

REAL ESTATE CENTER



Residential Mortgage Guide

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Solutions Through Research

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Summary

During the early 1980s, inflation threatened many people's ability to become homeowners. Methods of creative financing were devised to counteract the effects of the decade's high inflation rates.

Because inflation is no longer a primary concern for borrowers, many creative financing packages no longer are available or necessary. However, alternatives to the standard fixed-payment, 30-year mortgage loan do exist. They are devised to help potential homeowners overcome the major hurdles that prevent them from qualifying for a loan: debt service too high for income, lack of sufficient down payment and interest rates too high for borrowers to qualify.

This report describes mortgages available in the market and provides selection guidelines for various borrower situations. This does not imply that all such mortgage types are offered in all markets at all times. Local lenders are the best source for information about availability of specific mortgages and current terms. Local government agencies can provide information about eligibility requirements for any special loan programs available.

A glossary is included.

Today's mortgage market offers variations beyond the standard fixed-rate, level-payment mortgage loan. This guide offers a comprehensive overview of the loans commonly available. Each type is classified by the primary objective borrowers serve by selecting loans of that type. A glossary of mortgage terms is included.

Loans to Reduce Monthly Payments

Debt service is the obligation to repay a loan through periodic (usually monthly) payments. Most mortgage loans are *self-amortizing*, meaning that each payment includes some of the interest due on outstanding debt as well as a portion to retire the principal. The loan principal is paid back by the end of the loan term.

For a borrower to qualify for a loan, debt service cannot be more than a specific percentage of a borrower's income. Lowering the interest rate is the most effective way to reduce debt service. Loans that provide lower interest rates for the initial years of the term help borrowers whose current income pre-

cludes qualifying for loans at the going rate of interest.

Adjustable Rate Mortgages

The adjustable rate mortgage (ARM) is the most widely available alternative to the long-term, fixed-rate mortgage loan. Most ARMs are offered with first-year rates from one-half to 3 percentage points lower than fixed-rate loans. Thereafter, the interest rate on most ARMs is adjusted annually based on a selected index of prevailing market interest rates.

Often a *teaser rate*—one lower than that determined by the index—is offered as an incentive to borrowers. The rate then reverts to the index-determined rate at the first adjustment date.

After adjustment, the loan's payment schedule is recalculated to amortize the principal over the remaining term of the loan. Monthly payments may be increased or decreased for the next period. A limit, or *cap*, is fixed on the amount of adjustment allowed in any one period and during the life of the loan. Most common is a maximum adjustment of two percentage points in any one year and six percentage points total variation from the initial interest rate over the life of the loan.

Some loans limit the percentage increase allowed in the payment without limiting the interest rate. These loans may produce *negative amortization*, which allows the borrower's balance to increase over time.

Advantages. An ARM's lower interest rate may allow a borrower to qualify for a loan that would be unaffordable under a fixed-rate regime. In addition, an ARM borrower benefits from declining rates, so that monthly payments may decrease over time.

ARMs are offered by most savings and loan associations (S&Ls), commercial banks and mortgage companies throughout the United States. Their availability ensures competitive rates and terms. ARMs are eligible for FHA insurance as well (see page 5).

Disadvantages. The biggest disadvantage of the ARM is the risk of rising interest rates. Adjustment caps generally limit this problem, but several years of maximum increases could jeopardize a borrower's ability to pay. Prior to applying for the loan, borrowers should project the worst-case payment schedule.

An ARM is more complex than the fixed-rate mortgage. Informed choices are more difficult to make because of the loan's greater number of important features. In addition to interest rate, points and maturity, the borrower must evaluate the index, length of adjustment period and caps offered. The process of adjusting the interest rate also increases the possibility of lender error, making it more difficult for the borrower to monitor the lender's calculations.

Using the ARM to make qualifying easier is limited somewhat by current underwriting rules. When the loan-to-value ratio is 75 percent or more, many lenders use a higher interest rate to calculate required qualifying income.

Buy-Down Loans

In exchange for lower interest rates for home financing, lenders will often require payment of a percentage of the amount borrowed at closing. The amount is calculated as discount points. One discount point equals 1 percent of the loan amount. Payment of additional points further reduces the interest rate and, therefore, the monthly payment. When more points than the market norm are paid, the loan is called a *buy-down mortgage*.

The money for the buy-down can come from any number of sources, although some lenders restrict how much money can be applied. The borrower may have additional cash, or an interested party may agree to pay the buy-down to induce a sale. In some cases, the lender may make a special loan to fund the buy-down.

There are two basic forms of buy-down loans: a permanent buy-down and a subsidized loan. In a permanent buy-down, additional points are paid to reduce the interest rate on the loan for the entire term. Monthly payments are reduced, yet the lender receives the same yield.

The subsidized loan (or temporary buy-down) features a reduced interest rate and payment level only during the first few years of the term. Rather than reducing the contract interest rate, the funds provided by the buy-down are placed in an escrow account and used to reduce the monthly payment level.

In effect, the account subsidizes the loan payment during the period of reduced payments. The amount of reduction often is calculated to simulate a reduced interest rate. The reduction can be constant during the period, but usually it is graduated. For example, under a "3-2-1" buy-down, the payment for the first 12 months corresponds to a comparable loan at an interest rate 3 percentage points below the contract rate.

During the second year, the payment is as if the rate were 2 percentage points lower, and during the third year, 1 percentage point lower. Beyond the third year, payments are consistent with the full contract rate. A comparison of a permanent buy-down and a 3-2-1 buy-down with a loan with no buy-down is shown in Table 1.

