# BOOK OF HOME FINANCE

## 2021 EDITION

DAVE HERSHMAN

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THE HERSHMAN GROUP

THE DEFINITIVE TEXT ON THE WORLD OF REAL ESTATE FINANCE

# Welcome to the
# Book of Home Finance
# 2021 Edition

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This is a time of major changes in the world of real estate finance. Therefore, expect that some information contained in this book will become outdated fairly quickly.

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# The Book of Home Finance

## Introduction

The world of mortgages is certainly different than it was twenty years ago. It was not so long ago that a real estate agent would sell a home and send the purchaser to their community savings bank to apply for a mortgage. Qualification was never a question and neither was the choice of mortgage products. The purchaser had a relationship with the financial institutions which offered only one or two mortgage alternatives.

Now there are many mortgage products and institutions from which to choose. The qualification guidelines and mortgage alternatives are increasingly more complex. To make real estate finance even more interesting, one can apply for a mortgage with a mortgage broker, a mortgage banker, a bank, a credit union, a savings institution or even through your home computer!

It is clear that mortgage bankers, real estate professionals and home buyers need to be able to navigate through this maze of real estate finance in order to be a success in today's challenging market. This book is a step toward bringing this complex world into perspective and focus. It will not answer all questions, but it will give a base of knowledge so that one can master the process. Invaluable time will be saved by using the charts which compare mortgage products, down payment formulas and qualification guidelines.

Good luck in your efforts towards mastering the world of mortgages and real estate ownership!

Dave Hershman

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**Glossary**

# 1

# A Home as an Investment, Tax Deduction and Inflation Hedge

Security, privacy, freedom—the American Dream is to purchase a home. There is no doubt that owning a home is the goal of the average American. Why? Is it the ability to have no landlord? Is it the freedom to stay or move? There are many emotional benefits to home ownership – including the tendency of homeowners to become more fully ingrained into a community. Studies have shown that even the children of homeowner's fare better over the long run…*Homeownership is associated with lower high school dropout rates and lower teen birth rates, according to a study by professors Richard Green and Gary Painter at the University of Southern California and Michelle White at the University of San Diego sponsored by the Research Institute for Housing America (RIHA).*

This Chapter will focus on the financial benefits of becoming a homeowner. The reason we all aspire to own real estate is simply this: we desire to accumulate wealth. Time and time again, we hear of riches built with a real estate foundation. There is good reason that America has one of the lowest savings rates of industrialized countries but remains the richest country in the world: *Real Estate.* The Federal Reserve Board's 2010 Survey of Consumer Finances disclosed that the median net worth of owners is over 30 times greater than the net worth of renters.

While we focus on the economics, we do not want to play down the importance of the *psychological*, rather than economic reasons for owning a home. In 1992, Fannie Mae released a survey indicating that 78% of all Americans think owning a home is a good investment. More than one-third of these gave *security* and *sense of permanence* as the reasons for wanting to own. This is obviously not all about economics. Think the real estate boom and bust of the past ten years has brought about a change in these attitudes? Not at all. In 2019, a Gallop poll indicated that Americans still see home as the leading investment, ahead of stocks, bonds and mutual funds.

While these emotional benefits are substantial, this Segment will focus on the financial benefits of becoming a homeowner. The reason we all aspire to own real estate is simply this: we desire to accumulate wealth. Time and time again, we hear of riches built with a real estate foundation. There is a good reason that America has one of the lowest savings rates of industrialized countries but remains the richest country in the world: *Real Estate.* The Federal Reserve Board's Survey of Consumer Finances has continuously disclosed that the average net worth of owners is over 10 times greater than the net worth of renters.

What are these economic advantages? There are three basic economic reasons for purchasing a home:

1. *Real estate is an investment*. Using the concept of leverage, we will learn exactly why real estate constantly outperforms other investment vehicles—even during periods of low inflation.
   - This concept also includes the additional factor of principal reduction, or a forced savings plan.

2. *Real estate is a tax deduction*. Every year it seems that Congress opts to cut more and more tax breaks from the menu in the interests of tax simplification and preserving the progressive nature of the tax system. The mortgage interest deduction has suffered nicks and scratches but has emerged as the major survivor in the world of tax strategies.

3. *Real estate is an inflation hedge*. It has been several years since double-digit inflation numbers have raised their ugly heads. Even in times of low inflation, monthly rents move upward much more quickly than a mortgage payment.

## Real estate as an investment—the concept of leverage

Early in the decade, financial experts predicted low appreciation rates for housing in the 1990s and beyond. In fact, most of these *experts* predicted housing would not be as solid an investment as it had been in the past. In reality, home price appreciation picked up as the century came to a close. Real estate's long-term history of a 5.0% annual rate of appreciation was more than supported by the real estate boom of the years 2001 to 2005. Again, we faced the same dire predictions after several down years from 2006 to 2009. The moral of the story is to not to try to predict the future, but to look at real estate as a long-term investment.

**Median Existing Home Prices**
**Source: National Association Of Realtors Table 1-1**

| | |
|---|---|
| 1970 | $24,300 |
| 1975 | $39,600 |
| 1980 | $89,300 |
| 1985 | $95,400 |
| 1990 | $97,300 |
| 1995 | $117,000 |
| 2000 | $147,300 |
| 2005 | $219,000 |
| 2010 | $172,900 |
| 2015 | $223,300 |
| 2019 | $274,500 |
| 2020 | $309,800 |

Any prediction of the future is just that—a prediction. We do not aspire to be any more accurate in presenting a scenario for the future of housing appreciation in any part of the country than the so-called economic experts. We feel the best approach is to assume a low rate of appreciation to be conservative. We also feel the concept of leverage often has been missing in the experts' comparison of other investments to housing. It is the concept of leverage that makes housing an excellent investment in any inflationary environment.

What is the concept of *leverage*? Leverage is defined as the ability to control a large asset with a smaller asset. For example, you can purchase $200,000 in real estate using $10,000 in cash assets. You can leverage real estate highly because of several factors:

a. Real estate assets have a long history of appreciation, this means security for those institutions that would lend against this asset.

b. There is a complex system to record ownership of property—older than the United States itself. It is unlikely that the purchaser of real estate will be challenged by someone who is the *real* owner of the property from years gone by. This is also security for the lender.

c. There are consistent national standards for qualifying purchasers of real estate. These standards reduce the risk that a real estate loan will default and allow the loan to be easily *liquidated* (sold for cash) in case the lender needs to raise capital in the future.

d. Some mortgage programs are directly sponsored, subsidized, or insured by federal and local governments, resulting in even smaller cash and more liberal qualification requirements than would otherwise be necessary through conventional lenders.

> *How has the recent downturn changed the numbers? By 2010, US median home prices had fallen to $172,900. This represents a fall of over 20% from the peak of just a few years prior to 2010. Yet, the number is still approximately 700% higher than where it stood four decades previously, which is consistent with a 5.0% rate of return. And as of December 2020, the median price was $309,800, which well is above the 2005 peak.*

Let us compare a simple example in which we invest a cash asset of $10,000 over a number of years, either by leaving it in the bank or by purchasing $100,000 of real estate. The table assumes a 3.0% rate of interest in the bank for a total gain of *$3,439* after ten years. It also assumes a 3.0% appreciation rate for real estate during this time period. Factored in are a $5,000 cost of purchase (closing costs) and 10% cost of liquidation (sales costs). It should be noted that, assuming the property is sold after ten years, these costs are $15,000, which is more than the original asset. Yet the gain after ten years is over $19,000, or over an *11.0% annual rate of return on the $10,000 investment*!

