate discussion:

1. Consumer information.
2. Advance disclosure of settlement costs.
3. Title insurance placement.
4. Prohibition of kickbacks and referral fees.
5. Uniform settlement statement.
6. Advance inspection of uniform settlement statement.
7. Escrow deposits.

Consumer Information

Under provisions in RESPA, lenders are required to provide prospective borrowers with an information booklet containing information on real estate closings and RESPA when a loan application is made.

Advance Disclosure of Settlement Costs

At present, the lender is required to mail to the borrower within *three days after* the time of application a *good faith* estimate of certain closing costs for which information is available. The lender must provide information on the basis of actual costs known at that time,¹⁴ or estimates based on past experience in the locality where the property is located.

The estimates provided by the lender generally cover costs in the following categories: (1) title search, (2) title examination and opinion, (3) title insurance, (4) attorney's fee, (5) preparation of documents, (6) property survey, (7) credit report, (8) appraisal, (9) pest inspection, (10) notary fees, (11) loan closing service fee, (12) recording fees and any transfer tax, (13) loan origination fees, (14) discount points, (15) mortgage insurance application fees, (16) assumption fees, (17) mortgage insurance premiums, (18) escrow fees (fees charged for setting up escrow accounts), and (19) prepaid mortgage interest.

In addition, it is suggested, but not required, that the lender disclose (1) hazard insurance premiums and (2) escrow deposits for mortgage insurance, hazard insurance, and property taxes, if these amounts are known at the time of the advance disclosure. In practice, it would be difficult for the lender to know these latter two amounts three days after the borrower has applied for a loan. Although these two items are not likely to be estimated by the lender at the time of the advance disclosure, they will be charged to the borrower at the time of closing.

The form of the advance disclosure may vary from lender to lender and still remain within the requirements of the act. Typically, the disclosure will be made in dollar amounts which will be estimates of the cost of settlement services which are to be performed. However, it is also acceptable for the lender to disclose *ranges* for settlement costs. For instance, a loan origination fee could be stated as ranging from \$1,500 to \$2,000 in the lending area where the settlement is to occur. However, the lender may not disclose a range if a *specific party* is required by the lender to provide a settlement service. In this case, a specific dollar amount is required. Also, the lender is under no requirement to redisclose if the estimates of settlement services provided to the borrower change prior to the time of closing.

Title Insurance Placement

Under RESPA, a seller may not require that a buyer use a specific title insurance company as a condition of sale. This regulation is aimed primarily at developers who may have obtained a very favorable title insurance rate on undeveloped land, with the understanding that after development, buyers would be required to place the title insurance with the same company. This part of the act prohibits such requirements and ensures the freedom of the buyer to place title insurance with any title company.

Prohibition of Kickbacks and Referral Fees

Under RESPA, no person can give or receive a kickback or fee as a result of a referral. If any person refers a buyer-borrower to any specific party involved in the closing (lender, title company, attorney, real estate broker, appraiser, etc.) and receives a fee for the referral, receipt of

¹⁴ See: Public Law 95-522 as amended. Under RESPA, the lender is only required to disclose exact amounts of settlement costs when the lender requires a specific third party to provide a settlement service. If the borrower is free to choose providers of services, the lender need only disclose a range of what an acceptable fee for the service might be. See the consumer information booklet on RESPA obtainable from the U.S. Department of Housing and Urban Development.

such a fee violates the act. RESPA also prohibits fee splitting by parties associated with the closing unless fees are paid for services actually performed. This latter part of RESPA has probably caused more confusion than any other provision of the act because of the vagueness of the term “services actually performed.” However, the intent was to prohibit any circumvention of payments that would have been normally called referral fees by simply splitting fees.

Uniform Settlement Statement

Under RESPA provisions, a uniform settlement statement must be used by the settlement agent at closing. The responsibility for preparation of this statement lies with the lender, and it must be delivered to the borrower and seller at closing. Other closing statements, such as a company form, can also be used for closing purposes, if desired, but the uniform settlement statement must be completed.