Advantages. The biggest advantage of a buy-down is that it lowers debt service so that a borrower can take on a larger loan. The temporary buy-down is especially effective in reducing first-year debt service.

Buy-down payments are predictable, whereas ARM payments vary with interest rate trends. When ARMs are priced at about the same level as fixed-rate loans, a buy-down may provide greater first-year savings. In addition, a buy-down, either temporary or permanent, can be combined with an ARM to obtain the lowest possible debt service level.

Table 1. Buy-Down Mortgage Plans

Loan amount: \$100,000
 Term: 30 years
 Lender's required yield: 7 percent
 Buy-down amount: 4.585 points or \$4,585

Year	Monthly Payments		
	No Buy-Down	Permanent Buy-Down*	3-2-1- Buy-Down
1	\$665.30	\$634.80	\$477.42
2	665.30	634.80	536.82
3	665.30	634.80	599.55
4-30	665.30	634.80	665.30

*The required buy-down reduces the loan amount to \$95,415.

Disadvantages. To obtain lower debt service payments, the borrower must pay more cash at the closing or find someone to fund the buy-down. Funds for a subsidized buy-down are tied up in an escrow account that may pay a low or even zero interest rate. If the buy-down is funded by the seller, the price paid for the property probably will be higher than with standard financing.

Another potential drawback of temporary buy-downs is payment escalation early in the loan term.

Seller Financing

Seller financing is common for home sales in slow markets when interest rates are high and for sales of foreclosed properties by lenders. Sellers provide financing when they accept other than all-cash as payment for the home. The loan may be in the form of a second mortgage, often in conjunction with assumption of the existing first mortgage, or as a first mortgage representing the entire debt on the home.

Seller financing may provide a way to offset the effects of high interest rates and allow more buyers to afford the desired sales price. When the existing loan is assumable (generally an FHA or VA loan), a seller may offer to finance a portion of the difference between the existing loan balance and the sales price. In this way, the seller may be able to negotiate a higher sales price. Seller financing can be helpful, as well, when a buyer has trouble qualifying for a loan.

In general, seller financing is a short-term means to relieve the effects of high interest rates or unavailability of normal financing. Therefore, most of these loans mature sooner than the amortization period. After three to ten years, the outstanding balance of the loan becomes due in a *balloon payment*. This practice limits the exposure of the seller to default risk. The goal is to refinance the loan at favorable rates before the balloon payment comes due. The seller may hold the loan and receive the stream of payments or sell the loan to an investor. Such loans generally are highly discounted so that a seller can expect to receive only a fraction of the loan's face value. In addition, the seller may contract with someone else to service the loan and collect payments.

Advantages. All financing terms may be negotiated as part of the transaction price. This allows the seller and buyer to tailor the financing to fit their needs as well as set the contract price of the home. In fact, with seller financing, the price may be an unreliable indicator of the home's true market value.

When the seller services the loan, no escrow account is created for payment of taxes and insurance. Because these accounts usually pay no interest, eliminating them can save buyers money if they set aside funds for these periodic expenses in an interest-bearing account.

Disadvantages. Seller financing is rarely available except in slow housing markets. Most sellers prefer to receive cash for their home.

Table 2. Monthly Payments and End-of-Year Principal Balances for First Six Years of Loan

Year	Comparable Fixed-Payment Loan		Graduated-Payment Mortgage	
	Payment	Balance	Payment	Balance
1	\$665.30	\$98,984	\$547.01	\$100,450
2	665.30	97,895	574.36	100,594
3	665.30	96,727	603.08	100,392
4	665.30	95,475	633.23	99,802
5	665.30	94,132	664.89	98,777
6	665.30	92,692	698.14	97,266

(Loan amount \$100,000; 30-year term; 7 percent interest rate)

Substantial risks exist for both seller and buyer. The buyer may default, forcing the seller to foreclose to recover the property. The buyer may need legal assistance to ensure appropriate documentation for the loan and to protect the buyer's interest. Otherwise, the buyer may not be afforded all the legal rights under state mortgage law.

If the loan requires a balloon payment, refinancing must be arranged during the loan term. This puts the buyer at risk of finding affordable financing before the term expires. Refinancing may be difficult if interest rates rise further or the home's appraised value falls.

Graduated-Payment Mortgages

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Mortgage interest rates contain a premium to protect lenders from the effects of inflation. A portion of the interest rate charged on the loan compensates for this reduction in the real value of loan payments over time. That is why interest rates are higher when inflation is high and lower when inflation is low.

To the borrower, this means that mortgage payments may be burdensome in the first

years of the loan term but become more affordable as the loan matures. This is especially true of fixed-rate loans in which the basic payment of interest and principal is constant during the loan term.

To counteract the inflation adjustment, a Graduated-Payment Mortgage (GPM) offers artificially reduced payment levels in the first years of the loan term. The payment level is increased each year during the first five to ten years according to a fixed schedule (one not contingent on the rate of inflation). After this period ends, the loan becomes a fixed-payment loan for the remainder of the term.

Because payments increase each year during the first part of the term, the GPM is best suited for buyers who are reasonably assured that their income will rise during that time. For example, someone starting a career track with an established company might be a likely candidate for the loan.

The type of GPM that the FHA insures works as follows. The interest rate is fixed for the loan term. A formula is used to calculate the payment level for the first year. This payment is less than the amount needed to pay the interest, and the deficit is added to the outstanding loan balance. During an initial period (varies but five years is average), the payment increases annually by a fixed percentage. Eventually, the payment is sufficient to amortize the loan balance for the remaining term.