**Return on Investment**

| Years | $10,000 Cash | $100,000 Property |
|---|---|---|
| 3 | $927 | (-$5727) |
| 5 | $1,593 | $927 |
| 10 | $3,439 | $19,392 |
| 15 | $5,580 | $40,797 |
| 20 | $8,061 | $65,611 |
| 30 | $14,273 | $127,726 |

Assuming 3% rate of gain, 5,000 down payment, $5,000 closing costs, and $10,000 selling costs.

**Table 1-2**

What we have developed in this Chapter is a more in-depth look at the concept of leverage as it relates to residential real estate. What if the rate of home appreciation slows down to 2% per year? What if you try to sell the real estate after two years? What if the down payment is 20% of the purchase price? Generally, these rules apply:

a. *Low rates of appreciation*. The effect of leverage will lessen with lower rates of appreciation. However, in the long run, real estate will still outperform savings based instruments. It makes sense that low rates of housing appreciation will be accompanied by low rates of inflation, which will also lower savings rates. Investment gains may be increased by investing in stocks and/or bonds—but these investments introduce another element of risk.

b. *Holding periods*. Because of the cost of real estate acquisition (figured in our examples to be

5.0%) and the cost of real estate disposition (figured as 10.0%), there must be a reasonable holding period for gain on real estate. During periods of moderate appreciation (3% to 5%), real estate must be held at least three to five years to be more profitable than investment accounts. Higher appreciation rates will allow for shorter holding periods, but since we cannot predict when these periods will occur, we should never advise others to purchase for short-term gains (flipping real estate) unless there are extraordinary circumstances. When we consider the fact that real estate also may serve as our home, the holding period required becomes less of an issue.

c. *Increasing the down payment*. Generally, the larger the down payment, the smaller the percentage-return on real estate. Remember the concept of leverage requires that we control as large an asset as possible with the smallest asset possible. If no-money down and no closing cost mortgages are available, the potential for gain is significant. However, these options also increase the carrying costs of owning real estate.

d. *Mortgage principal reduction*. In addition to the leverage principle, the gain on real estate is increased by a reduction in the principal amount of the initial mortgage on the property. In simple terms, as one owns a house, one builds up additional equity because each mortgage payment reduces the amount of the principal balance outstanding. This assumes that the home-owner does not opt for an interest only loan—popular in the past but not as accessible more recently.

Table 1-3 shows the amount of principal reduction on a $100,000 loan. In this example, the cumulative principal reduction after ten years would be $18,658.68. This would be added to the gain calculated due to leverage and appreciation, as presented in the previous table. The table also shows how the most common type of mortgage loan, the *positively amortized* mortgage, has *accelerated* principal reduction properties. That means that the amount of principal reduction increases with each monthly payment. Note the

**Principal Reduction**

**30 Year Term**
**$100,000 Loan Term**
**5% Fixed Rate Loan**

| Year | Annual Principal Reduction | Cumulative Principal Reduction | Outstanding Principal Balance |
|---|---|---|---|
| 1 | $1,475.34 | $1,475.34 | $98,524.66 |
| 2 | $1,551.17 | $3,026.51 | $96,973.49 |
| 3 | $1,630.19 | $4,656.69 | $95,343.31 |
| 4 | $1,713.59 | $6,370.29 | $93,629.72 |
| 5 | $1,801.76 | $8,172.05 | $91,828.45 |
| 6 | $1,893.42 | $10,065.47 | $89,935.04 |
| 7 | $1,990.29 | $12,055.76 | $87,944.75 |
| 8 | $2,092.11 | $14,147.87 | $85,852.63 |
| 9 | $2,199.15 | $16,347.02 | $83,653.48 |
| 10 | $2,311.66 | $18,658.68 | $81,341.82 |

**Table 1-3**

**Net Return on Investments**

**$100,000 Home**
**With Principal Reduction and Equity Gain**
**Assuming a Mortgage Held for 10 Years**

| **Down Payment** | | 20% | 10% | 5% |
|---|---|---|---|---|
| **Total Investment** | | $25,000 | $15,000 | $10,000 |
| **Loan Amount** | | $80,000 | $90,000 | $95,000 |
| Home Appreciation Rate | Invest-ment Returns | *Assumes 5.0% 30-year loan $5,000 closing costs and 8.0% cost of sale.* | | |
| 3% | 3% | $24,969 | $30,274 | $32,994 |
| | | | | |
| 4% | 4% | $34,102 | $40,771 | $44,172 |
| 5% | 5% | $44,062 | $52,217 | $56,371 |
| 6% | 6% | $54,852 | $64,626 | $67,817 |
| 7% | 7% | $66,725 | $78,268 | $84,098 |

Calculations are as follows:

Home price appreciation over 10 years
+principal reduction over 10 years
-lost investment returns over 10 years
-costs of purchase (closing costs) and sale
=Total return on home investment

**Table 1-4**

table shows the first year's reduction is only $1,475 while the tenth year's payments reduce the principal by over $2,300.

With these concepts in mind, let's take a look at a comparison table that takes our money in the bank and compares its earnings with those from a purchase of $100,000 in real estate over ten years. We have varied the appreciation rates, return on investments, and down payments. We also assume 5% closing costs and 8% selling costs. The *total investment* is the down payment plus the 5% closing costs.

The net returns are then calculated from the appreciation of the property plus the principal paid down -- minus the investment returns lost and minus the closing and selling costs. The selling costs will vary based upon sales price which is greater at larger rates of appreciation. In essence, the returns shown are over and above what the money would have made in the bank.

The result is an interesting comparison of returns. Note the returns are actually greater when a lower down payment is used. This becomes an enormous difference if viewed in terms of the percentage return on the investment. *Note that we use $100,000 as a base home value and/or mortgage throughout this book because you can use this to easily extrapolate to your value. For a $350,000 home, just multiply the numbers by 3.5. In addition, real closing costs will vary based upon the mortgage amount and other factors. Therefore, you are encouraged to do your own analysis based upon actual numbers of the transaction you are considering.*

Next, let's look at the impact of varying the number of years you own your home. Since you only have to pay closing and sales costs once, you will benefit most from a longer ownership period. As Table 1-5 shows, the financial benefits of longer homeownership periods are even more impressive. A long holding period assures positive returns, even at low appreciation rates.

## Real estate as a forced savings plan

We introduced the concept of principal reduction in tandem with the concept of leverage. However, principal reduction also makes the monthly payment on a home more affordable in terms of real costs. Thus, it is important to demonstrate the effect of principal reduction on a monthly basis, as well as cumulatively.