This statement is uniform in the sense that the same form must be used in all loan closings covered under RESPA. This form, coupled with the information booklet received by the borrower when the loan application is made, which defines and illustrates costs on a line-by-line basis, should enable the borrower to make a better judgment concerning the reasonableness of the closing costs to be paid.

Advance Inspection of Uniform Settlement Statement

Not only must a uniform settlement statement be used at the closing, but the borrower has the right to inspect this statement one day prior to closing. At that time, information on the additional closing costs not required to be disclosed when the loan application is made must be disclosed to the borrower. These costs include hazard insurance premiums and any required escrow deposits, whatever their intended use is to be.

All of these costs must be disclosed to the extent that they are known to the lender on the day prior to closing. Also, the good faith estimates of other closing costs made when the loan application was completed by the borrower must be revised, if necessary, to reflect actual costs at that time. Both groups of costs must be entered on the uniform disclosure statement for inspection by the borrower.

Although the borrower has the right to advance disclosure, under RESPA the borrower is deemed to have *waived* the right of advance inspection unless a request is made in writing to see the settlement statement on or before the business day prior to settlement. If no request has been received, the lender is under no obligation to prepare the advance disclosure statement.

Escrow Deposits

RESPA limits the amount that a creditor may require the borrower to pay as an initial deposit into the escrow account. The maximum that a lender may require from the borrower as an escrow deposit is one-sixth of the annual amount to be paid on the borrower's behalf. For example, if the lender forwards premiums on the borrower's hazard insurance annually, then the maximum escrow deposit that the borrower can be required to make is one-sixth (two monthly premiums) of the annual hazard insurance premium. Lenders are not allowed to earn or pay the borrower interest on the initial deposit or monthly payments made into the escrow account.

Settlement Costs Illustrated

To help the reader understand how settlement costs are allocated between buyer and seller, we present an example involving the acquisition of the property used in our base example. We demonstrate first how closing costs are determined for a *conventional loan*. The basic information for the closing transaction is shown in Exhibit 8-7. Essentially, these costs must be disclosed to the borrower on a settlement statement, shown in Exhibit 8-8.

EXHIBIT 8-7
Information for
RESPA Closing
Statement

Buyer:	John and Jane J. Jones 482 Liberty Street Anytown, USA	
Seller:	Ralph and Pearl Brown 200 Heavenly Dr. Anytown, USA	
Lender:	ABC Savings and Loan Association Anytown, USA	
Settlement agent:	Land Title Company Anytown, USA	
Loan application date:	March 1—conventional loan	
Advance disclosure date:	March 3	
Borrower may request advance copy of actual settlement statement on:	March 24	
Actual settlement date (closing date):	March 25	
I. Buyer and seller information:		
a. Purchase price		\$76,700.00
b. Deposit		1,000.00
c. Real estate tax proration (taxes to be paid by buyer-owner January 1)		
\$797 Taxes owed by seller Jan. 1–March 24, or $(83 \text{ days} \div 365) \times \797		181.24
II. Buyer-borrower and lender information:		
a. Amount of loan (9.25% interest, 30 years, conventional loan)		61,360.00
b. Prepaid interest March 25 – 31 (7 days) or $(.0925 \div 365)$ times \$61,360 times 7 =		108.85
c. Property tax (escrow) (2 months @ \$66.42 per month)		132.84
d. Loan origination fee (1%)		614.00
e. Loan discount (1%)		614.00
f. Application fee		50.00
g. Appraisal		125.00
h. Credit report		45.00
i. Hazard insurance (escrow)		92.00
j. Title insurance: Land Title Company		350.00
k. Land Title Company closing fee		75.00
III. Transaction between buyer-borrower and others:		
a. Recording fees		31.00
b. Lender's title insurance—Land Title Company		100.00
IV. Transactions between seller and others:		
a. Release statement seller's mortgage		5.00
b. Payoff seller's mortgage (Anytown State Bank)		21,284.15
c. Real estate brokerage fee (6%) (Bobbie Broker)		4,602.00

As shown in Exhibit 8-7, closing costs are separated into four categories, the first three of which involve the buyer. These are the amounts to be paid to, or received from, the seller, lender, and third parties. The fourth category involves costs that must be paid by the seller to third parties. Most items have been previously explained; however, a few computational procedures deserve mention.