In Table 2, a sample GPM is compared to a fixed-rate loan at the same interest rate and maturity. In this example, the GPM payments

increase by 5 percent each year for the first five years. Thereafter, the payment is constant. While payments are reduced during the first four years, the principal balance builds up. The greater balance at the end of the graduated period causes the constant payment level to be higher than that of the comparable fixed-payment loan.

Advantages. A low first-year payment level may allow the borrower to qualify for a larger loan than a fixed-payment plan. However, the qualifying procedure usually recognizes that the payment level will increase during the next several years.

The GPM is not a subsidized loan. The deficit in early payments is compensated by higher payments later. This means the loan is relatively available and does not depend on a government appropriation. The loan may be applied to any home eligible for mortgage financing.

While the GPM involves increases in the principal and interest payment, the amount of the increase is established in the loan contract. There are no unexpected increases, as is possible with an ARM.

Disadvantages. If the borrower's income does not increase each year, payments will become more burdensome during the increment period. The increases are not contingent on inflation. A deflationary economy could lower the borrower's income while the mortgage payments continue to increase.

Because of deferred principal payments and negative amortization, the borrower will owe more at the end of the graduation period than was originally borrowed. This may cause a problem if the home is sold during the period and fails to appreciate. Also, this feature means that the borrower will pay more interest on the loan during the term than on a comparable fixed-payment loan.

Some GPMs avoid negative amortization by starting the payment at an amount equal to the required interest payment or by using an escrow account to subsidize the payment. These are called *tiered-payment mortgages* and are not as widely available as the more conventional GPM.

Special Loan Programs

Various federal government programs provide below-market interest rate mortgage loans for members of certain groups.

The oldest, most successful program of this type is the Mortgage Revenue Bond program. The idea originated in 1980 when Chicago issued municipal bonds to fund mortgage loans for city residents. Because the bonds were exempt from federal income taxation, they were sold at a yield several percentage points below the prevailing mortgage interest rate. The city could fund below-market mortgage loans and still pay bond interest and expenses. In effect, the loans were subsidized by federal taxpayers who must make up for the revenue lost on the income generated by the bonds.

The program became extremely popular and more localities issued similar bonds. Fearing a massive loss of tax revenue, Congress placed restrictions on the size and use of the program. Each state is given a maximum amount of bonding capacity to be used for mortgage loan programs (more than \$1 billion in mortgages have been provided through this program in Texas alone). The authorized amount is then allocated among local areas.

Actual loans are originated and serviced by local lenders; the bond proceeds are used to purchase the loans from the originators. Loans are targeted to first-time homebuyers (or anyone who has not owned a home in the last three years) with incomes below a specified level. (For information on this and other government-sponsored loan programs, contact the Texas Department of Housing and Community Affairs, Box 13941, Capitol Station, Austin, Texas 78711, telephone 1-800-792-1119.

Loans to Reduce Down Payments

The purpose of the lender's qualifying process is to estimate the risk that the borrower will default on the loan. Generally, the more a borrower invests in a home, the lower the chance of default. Therefore, lenders require that borrowers invest a certain amount of cash when purchasing a home. The standard amount for a conventional loan is 20 percent of the price or appraised value, whichever is higher.

Often, the cash down payment requirement is a major hurdle for first-time buyers. Therefore, various means have been developed to reduce this burden and allow more people to buy a home.

Insured and Guaranteed Loans

The most straightforward way to decrease the size of the down payment is to increase the size of the loan. However, the standard mortgage loan can cover no more than 80 percent of the home's cost. This limit can be increased substantially by *mortgage insurance* or *guarantees*.

Mortgage insurance can be purchased from the FHA, or from a private insurance company. The insurance protects the lender if the borrower defaults, but the borrower pays a premium for this coverage. The VA guarantees loans for eligible military veterans.

The lender may be reimbursed a set amount if the borrower defaults. In most cases, the insurer or guarantor will purchase the home at the foreclosure sale and pay off the lender in full.

Although there is no income limit on the FHA insurance program, the loan amount that can be insured is limited (the exact amount varies by county). Private insurance is used for loans surpassing the FHA limit. The VA program is limited to veterans who have earned entitlement. This entitlement has a limited dollar benefit and can be used only once unless reinstated. In general, retiring the loan is sufficient to reinstate the benefit.

The FHA insures loans up to 97 percent of the first \$25,000 of value, 95 percent of the next \$100,000 and 90 percent of value greater than \$125,000. For example, a home valued at \$150,000 would require a down payment of at least \$8,250. A premium of 2.25 percent of the loan is due at closing or can be financed into the loan. For first-time homebuyers who are willing to attend a special seminar conducted by the FHA, the front-end premium may be reduced to 1.75 percent. In addition, an annual premium of 0.5 percent of the outstanding balance is levied for a period that lengthens as the loan-to-value ratio increases.

The premiums for private insurance may be paid in a variety of ways, usually at the option of the borrower. The premium may be paid all at once at closing, in annual payments (usually collected in a monthly escrow) or in monthly payments. Over time, the debt outstanding may fall to less than 80 percent of value as the loan is repaid and the property increases in value. Most private insurers

allow homeowners to cancel the insurance when this occurs. Texas law requires lenders to inform borrowers each year of this possibility and what the borrower may do to get the insurance cancelled.

A VA loan may cover 100 percent of the home's cost. In general, lenders will provide as much as four times the value of the entitlement. Any costs greater than this amount must be supplied by the borrower. Regardless of the loan amount, a minimum investment is required from the borrower.