As we indicated earlier, America has a low savings rate when compared to other industrialized countries. Even in boom times, our savings rate is below the norm:

### Net Return on Investment

**$100,000 Home**
**With Principal Reduction and Equity Gain**
**Assuming a 5% Mortgage and 10% Down payment**

| **Number of Years Held** | | 3 | 5 | 10 |
|---|---|---|---|---|
| **Home Appreciation Rate** | **Savings Interest Rate** | Assumes 30-year mortgage with closing costs of $5,000 and 8.0% costs of sale. | | |
| 3% | 3% | ($1,672) | $6,618 | $30,274 |
| 4% | 4% | $805 | $11,036 | $40,771 |
| 5% | 5% | $3,329 | $15,628 | $52,217 |
| 6% | 6% | $5,900 | $20,399 | $64,626 |
| 7% | 7% | $8,519 | $25,351 | $78,268 |

Calculations are as follows:

Home price appreciation over amount of years
+principal reduction over amount of years
-lost investment returns over amount of years
-costs of purchase (closing costs) and sale
=Total return on home investment

**Table 1-5**

*The 2004 rate of U.S. savings of just 2.2 percent is remarkably low, not only by U.S. standards, but also by international standards…*

*...Laurence J. Kotlikoff, Professor of Economics, Boston University.*

This is why it is important to understand the structure of mortgage vs. the structure of rent. It is a simple equation:

- When you pay rent, 100% of the rent goes to the landlord.
- When you pay a mortgage, the interest is paid to the lender, but the principal pays down the loan, building equity.

Let us take a very simple example. In this case, a $300,000 30-year mortgage at 5.0%. The payment on the mortgage is $1,610, which includes principal and interest. In this case we will assume the total mortgage payment is $2,000, including taxes and insurance. We will also assume that payment of rent for the same property is $1,700. Thus, it appears the owner is paying $300 more per month for the privilege of owning.

However, let us break the payment down:

| Month | Principal | Interest |
|---|---|---|
| 1 | $360 | $1,250 |
| 60 | $460 | $1,150 |
| Average | $410 | $1,200 |

Note: all numbers are rounded for ease of comprehension.

Thus, on the average for the first five years of the loan, the owner is really paying $1,590 for the mortgage (2,000 minus 410) and the renter is paying $1,700. This money comes out of the home's "savings account" only when the home is sold or if the owner takes a loan against the equity in the home. If the owner lived in the home for 30 years, eventually the mortgage would have been totally paid off. The renter pays rent forever. Because the savings are not accessible and because the homeowner must make these payments each month, the concept is referred to as a *forced savings plan.*

## Calculation of the tax savings of a mortgage payment

Greater investment returns can be rendered worthless if the monthly carrying costs of homeownership are greater than renting. This section of the Chapter will focus on the tax savings of a mortgage payment. Recent changes in the tax code leave mortgages as the only major write-off still available to the average citizen aside from retirement accounts, though the latest changes in the tax law has lessened the impact of the tax advantage for certain individuals. While other sections of this book will focus on whether a purchaser can qualify for a mortgage loan. This section will focus on whether a purchaser can afford a mortgage loan. We do this by comparing the present rent payment of the purchaser with the proposed mortgage payment.

We make this comparison by calculating the rental equivalency of the mortgage payment. The term rental equivalency refers to the determination of an individual's mortgage payment after the effect of tax deductions, as compared to the rent they are presently paying. The mortgage payment after taxes is that is the same as their rent is that person's "rental equivalent." Another way of stating this?

*For the rent you are paying, you could purchase a home of ____ amount and keep your payment the same after taxes.*

A discussion of rental equivalency should enable a real estate professional to demonstrate the concept of affordability to a first-time homebuyer. The concept can also be applied to move-up buyers because the increased mortgage payments can also be reduced by the amount of tax savings (we refer to this as *re-leveraging).*

Let us take an example of someone who is paying $2,000 each month in rent. Let's also assume the same home would cost $400,000 (once again using an even number so you can extrapolate).

| Rent | Owning | | Mortgage Payment (PITI) | |
|---|---|---|---|---|
| $2,000 | $400,000 | Sales Price | $2,040.00 | Principal & Interest (PI) |
| | 380,000 | Mortgage | 300.00 | Real Estate Taxes (T) |
| | 5.0%* | 30 Year | 50.00 | Homeowner's Insurance (I) |
| | | | $2,380.00 | PITI (rounded) |
| | | | | *example includes Lender paid Mortgage Insurance – all numbers rounded. |

*example includes Lender Paid Mortgage Insurance

In this example, the mortgage payment is approximately $400 more than the rental payment of $2,000 each month. Again, the higher mortgage payment could offset the gains from housing appreciation. It is also natural for a prospective purchaser to say:

*"I can hardly afford my rent. How can I afford $400 more each month?"*

In order to answer this question, we must compare the rent payment with the mortgage payment after the tax benefits have been calculated. To do this, we must answer the following:

- How much of the mortgage payment (PITI) is tax deductible?
- What tax bracket is the borrower in?

Fortunately, most of the mortgage payment carries tax benefits, because the interest and real estate tax portions can be deducted from one's income. The calculation is as follows:

$380,000 mortgage x 5.0% = $19,000 annual interest, or $1,600 monthly (rounded)

Therefore, $1,600 out of the total PI payment of $2,380.00 is interest and is deductible, along with the real estate taxes-

$1,600 Interest
300 Real Estate Taxes
Total deductible portion of payments $1,900 80% of total PITI

Now that we know the deductible portion of the payment, we can determine the tax bracket of the borrower and calculate the tax savings. Using the 2020 Federal Monthly Withholding Tax Charts, at this link: **https://drive.google.com/file/d/1BfalXEGhRzyBacVHpblpl3dnR41EDqZr/view?usp=sharing** we find the following:

| | | |
|---|---|---|
| Borrower's Income (Single): | $72,000 | annually, or $6,000 monthly |
| Borrower's Present Federal Tax: | $746 | monthly |
| Borrower Income after Deduction: | $4,100* | ($6,000 minus $1,900) |
| Borrower's New Federal Tax: | $349 | |
| Tax Savings: | $397 | |
| Total Mortgage Payment: | $2,380 | Total Mortgage Payment |
| Tax Savings: | (-) 412 | |
| Rental Equivalent: | $1,983 | |
| Actual Rent on Same Property: | $2,000 | |

Note: All numbers are rounded for ease of comprehension.

*We are lowering the borrower's taxable income by giving them a deduction.

In this case the "table" ends at just over $5,000, but the brackets show that the tax rate is $22% of the amount over $5,000.

If someone is in a 22% tax bracket and 80% of the mortgage is deductible, then the mortgage payment is generally reduced by about 18% because of taxes.

In other words, what looked like a $400 gap is now equalized with this analysis-—and certainly the monthly cost of the home will not affect the equity one will gain with regard to homeownership versus renting.

A few things to note on the previous calculations:

1. There are also state tax savings for most borrowers. They are not shown because many times the borrower will need the deductibility of state taxes paid to exceed the standard deduction given to taxpayers who do not itemize deductions. Those who do not have enough itemized deductions to reach the standard deduction without the mortgage payment will not fully realize the tax savings for mortgage deductibility, especially for lower-cost homes. Eliminating the analysis of state and local tax savings minimizes, but does not eliminate, this effect – especially after in 2018 the standard deduction amounts were raised. Again, this effect would be more pronounced for lower priced homes and especially for married couples. Additionally, the maximum of $750,000 mortgage amount and $10,000 in state/local property and income tax deductions would affect higher priced properties. Note that this is not an issue for move-up buyers who are already itemizing deductions. Also, the full effect of deductibility may not be realized in the first year of ownership because you will pay less than a full year of mortgage payments.