In Section I of Exhibit 8-7, note that a property tax adjustment is made for the 83 days that the property has been owned by the seller during the current tax year. Since the buyer must pay \$797 in total taxes at year end, a refund for part of this tax is \$181.24 payable by the seller to the buyer at closing. An additional \$132.84, representing two months of prepaid property taxes, will also be collected and escrowed by the lender. Prepaid interest for seven days will be collected by the lender, as monthly payments are scheduled to

EXHIBIT 8-8
Settlement Statement

I. Amount Due from Buyer:		II. Amount Due to Seller:	
(A) Purchase price	\$76,700.00	Sale price	\$76,700.00
Plus: Settlement charges	2,337.69	Less: Property tax proration	181.24
Less: Property tax proration	181.24	Less: Payoff of existing loan	21,284.15
Less: Earnest money	1,000.00	Less: Settlement charges*	4,607.00
Less: Mortgage loan	61,360.00	Net amount due to seller	\$50,627.61
Net amount due from buyer	\$16,496.45		
<i>Buyer's Share of Settlement Charges:</i>		<i>*Seller's Share of Settlement Charges:</i>	
Loan origination fee	\$ 614.00	Broker commission	\$ 4,602.00
Loan discount	614.00	Recording fee	5.00
Appraisal fee	125.00		
Credit report	45.00		
Mortgage insurance application fee	50.00		
Interest (7 days @ \$15.55)	108.85		
2 months premium—escrow	92.00		
2 months property tax—escrow	132.84		
Title insurance (lender)	100.00		
Recording fee	31.00		
Closing fee	75.00		
Title insurance	350.00		
Total	\$ 2,337.69	Total	\$ 4,607.00

commence on May 1 (Section II). Interest included in the first, regular payment on May 1 spans the period of April 1–30; hence, interest for March 25–31 (inclusive) must be paid at closing. The reader should also note that two monthly installments for hazard insurance are to be prepaid by the buyer and escrowed by the lender. Finally, the lender is also requiring evidence of a binder for a one-year hazard insurance policy at closing. The amounts shown in Exhibit 8-7 are summarized on the uniform settlement statement in Exhibit 8-8. As previously indicated, this statement must be used by lenders to disclose closing costs in most residential transactions.

Federal Truth-in-Lending (FTL) Requirements

In addition to disclosure requirements affecting settlement costs under RESPA, disclosure requirements under the federal Truth-in-Lending Act, which deals with the cost of mortgage credit, have been a requirement affecting lenders since 1968.¹⁵ The intent of FTL legislation is to require that lenders disclose to borrowers financial information contained in loan agreements in a uniform manner. This is required so that borrowers can compare the cost of different loan agreements. It should be stressed that FTL legislation does not attempt to regulate the cost of mortgage credit, but it mandates uniform disclosure of the cost of credit. Truth-in-lending legislation generally requires that lenders disclose financial information contained in mortgage loan agreements to individuals purchasing one- to four-family residences. Commercial real estate transactions are generally excluded. The FTL disclosures must be made by lenders *three days after* application for a mortgage is made by the borrower. Recall that this time requirement is the same as the RESPA disclosure for

¹⁵ USC 1601; Stat. 146; Pub. L. 90-321 (May 29, 1968) as amended.

closing costs. However, unlike the RESPA disclosure, which contains estimates, the FTL disclosure, particularly the annual percentage rate (APR), must be accurately disclosed according to FTL guidelines. The APR as calculated by the lender *may* be rounded up or down to the nearest one-quarter of a percent. However, after rounding, it must fall within the nearest one-eighth of a percent of the APR calculated based on FTL calculation requirements. Furthermore, if market interest rates and, hence, the APR change from the time of application until the loan is closed, the lender must make additional disclosures prior to the date of loan closing.