The FHA also insures loans in which *sweat equity* is substituted for part of the cash down payment. Under the regular 203(b) insurance program, borrowers can apply as much as \$5,000 worth of repair work toward the price of the house (repairs greater than this limit are allowed under the 203[k] plan). All eligible work must be completed before the closing date.

Advantages. The FHA and VA programs are the most popular financing methods for young homebuyers with little cash for a down payment. The loans are available throughout the country, and all FHA and VA loans are assumable. Therefore, should interest rates rise when the home is put on the market for resale, the borrower may have a sales advantage by offering financing at a below-market interest rate.

Disadvantages. The cost of a lower down payment is a larger loan and, consequently, higher loan payments. This may present difficulties in qualifying for a loan sufficient to purchase the desired home. In addition, periodic fees and premiums add to the monthly costs.

Applying for insurance complicates the loan application process and may delay approval. In many cases, the seller incurs extra expenses when the buyer is using VA financing, and this may present a stumbling block in sales negotiation (brokers use different sales contract forms for these sales).

Piggyback Loans

In general, lenders do not require mortgage insurance on loans that cover no more than 80 percent of the value of the home. Some borrowers have found they can bridge the gap between an 80 percent first mortgage and available cash down payment with a second mortgage. However, many first mortgage

lenders do not allow second mortgages to replace part of the down payment.

That makes it difficult for borrowers to arrange this type of financing on their own (and attempts to obtain a second mortgage without knowledge nor consent of the first lender could put the borrower in a serious legal and financial bind).

However, mortgage brokers can arrange such combinations of loans which are generally referred to as "80/10/10 mortgage loans." The numbers refer to the percentages of purchase costs represented by the first mortgage, second mortgage and cash down payment, respectively. It may also be possible to arrange a "80/15/5" loan requiring a 5 percent down payment.

Advantages. The main advantage of an 80/10/10 loan over an insured loan is the lack of a mortgage insurance premium. Because the first mortgage is no larger than 80 percent of value, no insurance is required. The loan combination may require more interest payment than a comparable 90 percent loan, but all of the extra expense is deductible from taxable income for those who itemize deductions. Insurance premiums are not tax deductible.

Borrowers with private mortgage insurance may get the coverage cancelled when the loan is reduced to less than 80 percent of current value (FHA insurance cannot be cancelled). In fact, a 1998 federal law makes cancellation of insurance mandatory when a borrower's equity reaches 22 percent of value, assuming loan payments have been made on a timely basis. Cancellation means the insurance premium is no longer due. However, this feat requires an appraisal of the home and possibly other expenses. In contrast, the second loan in an 80/10/10 package has a relatively short term. When the term expires, the second loan is repaid, and the monthly payment falls accordingly.

Disadvantages. The loan package contains a second mortgage, meaning the second mortgage holder has an inferior security position in case the borrower defaults. Therefore, the second mortgage will carry a significantly higher interest rate compared to the first mortgage. This means that a portion of the expense the borrower saves from avoiding insurance premiums is paid back in the form of higher interest charges. Also, the first

mortgage lender may require some concession, in the form of a higher than market interest rate, for agreeing to the second mortgage.

Lease-Purchase

Many renters perceive paying rent as wasted money but mortgage payments as investments. Paying rent may be made more meaningful in a lease-purchase option arrangement with the homeowner. The tenant signs a lease to occupy the home and receives an option to purchase the home during a specified time period. Generally, there is no charge for the option privilege. The owner may agree to apply a portion of the rent toward a down payment on the purchase. Depending on the down payment required and the amount of applied rent, the tenant-purchaser may accumulate the entire down payment through this method. When the accumulation is sufficient, the tenant can apply for a mortgage loan to purchase the home.

As with other forms of seller assistance, the terms of the arrangement can be customized. These terms include the amount of rent applied to purchase, the purchase price (may be fixed or subject to an appraisal), the duration of the option and the price of the option. In addition, the agreement should specify what happens to the accumulated down payment if the option is not exercised (usually accumulated funds are forfeited to the owner). The tenant may want assurance that the home will not be sold during the option period. This may take the form of a right of first refusal in case the owner receives an offer from another buyer. Legal counsel is advised.

Advantages. A potential buyer with insufficient cash can accumulate a down payment in a relatively painless way while having a place to live. As a bonus, the tenant can become familiar with the house but reject purchase if it is unsatisfactory. The owner, on the other hand, has the advantage of attracting a potential buyer who ordinarily would not be in the market. In addition, the tenant is more motivated to care for the property than is a typical renter.

Disadvantages. This approach is limited. Such arrangements are rare except in slow home markets. The owner, in effect, is reducing the rent to accommodate a potential

buyer. Also, both tenant and owner must be more committed to the arrangement than a straight lease requires. The tenant may be pressured to exercise the option after a sizable amount of money has accumulated in the account. The owner must tie up the home in a potential future sale while forgoing opportunities for immediate sale.

Other Programs

In 1990, after a decade of declining homeownership rates, Congress created several new programs to assist first-time homebuyers. Some of these programs offer reduced interest rates, but others reduce the cash requirements of buying. In addition, regional Federal Home Loan Banks (FHLBs) have established a pool of funds to sponsor special affordable housing programs. These programs are varied, some providing for low down payments and some for reduced closing costs. For more information on low down payment loans, see "Opening the Door to Homeownership," publication no. 1184, available as a reprint or free download from <http://recenter.tamu.edu>.