2. Again, there are additional savings for homeowners. The portion of the principal and interest payment that is not interest ($2,040 PI - $1,600 I) is principal which goes to pay down the loan. This is equity the homeowner is building up even without housing appreciation—a forced savings plan. In this case the rental equivalency with the additional factor would be $2,000 minus $400, or $1,600. This assumes that the homeowner does not opt for an interest-only payment that would lower the total mortgage payment but eliminate the payment of principal.

3. There is another factor which affects the affordability of the home on a monthly basis. While the homeowner receives a tax deduction, the benefits of this deduction is not realized on a monthly cash-flow basis. Basically, most new homeowners cannot afford to increase their monthly payment by X% and wait until the end of the year to receive a refund. Thus, what they must do is adjust their "withholding exemptions" so that their monthly withholding is decreased by the same amount as the tax benefit.

   In order to do that, they must fill out a W-4 form with their human resources department. The calculation of the correct exemptions is an easy process. If the monthly savings is $300, you would go back to the monthly withholding chart. The person was single and therefore allowed one exemption. You would go to their monthly income without the deduction and move to the right until the taxes are reduced to close to $300.

**Wage Bracket Method Tables for Income Tax**

**SINGLE** Persons—**MONTHLY** Payroll Period

(For Wages Paid through December 31, 2016)

| And the wages are– | | And the number of withholding allowances claimed | | | | | | |
|---|---|---|---|---|---|---|---|---|
| At least | But less than | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| | | The amount of income tax to be withheld is— | | | | | | |
| $2,400 | $2,440 | $296 | $246 | $195 | $144 | $94 | $55 | $21 |
| 2,440 | 2,480 | 302 | 252 | 201 | 150 | 100 | 59 | 25 |
| 2,480 | 2,520 | 308 | 258 | 207 | 156 | 106 | 63 | 29 |
| 2,520 | 2,560 | 314 | 264 | 213 | 162 | 112 | 67 | 33 |
| 2,560 | 2,600 | 320 | [illegible] | 219 | 168 | 118 | 71 | 37 |
| 2,600 | 2,640 | 326 | [illegible] | 225 | 174 | 124 | 75 | 41 |
| 2,640 | 2,680 | 332 | [illegible] | 231 | 180 | 130 | 79 | 45 |
| 2,680 | 2,720 | 338 | [illegible] | 237 | 186 | 136 | 85 | 49 |
| 2,720 | 2,760 | 344 | [illegible] | 243 | 192 | 142 | 91 | 53 |
| 2,760 | 2,800 | 350 | [illegible] | 249 | 198 | 148 | 97 | 57 |
| 2,800 | 2,840 | 356 | [illegible] | 255 | 204 | 154 | 103 | 61 |
| 2,840 | 2,880 | 362 | [illegible] | 261 | 210 | 160 | 109 | 65 |
| 2,880 | 2,920 | 368 | [illegible] | 267 | 216 | 166 | 115 | 69 |
| 2,920 | 2,960 | 374 | 324 | 273 | 222 | [illegible] | [illegible] | [illegible] |
| 2,960 | 3,000 | 380 | 330 | 279 | 228 | 178 | 127 | 77 |

In the above example, we will assume the person makes $3,000 monthly. Their monthly tax withholding at one exemption is $330. To achieve a $100 change in withholding, they would have to take three exemptions.

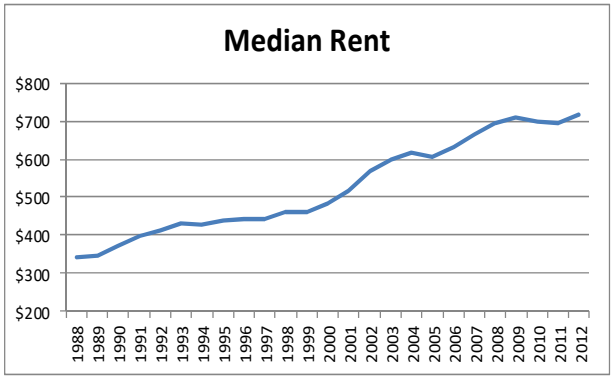
To save you the steps of these complex calculations, we have devised a chart that calculates the rental equivalency of mortgage payments. The chart assumes that 80% of the typical mortgage payment will be tax deductible and the borrower(s) are in a 25% tax bracket. You can use the table to extrapolate to other mortgage payments. For example, the tax savings for a $950 mortgage payment would be one-half of the difference between $900 and $1,000.

**Rental Tax-Equivalents**
**Assumes a 20% reduction of Total PITI**
**Or a 25% tax savings on the interest & taxes which is 80% of PITI**

| Total Mortgage Payments (PITI) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Monthly Payment | $800 | $900 | $1,000 | $1,200 | $1,500 | $2,000 | $2,500 |
| Rental Equivalency | $640 | $720 | $800 | $960 | $1,200 | $1,600 | $2,000 |

**Table 6**

Note: This table will vary as income tax rates change as well as by variations in property taxes and income. In general, those purchasing more expensive homes are more likely to have slightly larger write-offs and those purchasing the least expensive homes will have slightly lower write-offs and be affected by the standard deduction.




**Graph 1-1**
**United States Median Rents 1988-2012**
**Source—US Bureau of the Census**
**Note: in 2017 rents averaged $1,400 for a 2-BR apartment and this number was exceeded significantly in many metropolitan areas.**

## The mortgage payment as an inflation hedge

We have discussed the investment aspects of a home purchase; clearly the use of leverage causes real estate to be a superior investment at any level of appreciation in the long run. The concept of rental equivalency makes the investment affordable in the short run. Plus, we are also participating in a forced savings plan.

*But what about the affordability of a home in the long term?*

How does the home stack up against renting five, ten, and twenty years from now? As time goes on, home ownership becomes even more and more affordable because a home is an *inflation hedge*.

What is an inflation hedge? We all know what inflation is. It is the tendency for expenses to rise over time. We know that rent is subject to inflation. If your present rent payment was $800, a 5% rate of inflation would make the payment $1,303 in ten years.

A *hedge* is an instrument of financial protection. Sophisticated investors protect their investments from erosion by using hedges. For example, someone holding a large stock portfolio may purchase futures, betting that the stock market will go down. If we then have a stock market crash, the person can offset the loss in the value of his stocks with the gain in the futures. An inflation hedge protects one against future costs of inflation. The reason for this is simple—a mortgage payment resists inflation.

***A Typical Mortgage Payment***

| $100,000, 30 Year Mortgage at 5% | |
|---|---|
| Principal and Interest (P&I) | $537 |
| Real estate taxes | 100 |
| Homeowner's insurance | 40 |
| Total PITI | $677 |
| Portion subject to inflation | $140 |
| Percentage subject to inflation | 21.0% |

Why does a mortgage payment resist inflationary pressures? Because the largest portion of the mortgage payment is the loan repayment (P&I). The remainder of the payment will be subject to inflation. Specifically, real estate taxes, homeowner's insurance, and association dues will tend to move up with inflation. However, since these are only a small portion of the payment, the overall payment will not increase as fast as rent. *Note that the payment on adjustable rate mortgages may change independently of inflation.*

In the example, only $140.00 or 21.0% of the total mortgage payment is subject to inflation. We will use 20% as an even number. This will reduce any effective inflation by a factor of five, i.e., an inflation rate of 5% will become 1%. In other words, the rent payment will move up at a speed of five times the amount of the mortgage payment. Let's see what the effect is on long-term numbers.