Truth-in-Lending Sample Disclosure

Exhibit 8-9 contains a description of disclosures that must be made under FTL regulations. Referring to Exhibit 8-9 will aid the reader in establishing which financing costs are included under each disclosure item.

Establishing the APR under Federal Truth-in-Lending Requirements

The APR is the most important required disclosure under FTL, because not only must it be disclosed to loan applicants, but it must also be used when the lender advertises specific loan programs. Accuracy of calculation is also important because in the case of fixed rate, constant payment mortgages, the stated APR may vary from the true APR by only one-eighth of a percent. The calculation performed to determine the APR is essentially the same as the internal-rate-of-return calculation developed in previous chapters.

The information provided in Exhibit 8-10 makes determining the APR for a conventional mortgage fairly straightforward. The APR is determined in three steps. First, we consider the amount financed, shown in the exhibit as item (f). This item is the mortgage loan of \$61,360, *less* (a) the loan origination fee of \$614, (b) the loan discount fee (points) of \$614, and (c) prepaid interest charges of \$109, or a net amount advanced of \$60,023. Second, we consider the buyer/borrower's monthly payments of \$504.79 (based on the amount borrowed of \$61,360 at 9.25% interest for 30 years), shown in the exhibit as item (b). As the final step, we solve for the interest rate that makes the present value of the monthly payments equal to the amount financed. This is done as follows:

Solution:

$$PV = -\$60,023$$

$$PMT = \$504.79$$

$$n = 360$$

$$FV = 0$$

Solve for $i = .791827$ (monthly)

Solve for $i = .791827 \times 12 = 9.50\%$ (annually)

Function:

$$FV(PV, PMT, n, FV)$$

Determining the APR on the conventional insured mortgage is more difficult. This is because of multiple, uneven payments that occur as annual premiums for mortgage insurance change at the end of each year. Exhibit 8-11 illustrates the payment pattern on a conventional insured mortgage, where the annual mortgage insurance premium is based as a percentage of the outstanding loan balance each year. The schedule indicates that monthly mortgage insurance payments should stop during the 16th year, or when the loan balance reaches 80 percent of the original loan amount. The reader should also recall our discussion regarding other conditions under which mortgage insurance payments may no longer be required. To find the APR, 30 groups of 12 monthly payments listed in the exhibit

EXHIBIT 8-9 FTL Disclosure Requirements (Numerical Disclosures, FRM)

Disclosure Item	Description
Annual percentage rate	The effective cost of credit to the borrower on an annual basis as determined by an actuarial method prescribed in the act.
Finance charges	The sum of (1) all interest paid over the term of the loan including discount points, (2) loan application fees,* (3) <i>required</i> mortgage insurance or guarantee, credit life or disability, and hazard insurance, (4) loan origination fees, (5) discount points, (6) escrow charges made for establishing an escrow account, (7) prepaid mortgage interest, (8) assumption fees, and (9) fees for the preparation of an amortization schedule, when <i>paid for by the borrower</i> .
Amount financed	The mortgage amount less any of the finance charges described above that are paid at closing.
Total of payments	The borrower's total monthly payment over the loan term, including interest and principal reduction and fees for required mortgage insurance or credit life insurance, but typically excluding charges for property taxes and hazard insurance.
Amount of payments	The dollar amount of borrower monthly payments. When the monthly payment varies due to the cost of mortgage insurance, typically the highest and lowest payment amounts will be disclosed. When payment increases are known, as would be the case on a GPM, all payment amounts must be disclosed to the borrower.
Number of payments	For a constant payment, fixed rate mortgage, the term of the mortgage times 12. For a GPM, the number of times a borrower must make a payment must be disclosed.
Security interest	The lender must describe the nature of any interest that will be acquired in the borrower's property, should the loan be granted. Typically, the lender must describe any assets which he places a lien against.
Assumption policy	The lender must inform the borrower whether the mortgage is assumable by a subsequent purchaser of the property and whether the loan terms might change at the time of assumption.
Variable rate	If the interest rate on the mortgage is not fixed, the lender must disclose this fact.
Filing fees	The lender must disclose any statutory fees for filing liens against loan assets.
Late charge	The lender must disclose the existence and amount of any late payment fees.
Payment due date	The date after which the lender will charge late fees.
Prepayment policy	Whether or not a penalty will have to be paid, should the borrower repay the loan before the term has expired. The amount of any penalty need not be disclosed.
Hazard insurance	The lender must disclose whether insurance is required.
Mortgage insurance	Premium amount of any such insurance if the lender either requires or offers it for sale to borrowers.