The Federal National Mortgage Association (Fannie Mae) has several programs that provide special low down payment mortgages. In general, these plans require the borrower to provide a cash down payment of only 3 percent of cost with another 2 percent donated or borrowed. Program sponsors include labor unions and employers with the supplemental down payment provided as a member or employee benefit. In addition, the loans extend more liberal qualifying terms. Applicants must earn no more than 115 percent of the area median income.

Parents who wish to help their children raise the cash required for a down payment may now withdraw funds from their Individual Retirement Account (IRA) without penalty for that purpose. Starting in 1998, a new type of IRA can be established by any taxpayer with income less than \$150,000 per year. The Roth IRA is funded with after-tax income, but all investment earnings and appreciation in value are not taxed when withdrawn. After five years, funds may be withdrawn without penalty to buy a home. Therefore, this type of IRA may be ideal for someone saving for a home purchase five or more years in the future.

Loans to Combine Adjustable and Fixed Rates

Convertible Adjustable Rate Mortgages

A convertible ARM, or CARM, offers a limited period within the term when the loan can be converted into a fixed-rate mortgage. The conversion window usually lasts from the beginning of the second year to the end of the fifth year. If the conversion option is exercised, the loan becomes a fixed-rate loan at a specified rate. The most common rate is the Fannie Mae quoted yield for 60-day delivery of loans in effect at the time of conversion. However, the fee is much less than the cost of refinancing.

The CARM is for borrowers who like the lower interest rates available with ARMs but are cautious about assuming the risks of a variable interest rate. The loan is especially attractive when rates on fixed-rate loans are significantly higher than those on ARMs.

Advantages. The primary advantage of a CARM is the potential savings of converting the loan compared to refinancing. Conversion requires payment of a nominal fee (usually around \$250), while refinancing may cost as much as 3 to 5 percent of the new loan amount.

Disadvantages. Compared to the ARM, the CARM may carry a slightly higher initial interest rate, a higher margin, more discount points or no caps on annual adjustments. These trade-offs may prove costly if the option to convert is not exercised. A borrower also may feel pressured into converting before the window closes, even though it may not be advantageous. The fixed rate available at conversion may be slightly higher than the going rate for comparable fixed-rate loans.

Hybrid Adjustable Rate Mortgages

The hybrid loan is like a convertible ARM in reverse. An initial period of fixed rate is followed by a period of adjustable rates. The loan operates as an annually adjusted ARM with the first period extended for several years. The Federal Home Loan Mortgage Corporation (Freddie Mac) buys "3/1" and "5/1" loans on the secondary market, so these types should be available. A "3/1" loan features

**Table 3. Hybrid ARMs Compared to Fixed and Adjustable Loans
with Continuously Rising Interest Rates**

Loan	Monthly Payment*		Total Interest Paid		
	Initial	Maximum	After 3 years	After 5 years	To maturity
Fixed-rate	\$699	\$699	\$22,186	\$36,570	\$151,722
5/1 hybrid	665	1,051	20,678	34,050	249,534
3/1 hybrid	632	1,008	19,172	34,913	232,962
ARM	537	889	16,139	28,885	192,920

*Principal and interest on \$100,000 loan.

an initial three-year period when the interest rate is fixed, followed by annual adjustments for the remainder of the term. A "5/1" works similarly but has a five-year initial period. Hybrid loans purchased by Freddie Mac have both annual caps and life-of-loan caps (see page 1).

Advantages. Hybrid loans appeal to borrowers who find interest rates on fixed-rate mortgages too high but do not want all the risk involved with ARMs. The hybrid is a compromise, generally offering slightly lower rates compared to fixed loans while offering fixed rates for the important first several years of the loan. Hybrids typically are originated at interest rates one-half to one percentage point lower than fixed-rate mortgages, with the greater discount on loans for the shorter initial period. The loan may be a good choice when interest rates have moved up a bit and are expected to increase again before the fixed period expires. Finally, someone beginning a career with expectations that income will improve after a few years may find these loans attractive.

Disadvantages. The hybrid loan complicates loan shopping. The advantages of a long initial period must be weighed beside the discount offered relative to the rate on fixed-rate loans. While the lower rate offered on hybrids may help in qualifying (Freddie Mac allows lenders to qualify borrowers based on the initial interest rate), it may not be generous enough to make the loan feasible in the long run. (See hypothetical example results shown in Table 3.) Sample loans are projected over a period when interest rates are rising continuously by one-half percentage point per year. The loans—a fixed rate loan at 7.5

percent, a 5/1 starting at 7 percent, a 3/1 at 6.5 percent and a one-year ARM at 5 percent. All loans have 30-year terms. Hybrids and the ARM are subject to a 2 percentage point annual cap and a 6 percentage point overall cap. The table shows how much the starting payments are decreased by the lower interest rate, as well as how high the payments reach before the overall cap takes effect. Note the total amount of interest paid for each loan, shown after 3, 7 and 30 years in the table. Under the assumed conditions (admittedly unlikely to occur), the hybrids offer lower costs only if the borrower moves before the fixed period expires.

Balloon Mortgages

Although the majority of mortgage loans extend for 25 to 30 years, most homeowners move or refinance much sooner. Consequently, the expected life of a mortgage loan is less than ten years. If a homebuyer were willing to commit to refinancing a mortgage sooner, within seven years for example, the lender could offer a lower rate of interest. This is the concept behind the balloon mortgage: a lower interest rate in exchange for limiting the lender's exposure to interest rate risk.

The monthly payment on a balloon mortgage is set to amortize the principal over a 30-year term. However, after five to seven years, the balance of the loan becomes due in a balloon payment. The borrower usually has the option of refinancing the loan at the current rate of interest. While nominally the loan is a fixed-rate loan, when refinancing, it operates much like an adjustable rate loan with one adjustment at the end of the initial term.