Using Table 1-7**,** we can see that even low rates of inflation (3%) will cause the mortgage payment to become virtually equal to rent in ten years. These are conservative measures; the average inflation rate in the United States for the period from 1950 to 2010 was over 3.0%,[1] according to the U.S. Department of Labor, Bureau of Statistics. The financial crisis and slow recovery has brought the level of inflation below the norm for the most recent decade. However, with regard to rental inflation, rents in the United States over the same period have gone up at an even faster pace and are expected to continue to rise even more quickly during the period of 2011-2015 because the financial crisis has resulted in the creation of additional rental demand.

[1] U.S. Department of Labor, Bureau of Labor Statistics

Our analysis of inflation hedging is only partially complete. We have merely compared the actual payment increases over a period of time in accordance with various imputed inflation rates. We have not factored in the effects of tax deduction and principal reduction of the mortgage. In ten years, the rent payment is still projected to have no tax benefit. Table 1-8 repeats a similar chart, only this time we are reducing the mortgage payments by the amount of the federal tax benefit and the principal portion of the P&I payment.

**Inflation Effects on Rent and Mortgage Payments**

| | $1,000 Rent | | $1,300 Mortgage | |
|---|---|---|---|---|
| **Inflation Rate** | **After 5 Years** | **After 10 Years** | **After 5 Years** | **After 10 Years** |
| 3% | $1,159 | $1,344 | $1,339 | $1,380 |
| 4% | $1,217 | $1,480 | $1,353 | $1,408 |
| | | | | |
| 5% | $1,276 | $1,629 | $1,366 | $1,436 |
| 6% | $1,338 | $1,791 | $1,380 | $1,465 |
| 7% | $1,403 | $1,967 | $1,394 | $1,494 |
| 8% | $1,469 | $2,159 | $1,407 | $1,524 |

*The assumption is 20% of the mortgage is subject to inflation while 100% of rent is subject to inflation*

**Table 1-7**

Note again, the amount of tax deduction will vary based upon a person's tax bracket, but also be affected by the amount of the mortgage. For lower priced homes, the expanded standard deduction could eliminate this benefit. For higher prices homes, the deduction maximum of $750,000 and income/property maximum of $10,000 would come into play. However, all other benefits—leverage, forced savings plan and inflation protection would still exist.

One area we have not addressed is the upkeep of a home. Maintenance costs for renters are significantly lower, but these numbers vary depending upon the responsibilities set out in leases, as well as the age and type of property. For example, condos would have lower maintenance costs, but higher association dues. It is important to average the costs over a period of time. For example, a $24,000 cost over 10 years would be $200 per month. In addition, though we have added the cost of homeowner's insurance to ownership, renters should have a policy to protect their belongings as well.

Regardless of this extra cost, when one analyzes this chart, which covers the true cost of owning versus renting in the long run and adds the "investment" gains of homeownership as compared to renting…the economics of homeownership are clear. This is exactly the reason that the net worth of owners is many times that if renters as reported by the Federal Reserve Board. It is also why the dream of homeownership is known as the "American Dream."—both economically and socially.

**Inflation, Tax, and Principal Reduction**

**Effects on Rent and Mortgage Payments**

| | $1,000 Rent | | $1,300 Mortgage | |
|---|---|---|---|---|
| **Inflation Rate** | **After 5 Years** | **After 10 Years** | **After 5 Years** | **After 10 Years** |
| 3% | $1,159 | $1,344 | $769 | $723 |
| 4% | $1,217 | $1,480 | $782 | $754 |
| 5% | $1,276 | $1,629 | $795 | $788 |
| 6% | $1,338 | $1,791 | $809 | $824 |
| 7% | $1,403 | $1,967 | $824 | $864 |
| 8% | $1,469 | $2,159 | $839 | $906 |

**Table 1-8**

Assumptions:

- *5.0% interest rate on a $200,000 mortgage and real estate taxes and insurance at $225 monthly.*
- *A reduction of 20% in the total mortgage payment due to the tax deduction. This is the equivalent of a 25% reduction in the taxes and interest only (25% tax bracket)*
- *20% of the mortgage is subject to inflation, while 100% of rent is subject to inflation.*
- *Formula for future mortgage payment--*
    - *80% of mortgage payment (for tax deduction);*
    - *minus principal reduction in year 5 or year 10;*
    - *plus inflationary increase in taxes & insurance.*

# 2

# Sources of Mortgages

## The Federal Housing Administration (FHA)

The Federal Housing Administration has long been a player in the mortgage industry. The Federal Housing Administration is a federal agency within the Department of Housing and Urban Development. The loan program was created in 1934 to assist homebuyers in acquiring property with small down payments. It is important to note that under the most prevalent mortgage program, FHA does not lend money. Lenders are given protection against default[2] by the borrower.

In this context, default simply means non-payment of the mortgage by the borrower. Technically, when a mortgage is more than 30 days past due, it is *in default*. The vast majority of notes carry provisions of a late payment penalty if the mortgage is more than 15 days late (the first 15 days is called a *grace period*). The 30-day period is not in addition to the 15-day grace period; rather it includes the 15 days so that the total is 30 days.

This protection is in the form of *mortgage insurance* and FHA is considered an insurance program. An FHA borrower actually pays for this insurance and these insurance premiums are called *Mortgage Insurance Premiums*, or *MIP*. Simply stated, FHA mortgages are mortgages made by private lenders that are insured by the Federal Government through premiums paid for by the users. Having insurance provided by the Federal Government enables the program to offer lower down payments and allows more liberal qualification standards than comparable private mortgages.

The lenders approve the mortgages for FHA under the *Direct Endorsement Program*.[3] Lenders deal with FHA through the FHA Connection automated system. Through this system, they can get case number assignments (for new appraisals under the CHUMS system), view borrower credit watch alerts (under the CAIVRS system), and access to MIP refund information for refinances. FHA-approved condominiums and appraiser lists are also available from this system.

During the 1990s, the national market share of FHA became smaller and smaller. This was caused by a variety of factors, not the least of which is the fact that FHA fell behind the times as conventional lenders introduced innovations such as no-money down financing. FHA passed many reforms to reverse this trend and the fiscal crisis which started in 2006 limited conventional alternatives while FHA lending soared again to over 20%. More recently, increases in the cost of mortgage insurance designed to strengthen FHA's

[2] In this context, default simply means non-payment of the mortgage by the borrower. Technically, when a mortgage is more than 30 days past due, it is *in default*. The vast majority of notes carry provisions of a late payment penalty if the mortgage is more than 15 days late (the first 15 days is called a *grace period*). The 30-day period is not in addition to the 15-day grace period; rather it includes the 15 days so that the total is 30 days.

[3] When approved under the *Direct Endorsement* or *DE* program, the section of FHA would be referenced as *703b*, rather than *203b* (*734c*, not *234c*, for condominiums). Participation in the direct endorsement program also allows the utilization of *staff appraisers* to appraise properties for FHA mortgages. Staff appraisers are employees of the mortgage company as opposed to independent FHA *fee panel appraisers*.

finances have caused FHA's market share to ease significantly – until the government lowered FHA mortgage insurance premiums in early 2015.