*When an application fee is charged to all applicants, rather than just to applicants who receive loan approval, this fee need not be included in the finance charge.
 †Credit life or disability insurance need not be disclosed with the finance charge unless it is required by the lender. Hazard insurance is included in the finance charge only when the lender requires that a specific insurer be used.

must be discounted until the present value equals the amount financed. The procedure for discounting grouped cash flows has been presented in an earlier chapter, and the student should refer again to that material. The APR on the mortgage used in the example and the payment pattern shown in Exhibit 8-10 is 10.19 percent (calculation not shown).

ARMs and Truth-in-Lending Disclosure

In addition to the required disclosure for an FRM outlined in Exhibit 8-9, slightly more disclosure is required when a borrower applies for an ARM. Additional items that must be disclosed are listed in Exhibit 8-12. The intent of the additional disclosure on ARMs is to illustrate to the borrower the effect of an increase in the composite rate (the index plus the margin) on monthly payments and the loan balance. However, determining the APR

EXHIBIT 8-10
Federal Truth-in-
Lending Disclosure
Requirements (FRM
Transactions)

	Conventional	Conventional Insured
(a) Prepaid finance charges		
Loan origination fee	\$ 614	\$ 729
Discount fee (points)	614	729
Prepaid interest	109	133
Prepaid mortgage insurance	-0-	583
Prepaid finance charge	\$ 1,337	\$ 2,174
(b) Payment amount		
Constant	\$ 504.79	N/A
Highest		\$ 633.94
Lowest		\$ 612.69
(c) Number of payments	360	360
(d) Total of payments (c times b)	\$181,724	\$223,919
(e) Total finance charge*	121,701	153,228
(f) Amount financed		
(1) <i>First method:</i>		
Original loan balance	61,360	72,865
Less:		
Prepaid finance charge	(1,337)	(2,174)
Amount financed	\$ 60,023 ¹	\$ 70,691 ¹
(2) <i>Second method:</i>		
Total payments	\$181,724	\$223,919
Less:		
Total finance charge	\$121,701	153,228
Amount financed	\$ 60,023	\$ 70,691
(g) APR	9.5%	10.19%

*This amount includes all interest and mortgage premiums, as well as all prepaid finance charges.

¹Based on amount financed.

is more difficult on an ARM. The difficulty arises because, as discussed in the previous chapter, future interest rates on ARMs are *unknown*.