Table 4. Comparison of Three Fixed-Rate Mortgages

Type	Interest Rate Percentage	Monthly P&I*
30-year term	7.5	\$699.21
Seven-year term	7.0	1,509.27
Seven-year balloon, 30-year amortization	7.0	665.30

*Principal and interest on \$100,000 loan.

Table 5. Standard 30-Year, 15-Year and Biweekly Mortgages Compared

Item	Standard 30-Year Mortgage	15-Year Mortgage	Biweekly Mortgage
Monthly payment	\$699.21	\$927.01	\$786.61
Term	30 years	15 years	21 years
Total interest paid	\$151,717	\$66,362	\$99,456
Percent of loan paid after 5 years	5.4	21.9	11.8
after 10 years	13.2	53.7	28.8

\$349.60 per two-week period (will effectively repay the loan in approximately 21 years.)

Original loan balance is \$100,000, interest rate is 7.5 percent.

Balloon loans usually are offered at interest rates lower than long-term loans. However, because they are amortized over a long term, monthly payments are relatively low. The monthly payments on a 30-year fixed-rate loan, a loan amortized over seven years, and a balloon loan with 30-year amortization and seven-year maturity are compared in Table 4. Payments are reduced both by the lower interest rate and by the long amortization period.

Advantages. A balloon loan has a lower interest rate than comparable long-term loans but much less exposure to interest rate risk than ARMs. The loan is ideal for someone who expects to move before the balloon payment becomes due. It appeals also to those who think future interest rates will be lower. Under those circumstances, the borrower gives up little in exchange for savings on interest payments.

The loan is well accepted in secondary markets, making it readily available to borrowers. Both the Federal National

Mortgage Association (Fannie Mae) and Freddie Mac have devised programs for purchasing the loans. Their regulations also allow the loans to be offered with seller-provided buy-downs of modest proportions. Therefore, the rates available to the buyer can be attractive.

Disadvantages. If the borrower does not move during the term of the loan or cannot sell the home, he or she must refinance at the going rate. To meet this contingency, Fannie Mae and Freddie Mac allow borrowers to extend the loan term without the expense of refinancing. Loans owned by Fannie Mae can be extended at the current market interest rate, while Freddie Mac loans are renewed at 50 basis points more than the required net yield for 60-day deliveries.

Loans to Reduce Interest Payments

Most of the payments on a mortgage loan apply to the interest on the principal, the

result of extending payments over time. Most mortgage loans offer the opportunity to pay down portions of principal on a voluntary basis (in contracts with no prepayment penalty). Some loans, however, are designed to automatically reduce the loan term and lessen interest charges.

15-Year Loans

In the mid-to-late 1980s, loans with 15-year terms became popular. Borrowers were attracted to reduced cumulative interest payments, while lenders liked the reduced exposure to interest rate risk.

The interest that can be saved with a shorter term loan, although at a higher level of monthly principal and interest payment, is shown in Table 5. Considering that total interest paid over the term is reduced by more than half, the approximate 25 percent increase in the payment may be considered worthwhile by many borrowers. In practice, because many lenders originate the loans at a slightly lower interest rate, the difference in debt service probably will be less than shown. Still, this loan option is best suited for someone who can afford to make a larger monthly payment.

Advantages. The 15-year term can reduce interest payments significantly, which means the total cost of the home is much less (although interest payments are tax deductible). In addition, if the home is sold or refinanced before the end of the loan term, the principal balance of the loan is much less. Net proceeds from resale are higher with no effect on taxes owed or deferred from the sale. The borrower also builds equity faster. Voluntary contributions to principal reduction are possible with a longer term loan, but it requires financial discipline. With a 15-year loan, the contribution is automatic and may be considered a mandatory savings program. Finally, 15-year loans usually carry slightly lower interest rates compared to 30-year loans.

Disadvantages. The monthly payment may be higher than that for a longer-term loan. Therefore, this loan is not appropriate for most financially constrained first-time buyers. Although the payment is higher, the borrower probably will have less tax-deductible expenses because less of the payment applies toward the interest. While building home

equity is desirable, such an investment is relatively illiquid. In other words, once money goes into the home, it is difficult to convert it back to cash if needed quickly. If desired, a borrower can reduce the term of most mortgage loans by making voluntary principal reductions periodically. (Check the mortgage agreement for a prepayment clause or penalties first.)

Biweekly Mortgages

A biweekly mortgage has a simple premise. By requiring payments equal to one-half the normal monthly payment every two weeks, the loan term is reduced significantly. Because there are 52 weeks in a year, 26 biweekly payments equal 13 months' payments. The extra payment is devoted solely to reducing the principal balance (see Table 5).

Although any home loan can be biweekly, the method is oriented to those who receive a paycheck every two weeks. Many lenders require the borrower to maintain a deposit account from which payments can be drawn on an automated basis. This arrangement eliminates some paperwork and mailing associated with collecting payments. Lenders prefer and frequently require that borrowers have their paycheck deposited automatically into the account.

Advantages. This loan arrangement reduces the principal more quickly, lowers overall interest costs and creates rapid amortization.

Disadvantages. Unlike 15-year mortgages, the possibility of obtaining a lower interest rate is doubtful. Any advantage to the lender of a shorter term is offset by the costs of servicing the loan. In addition, borrowers may be required to maintain an account at the lending institution, which reduces their options for personal financial management. Finally, the biweekly loan may not be available everywhere.