## Who is eligible to obtain FHA mortgages?

Any borrower of legal age can participate in The FHA Mortgage Program. Citizenship is not required, though physical evidence of a social security number and picture identification must be presented at loan application. The lender must determine residency status for non-U.S. citizens. There are no income restrictions, however FHA's published maximum mortgage limits ensure the program will serve primarily lower and middle-income homeowners. In addition, all parties to the transaction must be checked through the Denial of Participation List and the Federal Government's List of Excluded Parties. The validity of the social security number is verified as well.

Two or more borrowers, or *co-borrowers*, can finance a house under the FHA program. These co-borrowers need not be related, but they must have a family-type relationship if one of the co-borrowers does not occupy the house. In this case, the *co-borrower* is defined as a *non-owner occupant co-borrower*.

FHA currently limits one FHA mortgage per borrower that can be outstanding at any one time. Prior to 1992, each borrower was limited to one *high balance* (defined as above 75% loan-to-value) FHA mortgage outstanding at one time. Currently, there are exceptions to the one FHA mortgage rule for hardship situations. Exceptions include transfers in which the home currently owned and financed by FHA cannot be sold, a new home is mandated by an increase in family size, or the home being vacated will be occupied by a co-mortgagor). In the price range of FHA mortgages, borrowers retaining more than one FHA mortgage are not common—especially now that assumptions are restricted to owner occupants.

In late 2008, FHA added a requirement for applicants that already owned a property being converted to a rental upon purchasing a home using FHA financing. With a few exception's such as a present loan-to-value below 75% on the presently owned home, the owner cannot use rental income on the present home to qualify for the new home because FHA was concerned that homeowners would take advantage of market conditions at the time to walk away from their present homes that are "under-water" while purchasing a new home at a lower value.

In 2003, FHA released its ban on financing when the property is being "flipped" as defined by a resale in the first 90 days after a home is purchased. Resales within 91-180 days may require additional documentation if the original value increases significantly. The sale must also be from the owner of record. In December of 2004, FHA specifically exempted property acquired through inheritance or properties bought and sold through FHA or other governmental agencies and in 2008 FHA also exempted bank-owned properties. In February 2010, FHA instituted a waiver of this regulation for one year because of economic conditions as long as certain conditions were met. This waiver expired December 31, 2014.

## Types of transactions financed under FHA

FHA finances the following types of transactions:

- *Owner-occupied purchase transactions* (203b). The vast majority of FHA financing is for purchases of primary residences that must be occupied within 60 days of settlement. Investors cannot finance purchases through FHA and the financing of second homes is restricted to *hardship* situations. FHA is prohibited from insuring a mortgage on a second home that is a vacation or investment property.

- *Owner-occupied rate reduction[4] refinance transactions (203b).* Homeowners can refinance their current mortgage through The FHA program. If the homeowner currently has an FHA mortgage on the property and the new FHA mortgage will result in a lower payment, the homeowner can participate in *FHA Streamline*, or *FHA Rate Reduction*, refinance program. This program traditionally has required no income re-qualification as long as there is a good mortgage payment history, however, in 2009 FHA started requiring verification of assets and income. Appraisals are not required by FHA but may be required by the lender. In 2011, FHA eliminated the option to include financed closing costs if an appraisal supporting the request was completed. A borrower may not receive cash back under this program except for minor adjustments that may occur at closing and these adjustments may not exceed $500. Under the *FHA Streamline Program*, a homeowner who no longer lives in the property but has an FHA mortgage can obtain an FHA mortgage with a lower payment through a refinance. Few lenders offer this option and typically they would require a maximum 85% LTV[4]. FHA streamline mortgages are also required to provide a net tangible benefit to the borrower. In 2017, Ginnie Mae added a requirement that the existing loan must have six payments made before refinancing. Refinancing a conventional mortgage to an FHA loan with full processing has an allowable 97.75% LTV. In late 2010, FHA added a requirement that refinances also subordinating a second lien could have a maximum combined loan-to-value (CLTV) of 97.75% as well as 125% CLTV for Streamline Refinances. FHA also added a provision that the second lien would not be subject to geographic loan limits.
- *Refinances for those behind in their payments and "under-water."* In reaction to the housing crisis, in 2007 FHA introduced the FHA-Secure Program to facilitate refinances for those who were subject to increases in payments due to adjustments in the rate of their adjustable rate mortgages. This program was eliminated at the end of 2008 and replaced with the HOPE for Homeowners Program, a broader refinance program that was available to those behind on their payments and underwater in their homes. The HOPE for Homeowners program also was not widely used because of the requirements that lenders reduce the principal of these mortgages. In 2010, FHA added a refinance program aimed at homeowners who are in negative equity position. This program was effective until December 31, 2012 and has been extended to an expiration date of December 31, 2016. Under this program, the present mortgage has to be a conventional mortgage and the maximum LTV is 97.75% with a maximum CLTV of 115%. As in earlier efforts, this program was not widely used. This program expired in 2016.

[4] A *rate reduction* refinance transaction is a refinance of only the existing mortgage balance and allows an increase of the new mortgage amount over the existing mortgage balance only to finance, or *roll in,* the closing costs of the refinance transaction. The term "LTV" refers to the loan amount divided by the value of the property. The term "CLTV" refers to the loan amount of a first and second mortgage divided by the value of the property. In other words, a 95% LTV is the equivalent of a 5% down payment.

**Net Tangible Benefit Table**

| From | To | | |
|---|---|---|---|
| | **Fixed Rate New Combined Rate** | **One-Year ARM New Combined Rate** | **Hybrid ARM New Combined Rate** |
| **Fixed Rate** | At least 0.5 percentage points below the prior Combined Rate. | At least 2 percentage points below the prior Combined Rate. | At least 2 percentage points below the prior Combined Rate. |
| **Any ARM With Less Than 15 Months to Next Payment Change Date** | No more than 2 percentage points above the prior Combined Rate. | At least 1 percentage point below the prior Combined Rate. | At least 1 percentage point below the prior Combined Rate. |
| **Any ARM With Greater Than or Equal to 15 Months to Next Payment Change Date** | No more than 2 percentage points above the prior Combined Rate. | At least 2 percentage points below the prior Combined Rate. | At least 1 percentage point below the prior Combined Rate. |