Because the future pattern of interest rates is unknown, the method required when determining the APR on an ARM requires that the margin plus index *at the time of origination* be used as the assumed interest rate over the remaining term of the loan. An example should help clarify this point. We make the following assumptions:

- Conventional ARM
- \$60,000 loan amount
- 2 percent annual interest rate cap
- 5 percent over the life of the mortgage cap
- 5 percent initial rate
- 7 percent index at origination
- 2 percent margin
- 30-year term
- \$1,200 prepaid finance charge
- \$59,498.76 balance at the end of year 1
- Negative amortization is allowed

EXHIBIT 8-11
Mortgage Insurance
Premiums
(Conventional
Insured Mortgage)

Year	Mortgage Balance Beginning of Year	Annual Mortgage Insurance Premium	Monthly Mortgage Insurance Payment	Borrower Monthly Mortgage Payment	Current Mortgage Balance as a Percentage of the Original Mortgage Balance
Closing	\$72,865.19	\$582.92	\$21.25	\$633.94	100.00%
1	72,865.19	255.03	21.12	633.81	100.00
2	72,415.87	253.46	20.98	633.67	99.38
3	71,921.96	251.73	20.82	633.51	98.71
4	71,379.03	249.83	20.64	633.33	97.96
5	70,782.22	247.74	20.45	633.14	97.14
6	70,126.17	245.44	20.24	632.93	96.24
7	69,405.01	242.92	20.01	632.70	95.25
8	68,612.28	240.14	19.76	632.45	94.16
9	67,740.87	237.09	19.48	632.17	92.97
10	66,782.98	233.74	19.17	631.86	91.65
11	65,730.02	230.06	18.83	631.52	90.21
12	64,572.55	226.00	18.46	631.15	88.62
13	63,300.21	221.55	18.05	630.74	86.87
14	61,901.59	216.66	17.61	630.30	84.95
15	60,364.17	211.27	17.11	629.80	82.84
16	58,674.15	205.36	0.00	612.69	80.52
17	56,816.41	0.00	0.00	612.69	77.97
18	54,774.29	0.00	0.00	612.69	75.17
19	52,529.50	0.00	0.00	612.69	72.09
20	50,061.91	0.00	0.00	612.69	68.70
21	47,349.43	0.00	0.00	612.69	64.98
22	44,367.73	0.00	0.00	612.69	60.89
23	41,090.11	0.00	0.00	612.69	6.39
24	37,487.19	0.00	0.00	612.69	51.45
25	33,526.70	0.00	0.00	612.69	46.01
26	29,173.13	0.00	0.00	612.69	40.04
27	24,387.48	0.00	0.00	612.69	33.47
28	19,126.87	0.00	0.00	612.69	26.25
29	13,344.15	0.00	0.00	612.69	18.31
30	6,987.52	0.00	0.00	612.69	9.59
31	0.00	0.00	0.00	-0-	0.00

EXHIBIT 8-12
Federal Truth-in-
Lending Additional
Required Disclosures
for ARMs

- Index.
- Margin.
- Composite rate at the time of origination.
- Adjustment period.
- Payment caps at each adjustment period (if any).
- Payment caps over the term of the loan (if any).
- Interest rate caps over the life of the loan (if any).
- Interest rate caps at each adjustment period (if any).
- Whether composite rate increases will affect payment amounts, the loan balance, or both.
- An example of the effect that an increase in the composite rate would have on payment amounts or the loan balance or both (depending upon payment and rate caps, as well as any limits on negative amortization the loan may feature).

The following illustrates the calculation of an APR on the ARM loan described above:

(A) Payment year 1:

Solution:

$$PV = -\$60,000$$

$$n = 360$$

$$FV = 0$$

$$i = 5\%$$

Solve for $PMT = \$322.09$

Function:

$$PMT(PV, n, FV, i)$$

(B) Payments year 2 through 30:

Solution:

$$PV = -\$59,114.78$$

$$n = 348$$

$$FV = 0$$

$$i = 9\%$$

Solve for $PMT = \$478.92$

Function:

$$PMT(PV, n, FV, i)$$

Solving for the APR:

Solution: (Note: CF_s are grouped PMT_s for 12 months, then 348 months)

$$PV = -\$58,800(60,000 \text{ less points})$$

$$CF_j = \$322.09$$

$$n_j = 12$$

$$CF_j = \$478.92$$

$$n_j = 348$$

$$FV = 0$$

Solve for $i = 0.733437$ (monthly)

Solve for $i = 0.733437 \times 12 = 8.80\%$ (annually)

Recall that disclosure of the APR on a fixed rate mortgage must be accurate to one-eighth of a percent; however, on an ARM, the APR may vary as much as one-fourth of a percent from the actual APR.