Some lenders will set up biweekly loan accounts for a special fee. Note that the borrower can achieve the effects of a biweekly mortgage for no cost by simply making additional payments toward principal. For example, a disciplined borrower might make it a habit to send in 10 percent more than the payment due. However, if the borrower feels the convenience of biweekly payments (possibly transferred automatically to the loan account) is worth the fee, then the additional costs may be justified.

Loans to Access Equity

Most mortgage loans are used to purchase a home. Therefore, it is desirable for the borrower to repay some of the loan with each payment. The borrower “owns” a little more of the home each time a payment is made, and eventually, the loan is retired without the need for a large lump-sum payment.

However, some homeowners find they periodically need cash more than they need the security of an accumulated equity investment. One way to convert equity into cash is to refinance an existing mortgage loan with a larger debt. Because the new loan is larger than that needed to retire the old mortgage, there will be proceeds from the refinancing that can be used for any purpose desired by the borrower. In addition, there are special loans that do not require retiring the existing loan.

Home Equity Loans

Home equity loans are second mortgages subordinate to the existing mortgage loan on a home. The loans are used to raise cash for emergencies or to make purchases of goods and services. One popular use for these types of loans is to replace existing unsecured debt, which most often carries higher rates of interest and less favorable terms. Because the loans are secured by a mortgage on the home, interest paid on the loan (as much as \$100,000 of debt over the original amount of the purchase mortgage) can be used as an itemized deduction for federal income taxes. Therefore, home equity loans are a relatively low-cost form of consumer finance.

Texas homeowners have been able to obtain home equity loans since the constitution was amended in 1998. The amendment contains a long list of requirements that must be met to establish a valid home equity mortgage lien. These include: an 11-day “cooling off” period between application and closing, a prohibition against closing the loan in the borrower’s home and a three-day period after the loan is closed during which the borrower can rescind the loan. In addition, a home equity loan cannot cause the total debt on the property to be more than 80 percent of value (this condition also holds for first-mortgage refinancing that yields cash proceeds). In Texas, a home equity loan must be

in the form of a lump-sum amount, rather than an open line of credit that can be drawn upon as needed.

Advantages. Because delinquency and default rates have been low for home equity loans, interest rates charged have likewise been low. For homeowners who can take advantage of the tax deductibility features, home equity loans are especially attractive ways for financing consumer purchases and emergency expenses. Home equity loans add flexibility to home finance by allowing homeowners to retract equity investment when other needs take precedence. The loans are readily available from a variety of lenders, and lender competition has eliminated many of the fees charged to originate the loans.

Disadvantages. Home equity loans are mortgages, meaning that the borrower’s home is pledged against default on the loan. So if the borrower cannot make the loan payments, the lender can foreclose on the loan and force sale of the home. Because the loan is a mortgage, filing bankruptcy may not save the debtor’s home.

Use of home equity debt will reduce the amount of sales proceeds that can be used to purchase the next home. Many home equity loans allow the lender to adjust the interest rate, sometimes as often as daily. Although the adjustments must be governed by an index not controlled by the lender, there may not be adjustment caps (see page 1) to protect the borrower against large increases in cost.

Reverse Annuity Mortgages

Reverse Annuity Mortgages or RAMs are intended to provide older homeowners with supplemental income. A RAM borrower generally has a large equity position (preferably, owning free and clear) and is of advanced age. Texas law requires a RAM borrower to be at least 55 years old. Instead of a lump sum payment, the borrower receives a regular stream of income from the loan. As a consequence, the principal of the loan builds gradually over the loan term. Some RAMs have a finite loan term after which the home is sold and the loan retired from the proceeds. Most, however, allow the borrower to reside in the home as long as they wish, and the loan is retired when the borrower either moves or dies.

Because RAMs are highly risky and not as profitable to lenders as other loans, they exist only because of support by the federal government. The FHA has a special insurance program for RAMs that mitigates some of the risk faced by lenders. Fannie Mae purchases RAMs that fit its criteria, so that lenders can earn fees by originating the loans.

The Texas Constitution places many restrictions on how RAMs are originated. All borrowers must receive counseling on the pros and cons of RAMs. Funds must be paid out in periodic payments rather than as a line-of-credit. Like home equity loans, RAMs must be closed at the lender's office. The lender can only look to the home for repayment of the loan, no other assets of the borrower can be pledged.

Advantages. An older person who owns a home but has a limited or fixed income may be able to live a higher quality of life by getting a RAM. The loan may be set up to allow the borrower to live in the home as long as desired. Further, income supplied by a RAM is not taxable income but merely proceeds from a loan.

Disadvantages. Basically, a RAM draws down accumulated equity in the borrower's

home. If the borrower wishes to move and buy another home, there will be fewer proceeds, perhaps none, available to apply to the next purchase. The borrower will not be able to bequeath the home as part of an estate to the borrower's heirs (unless the heirs wish to pay off the loan in cash rather than selling the home).

Although the costs of the loan are not paid directly by the borrower, it may be possible to derive a higher income by getting a loan with lower fees and interest rate. It may also be possible to get a higher income if the term of the loan is finite rather than extending indefinitely. However, the borrower choosing a finite term forfeits the security of lifetime use of the home.

Availability of RAMs in Texas is poor. Because of the qualifications placed on the loan by the constitution, RAMs made in Texas do not conform with national standards. **Fannie Mae has been reluctant to purchase these loans because of questions of compatibility. Therefore, a potential RAM borrower may find it difficult to locate a lender.**

Glossary

Amortization—process by which the principal balance of a loan is reduced by the principal portion of monthly payments. An amortization table shows how much is owed on the loan throughout its term.