**Table 2-1**

- *Owner-occupied cash-out refinance transactions (203b).* An existing homeowner can refinance his/her 1-2 unit primary residence to *take cash out* up to 80% of the *appraised value* of the property if the property is owned by the homeowner for at least 12 months prior to the refinance. If owned less than 12 months, the original sales price must be taken into consideration. In other words, if a homeowner had a property worth $100,000 and a present mortgage of $50,000, the homeowner could obtain a new mortgage of $80,000. The maximum CLTV for these mortgages are also 80% and there must be no late payments on the current mortgage for the past 12 months.
- *Rehabilitation mortgages (203k).* These mortgages are used for the acquisition of owner-occupied properties that need repairs or *rehabilitation*. The cost of rehabilitation can be included in the mortgage amount with no additional down payment required. The eligible improvements must amount to at least $5,000 under this program. Minor improvements amounting to less than $5,000 are not eligible. The lender advances money to acquire the property and places the excess necessary to complete the repairs in *escrow*[5]—the estimate of which is determined by plans submitted at the time of the loan application. The repair money is then released in increments, or draws, as the work is accomplished in stages.
- *Streamline K Limited Repair Program.* In 2005, FHA introduced a program that allows inclusion of $35,000 of repairs to be financed without plans and specifications when a borrower is acquiring an FHA financed property. FHA specifies what type of repairs can be financed with this program and it excludes major remodeling.
- *Qualified veterans (203b Vet).* FHA financed purchases for qualified veterans. This program did not differ from any other FHA program except for a lower down payment. The program was open to all veterans but was not for active military personnel. A *Certificate of Veterans Status* from the VA was required. With FHA mandating a minimum down payment of 3.5% nationally in 2008, the FHA Vet program became obsolete.
- *Assumptions.* FHA mortgages are assumable at the present interest rate, including fixed rate

[5] The term *escrow* refers to holding money aside in a third-party account.

mortgages. Assumptions require qualification of the buyer and a fee of $900 plus allowable third-party expenses. Investors cannot assume these mortgages.

## Types of properties eligible for FHA

Generally, FHA programs include all properties that contain up to four units. Condominium projects must be approved by FHA for properties within the developments to obtain FHA financing. In January 2003, FHA announced it would no longer require approval of planned unit developments (PUDs). FHA does not finance farms and the land upon which the property is located cannot exceed what is necessary for *livability*.

The issue of condominium project approval is the most complex property issue associated with FHA mortgages. In 2009, FHA completely revised their condominium guidelines to include the ability of lenders to approve projects directly (DELRAP) and these were finalized and implemented in 2011. FHA can still approve projects directly (HRAP). In general, condominium projects must adhere to the following rules:

- Lists ineligible projects, including condo-tels, multi-dwelling units, time shares, houseboats.
- Project approval not required for single family detached condo's, but they can't be manufactured homes.
- Project approval not required for streamline refinances or HUD owned property sales.
- Environmental reviews: For HUD review not required if construction is beyond stage that HUD can influence and local jurisdictions have approved. For lender review is not required but if appraisal indicates an environmental condition, it must be mitigated.
- Project eligibility standards include no more than 25% commercial; no more than 10% owned by one investor; no more than 15% in arrears on dues; at least 50% of units must be presold; 50% owner-occupied on sold units; phasing allowed; no more than 50% of units in the complex can have FHA insurance (concentration); and association must have adequate reserves. FHA can issue exceptions to concentration limits under certain conditions. In October of 2016, FHA issued a letter allowing exceptions to the owner-occupancy limits down to 35% under certain conditions.
- The one year waiting period for conversions was eliminated. If converted from rental, the property is treated as new construction.
- Once on approval list, resubmission of project is not required. Recertification is required after two years. If previously approved a special certification by lender is required.

In November 2015, FHA released a Mortgagee Letter which temporarily loosened its requirements for condominium project approvals. The provisions contained in this letter were made effective upon the issuance of the letter and expire one year from the date of the letter but were extended in 2016. The letter covers three areas of leniency: revised calculations of FHA required owner-occupancy percentage, an expansion of eligible condominium project insurance coverage and revised requirements for obtaining condominium project recertification. This owner-occupancy standard allows the inclusion of units as owner-occupied which are not investor owned, such as units under contract to intended occupants. The project certification allows submissions within six months after certification expires and only documentation that varies from the original submission needs to be submitted.

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In 2019, FHA released a Mortgagee Letter which extended the ability to achieve single unit approval in projects which are not FHA approved. The applicant must receive an accept in the TOTAL system or the maximum LTV is 90%. The project must have an owner-occupancy percentage of 50% and there are additional restrictions as well.

FHA appraisals traditionally were called *conditional commitments*. These appraisals were valid for six months and approvals issued were called *firm commitments*, which expired when the *conditional commitments* expired. A blanket appraisal could be accomplished for a new subdivision and this was called a *master conditional commitment*, or *MCC*. These were later re-named, *master appraisal reports (MARs)* and were valid for one year. The use of MARs was eliminated in 2011 because in 2009 FHA shortened the validity period of appraisals to 120 days.

In 2005, FHA issued a mortgagee letter that, as of January 1, 2006, adopted the use of Fannie Mae appraisal forms. This same letter ended the use of the VC Form for required repairs and a subsequent letter specified that FHA was no longer requiring minor repairs such as replacing loose handrails. In late 2009, FHA also issued guidelines similar to the Home Valuation Code of Conduct (HVCC) that limited the ability of production personnel to select appraisers and have direct interaction with appraisers in order to limit undo pressure with regard to the achievement of certain targeted values.

If the lender is *Direct Endorsement* (the lender approves FHA mortgages without sending the mortgage to FHA), the designated appraiser also sends the appraisal directly to the lender and the lender issues the appraisal. Appraisers approved by FHA are said to be on the HUD Appraisal Roster. In 2009, FHA added a requirement that all HUD appraisers had to hold state licenses.

## Mortgage types offered under FHA

FHA Mortgage Program offers several types of mortgage instruments:

- *Fixed rate mortgages.* FHA will insure fixed rate mortgages that carry anywhere from a 15 to 30-year term. It is typical for FHA fixed rate mortgage pools to be securitized and sold through Ginnie Mae, which is also a Division of HUD. Until November 30, 1983, FHA published an interest rate ceiling that was set in tandem with VA's maximum interest rate. On that date, FHA deregulated the interest rate and the rate and discount points became negotiable between the borrower and the lender. For the first time the borrower was eligible to pay discount points.
- *Fixed rate buydowns.* FHA allows the temporary buydown of FHA fixed rate mortgages. As of July 2004, qualification must be at the note rate of the mortgage. Increases are limited to no more than 1.0% each year. Because of Ginnie Mae securitization requirements for these types of loans, the price of an FHA mortgage with a buydown may be greater than a comparable FHA fixed rate mortgage, even with the cost of the buydown taken into consideration.
- *Adjustable rate mortgages (Section 251).* FHA insures adjustable rate mortgages. The 1- year, 3/1 and 5/1 adjustables have caps of 1.0% each year and 5.0% over the life of the mortgage. The 7/1, and 10/1 adjustables have 2.0% annual caps and 6.0% life caps. The 5/1 was originally restricted to a 1.0% annual cap and 5% life cap, however subsequently Congress authorized 2.0% annual caps and a 6.0% life cap to allow for easier securitization. Lenders may offer either option. The down payment and qualification guidelines mirror those of FHA fixed rate programs. FHA borrowers applying for 1-year ARMs must qualify at the start rate plus 1.0% if the LTV is 95% or greater. FHA adjustables do not allow temporary buydowns.
- *Reverse mortgage program (255).* Home Equity Conversion Mortgages (HECM) provide

equity-rich elderly homeowners with the opportunity to convert their equity into monthly income or a line of credit to help them meet living expenses while they remain in their homes (see Chapter 3). In 2003, FHA allowed the borrower to lock in rates at the beginning of the process rather than closing and in 2006, extended the time that borrowers could lock up to 120 days from 60 days.