It should be stressed that this method of computing the APR on an ARM will almost certainly *not* reflect the true cost of funds to the borrower. Clearly, a decrease or increase in the index over the loan term would cause the stated APR to be incorrect. Moreover, the lender is not required to redisclose the APR at closing. As a result, the borrower should be aware that using the APR for an ARM for comparison with FRMs or ARMs with substantially different terms is not advisable. Indeed, the usefulness of an APR for an ARM is quite limited since it assumes that the composite rate (9%) in existence at the time that the loan is originated will be the same at the end of the first adjustment interval and for every succeeding period for the term of the loan.

Key Terms

ALT-A loans, 225
 Certificate of Reasonable Value (CRV), 227
 conventional mortgage loans, 223
 credit scoring, 230
 default insurance, 222
 Department of Veterans Affairs (VA), 226

Federal Housing Administration (FHA), 226
 FHA-insured mortgages, 226
 guarantees, 226
 loan-to-value ratio, 223
 mortgage insurance, 224

mortgage insurers, 224
 payment-to-income ratio, 223
 residual income, 235
 subprime loans, 225
 underwriting, 222
 VA-guaranteed mortgage loans, 226

Useful Websites

www.hud.gov—U.S. Department of Housing and Urban Development. Includes the Federal Housing Administration (FHA), which is now part of HUD. See www.hud.gov/offices/hsg/hsgabout.cfm for discussion of FHA.

www.fha-home-loans.com—Excellent site for information about FHA loans, including the current requirements to qualify.

www.freddiemac.com—Federal Home Loan Mortgage Corporation.

www.homeloans.va.gov—Veteran's Administration. Includes information on VA-guaranteed loans.

www.fanniemae.com—Federal National Mortgage Association.

Questions

1. What is the legislative intent of federal truth-in-lending disclosures, and what specific disclosures are required under the act?
2. When would the cost of credit life insurance be included in the finance charge and APR calculations for federal truth-in-lending disclosures?
3. What assumption about the future composite rate of interest on an adjustable rate mortgage is made when determining the APR for federal truth-in-lending disclosures?
4. List the closing cost items that require RESPA disclosure. What items may be excluded from disclosures under the act? What form can these disclosures take?
5. What types of fees and conditions are prohibited under RESPA?
6. For what items may a lender require escrow accounts from a borrower?

Problems

1. A loan with the following terms is being made:
Fixed rate, constant monthly payment. Closing date February 9th.
9% interest rate. Prepaid interest due at closing.
\$70,000 mortgage loan amount.
\$1,500 loan discount points to be paid by the buyer/borrower to the lender.
25-year term, monthly payments, fully amortizing.
 - a. Calculate the APR for federal truth-in-lending purposes.
 - b. Do you think that the APR calculated in (a) reflects the likely return that the lender will receive over the term of the loan? List specific reasons that the lender's actual return might be different from the APR.
 - c. A potential home buyer is wondering about her credit card accounts and the effect that they may have on her credit score which will be evaluated when she applies for a mortgage loan. At present, she has 3 accounts with credit limits and balances outstanding as follows:
She would like to transfer the balance in account #2 to account #3 in order to save the membership fee and because the interest charges for account #2 are higher than the others. If she does this account #2 would be closed.