Basis point—one hundredth of 1 percent. A 100-basis-point increase is equal to an increase of 1 percentage point.

Buy-down—payment of additional discount points to reduce the contract interest rate on a loan.

Contract interest rate—interest rate that determines periodic interest due on outstanding principal. The P&I (principal and interest) payments on a loan are based on this rate.

Debt service—payment burden associated with a loan. In most cases, this is the P&I payment plus any premium for mortgage insurance.

Default—borrower's failure to comply with the loan agreement requirements, giving the lender the right to initiate foreclosure proceedings. Most defaults stem from the borrower's failure to make timely payments.

Discount points—additional charges required by a lender as a condition of granting a loan. Each point is equal to 1 percent of the loan balance and is payable at the loan closing.

Down payment—difference between the price of a property and the amount covered by mortgage debt. Usually, this difference must be covered by a cash payment from the buyer to the seller.

Effective interest rate—actual rate of interest earned on a loan considering the payment of periodic interest and initial discount points. When calculated over the entire term of the loan, this is called the *annual percentage rate* (APR).

Escrow—account maintained by the lender to pay premiums on hazard insurance policies and property taxes due on the mortgaged property. Contributions from the borrower are required to fund the account.

Federal Housing Administration (FHA)—government agency that insures home mortgage loans, reducing the down payment required.

Federal Home Loan Mortgage Corporation (*Freddie Mac*)—privately owned but government sponsored organization that purchases mortgages from lenders, mainly savings and loan associations.

Federal National Mortgage Association (*Fannie Mae*)—organization similar in purpose to Freddie Mac but buys loans primarily from mortgage bankers.

First mortgage—loan secured by a mortgage giving the lender first rights to recover damages in case of foreclosure. Generally the only or largest loan on a property.

Fixed-payment loan—that features a constant P&I payment during the entire term.

Fixed-rate mortgage—loan that charges a constant rate of interest during the entire term.

Foreclosure—process by which a lender seeks to recover the outstanding principal, unpaid interest and costs from a defaulting borrower. Generally results in the property being sold or acquired by the lender.

Homestead—principal residence that is legally protected from seizure by creditors to satisfy debts other than the mortgage debt secured by the property.

Loan origination—process of making a loan. Includes underwriting (assessing the risk of default) and approving the dispersion of funds for the loan.

Loan servicing—process of collecting debt service on a loan, maintaining escrow accounts and payments and providing information to the borrower on the status of the loan.

Market interest rate—average interest rate prevailing in the market for similar types of loans. This is considered the rate that anyone could obtain on a loan to purchase any property on the market.

Maturity—period during which a loan is amortized. The maturity of a loan is used to compute the P&I payment, even though the principal may be paid before the maturity date.

Mortgage—technically, the pledge of the property to back up a promise to repay borrowed money. Therefore, the borrower gives the lender a mortgage on the home. In common usage, the term often refers to the loan itself.

Mortgage banker—lender specializing in real estate mortgage loans. Unlike a savings association, mortgage bankers do not accept deposits but obtain funds by selling loans they have originated.

Mortgage broker—someone who arranges and originates mortgage loans. Brokers act as agents of mortgage lenders operating in the wholesale market. Unlike a mortgage banker, a broker does not make loans from company funds but works directly with one or more mortgage lenders.

Mortgage guarantee—commitment to indemnify the lender in case the borrower defaults on a mortgage loan. In the case of VA guarantees, the commitment may be limited to a specified amount of repayment.

Mortgage insurance—policy purchased by the borrower that pays the lender a specified benefit should the borrower default on the loan. Generally required on loans for more than 80 percent of the cost of a home.

Principal and interest payments (P&I)—part of the monthly mortgage payment that covers accrued interest on outstanding principal and amortization of principal. When the required contributions to escrow is included, the payment is termed PITI, or principal, interest, taxes and insurance.

Private mortgage insurance (PMI)—required on low down payment loans not insured by the FHA. Commonly used on loans that are too large to qualify for FHA insurance.

Payment shock—financial difficulty associated with a significant increase in P&I on an ARM. Especially a problem for borrowers who used the low first-year interest rate on an ARM to maximize the loan they could obtain.

Prepayment penalty—fee paid for the privilege of repaying the principal balance of a loan before it is due (for example, when a home is sold or the loan is refinanced). The fee usually is based on a percentage of the outstanding balance.

Principal—money that is borrowed and not yet repaid. May be referred to as *outstanding principal* or *principal balance*. May refer to the portion of the P&I that is used to reduce the principal balance.

Qualifying—process used to evaluate the risk of loaning to a specific borrower to purchase a specific house. Consists of an appraisal of the property, a credit check on the borrower and an evaluation of loan affordability based on the borrower's income and current indebtedness.

Savings and loan association (S&L)—depository institution that specializes in mortgage loans.

Second mortgage—loan secured by a mortgage that is lower in priority than a first mortgage. Commonly used to supplement a first mortgage loan or assumption at the time of purchase or as a way of raising cash for home improvements.

Term(s)—time required to repay the loan. If there is no balloon payment requirement, the term is the same as the maturity. Mortgage terms are the characteristics of a loan, such as the interest rate, discount points, term and loan-to-value ratio.

Veterans Administration (VA)—government agency that provides benefits programs to qualified military veterans.

Yield—rate of interest earned by the lender on a loan. Calculation of the yield takes into account contract interest paid, front-end fees and exit penalties paid.