Account	Limit	Outstanding Balance
(1)	\$ 5,000	\$3,000
(2)	10,000	5,000
(3)	15,000	8,000

 - (a) How much credit capacity is she currently using?
 - (b) If she cancels account #2 and transfers the balance to account #3, what will be the capacity used now?
 - (c) After the transfer, how much would an increase in the total credit limit have to be in account #3 to restore the total capacity used in all accounts prior to the transfer?
2. You are a new loan officer with Alpha Mortgage, and the manager of the loan department has just presented a problem to you. He is unable to complete the APR calculation on an adjustable rate mortgage that a borrower applied for yesterday. The loan features initial payments based on a 10 percent rate of interest, while the current composite rate on the loan is 13 percent. No discount points have been paid by any party to the transaction, and any difference between

borrower payments and the interest payment required at the composite rate will be accrued in the mortgage balance in the form of negative amortization. The mortgage amount desired by the borrower is \$65,000 for a 30-year term, but a one-time mortgage insurance premium of \$2,400 is being funded as a part of the loan amount, making the total loan balance \$67,400. The borrower is paying \$1,600 in prepaid finance charges at closing.

3.
 - a. Determine the APR, assuming that the ARM is made with a 2 percent annual and 5 percent over-the-life interest rate cap.
 - b. In what way does the APR disclosure aid the borrower in understanding the terms of this specific loan agreement? What are some of the problems with the APR calculations on ARMs?
 4. On August 20, Mr. and Mrs. Cleaver decided to buy a property from Mr. and Mrs. Ward for \$105,000. On August 30, Mr. and Mrs. Cleaver obtained a loan commitment from OKAY National Bank for an \$84,000 conventional loan at 10 percent for 30 years. The lender informs Mr. and Mrs. Cleaver that a \$2,100 loan origination fee will be required to obtain the loan. The loan closing is to take place September 22. In addition, escrow accounts will be required for all prorated property taxes and hazard insurance; however, no mortgage insurance is necessary. The buyer will also pay a full year's premium for hazard insurance to Rock of Gibraltar Insurance Company. A breakdown of expected settlement costs, provided by OKAY National Bank when Mr. and Mrs. Cleaver inspect the uniform settlement statement as required under RESPA on September 21, is as follows:
 - I. Transactions between buyer-borrower and third parties:
 - a. Recording fees—mortgage \$30.00
 - b. Real estate transfer tax 225.00
 - c. Recording fees/document prep. 200.00
 - d. Hazard insurance—one-year policy—Rock of Gibraltar Ins. Co. 420.00
 - e. Peggy Prudent—attorney 150.00
 - f. Inspections 50.00
 - g. Title insurance fee (Landco Title Co.) 400.00
 - h. Landco Title Co.—closing fee 125.00
 - II. Transactions between seller and third parties:
 - a. Release statement—seller's mortgage 5.00
 - b. Payoff—seller's mortgage (Home State Bank) 32,715.00
 - c. Real estate brokerage fee (6% Fast Deal Realty) 6,300.00
 - III. Buyer-borrower and lender information:
 - a. Amount of loan \$ 84,000.00
 - b. Prepaid interest is owed from closing through September 30, which equals nine days (inclusive). Regular payments to begin on November 1. $[\cdot 10 \times 84,000] \div 365 \cdot 9$ 207.12
 - c. Property tax escrow—two months required 133.33
 - d. Loan origination fee 2,100.00
 - IV. Buyer and seller information:
 - a. Purchase price \$105,000.00
 - b. Deposit paid by Cleaver to Ward (paid in escrow to OKAY National Bank) 1,500.00
 - c. Real estate tax proration (taxes for the current year to be paid in arrears by BUYER to county next January 1: \$800 per year). Therefore, because the SELLER will own the property from January 1 to September 22, or 264 days. Therefore, the Buyer owes for the 101 days prior to closing and transfer of title. Therefore, a credit for part of the \$800-per-year real estate tax (for 264 days) is due to buyer from seller at closing. \$ 578.63
- Required:
- a. What are the amounts due from the borrower and due to the seller at closing?
 - b. What would be the disclosed annual percentage rate as required under the Truth-in-Lending Act?
 - c. When will the first regular monthly mortgage payment be due from the borrower?