In 2008, the national loan limit for reverse mortgages was set at the conforming limit of $417,000. This limit was raised to the high cost maximum (currently $822,375) under the Economic Stimulus Act and subsequent legislation. In late 2010, FHA introduced a "HECM Saver" mortgage that required virtually no up-front mortgage insurance premium but produces a smaller benefit to the homeowner (subsequently eliminated). In 2013, FHA introduced modifications to the program which included a limitation of the amount of cash disbursement in the first year, increased mortgage insurance costs and also added a requirement for a financial analysis to be performed. In 2018, FHA began to require two appraisals for certain reverse transactions. Additional conventional sources of reverse mortgage have become available more recently.

For those who do not meet requirements for residual income, the lender must implement options to either set-aside money to pay escrows or for the lender to be authorized to pay escrows directly.

- *Energy Efficiency Improvements.* Under the FHA EEM Program, a borrower can finance into the mortgage 100% of the cost of eligible energy-efficient improvements. In 2009, the maximum amount of improvements was changed to the lesser of 5% of: a. The value of the property; b. 115% of the median area price of a single-family dwelling; or c. 150% of the conforming loan limit. To be eligible for inclusion into the mortgage, the energy-efficient improvements must be "cost effective," i.e., the total cost of the improvements (including maintenance costs) must be less than the total present value of the energy saved over the useful life of the improvements. No additional down payment is required and the program can be used for purchases or refinances. In September of 2015, FHA issued a Mortgagee Letter updating FHA's EEH minimum energy efficiency standard to the most recent International Energy Conservation Code (IECC) adopted by the Department of Housing and Urban Development (HUD) for loans on new construction. The Mortgagee Letter also adds the use of the DOE's Home Energy Score option for existing homes.

**Refunds of One Time FHA MIP**

Previously, HUD would refund unearned Mortgage Insurance Premium (MIP) if the mortgage was terminated before maturity of the mortgage. Presently, this refund will only take place for FHA-to-FHA refinances. Listed below are percentages of one-time Mortgage Insurance Premiums (MIP) refunded to FHA mortgagors when contract insurance is terminated

| Insurance Terminated at the End of Policy Year | Percentage of MIP Refunded 3 Years |
|---|---|
| 1 | 58% |
| 2 | 34% |
| 3 | 10% |

**Table 2-2**

## Costs to obtain an FHA mortgage

This section covers costs of obtaining an FHA mortgage that are unique to the FHA program.

- *Down payment.* Until December of 2008, FHA mortgages required a minimum of 1.25% to 2.85% down payment, depending upon the sales price and whether the property was in a "high-closing cost" or "low-closing cost" state. In addition, a minimum 3.0% was required to be invested in the transaction from the borrower's funds. Effective January of 2009, Congress changed the requirement to a 3.5% down payment requirement across the board with no separate minimum investment requirement. In

2010, FHA announced that they would require a 10% down payment for those with a credit score below 580.

- *FHA mortgage insurance.* FHA mortgage insurance, typically referred to as MIP, is the one closing cost that is unique to FHA mortgage programs. Every FHA mortgage must have mortgage insurance, regardless of the amount of the down payment. FHA collects mortgage insurance up-front and monthly. The exemption from upfront MIP for condominiums and rehabilitation mortgages ended effective January 1, 2006.

  - *Changes in Premiums.* In mid-2008, FHA implemented a risk-based premium table for up-front and monthly MIP, with variations for LTV and credit scores. Congress passed a moratorium on this strategy for one year starting October 1, 2008 and it was never reenacted. There have been many changes in the mortgage insurance premiums since that time and these are summarized in Table 2-3 which contains a history from 2008 to the present. This history has included several increases in up-front and annual premiums starting in 2010 which were designed to strengthen FHA's finances with a reduction in January of 2015 for mortgages over a 15-year term.

  - *Up-front premium.* The entire amount of this MIP can be financed into the loan amount…

  – If the FHA loan amount is $100,000 *(base mortgage amount)*;
  – The mortgage insurance premium would be $1,750 ($100,000 x 1.75%);
  – The mortgage amount including MIP would be $101,750 ($100,000 + $1,75

  What really happens during an FHA mortgage transaction is that the borrower owes FHA a lump sum mortgage insurance premium. The lender making the FHA mortgage will actually lend the money for the premium to the borrower and send the money to FHA so that the mortgage will be insured. FHA issues a *mortgage insurance certificate*, or *MIC*, to the lender that must be sent to Ginnie Mae as proof of insurance so the mortgage can be included with other mortgages in a *pooled mortgage security sale.* FHA will now refund the unused up-front MIP[6] for FHA-to-FHA refinances only under a 3-year schedule (See Table 2-1).

  - *Monthly mortgage insurance.* The amount of monthly MIP depends upon the amount of the down payment -- or the loan-to-value (LTV) -- and type of mortgage.

  If the FHA loan amount is $100,000 *(base mortgage amount)*;

  – The mortgage insurance premium would be 0.85% (30 year over 95% LTV)
  – The monthly cost would be approximately $70.83 ($100,000 x 0.85% divided by 12)

  FHA monthly mortgage insurance is deductible on income taxes under the same rules in which conventional mortgage insurance is allowed (see conforming loans).

  - *Cancellation of Monthly Mortgage Insurance.* For 30-year mortgages closed after January 1, 2001, the premium is eliminated when the loan balance is 78% of the original purchase price, provided the premium has been paid for at least five years. Loans originated after June 3, 2013 have a cancellation policy which varies in accordance with the scheduled shown in Table 2-2.

**Continued on page 26**

[6] The refund of unused MIP must be differentiated from a refund of *distributive shares*. In the latter case, all FHA mortgages of a certain time period are put into *pools* by FHA. If there is residual money that remains at the end of the life of the pool, the money must be refunded to the borrowers. FHA discontinued the refund of distributive shares several years ago.

**Table 2-3**

**FHA MORTGAGE INSURANCE CANCELLATION POLICIES**

| Term | LTV (%) | Previous | New |
|---|---|---|---|
| ≤ 15 yrs | ≤ 78 | No annual MIP | 11 years |
| ≤ 15 yrs | > 78 – 90.00 | Cancelled at 78% LTV | 11 years |
| ≤ 15 yrs | > 90.00 | Cancelled at 78% LTV | Loan term |
| > 15 yrs | ≤ 78 | 5 years | 11 years |
| > 15 yrs | > 78 – 90.00 | Cancelled at 78% LTV & 5 yrs | 11 years |
| > 15 yrs | > 90.00 | Cancelled at 78% LTV & 5 yrs | Loan term |

**Table 2-4**

**HISTORY OF FHA MORTGAGE INSURANCE**

| YEARS | UPFRONT MIP | 90% TO 95% | ABOVE 95% |
|---|---|---|---|
| 4/5/2010 and after: 30yr | 2.25% | .50% | .55% |
| 4/5/2010 and after: 15yr | 2.25% | .25% | .25% |
| 10/4/2010 and after: 30yr | 1.00% | .85% | .90% |
| 10/4/2010 and after: 15yr | 1.00% | .25% | .25% |
| 4/4/2011 and after: 30yr | 1.00% | 1.15% | 1.15% |
| 4/4/2011 and after: 15yr | 1.00% | .50% | .50% |
| 4/9/2012 and after: 30yr | 1.75% | 1.25% | 1.25% |
| 4/9/2012 and after: 15yr | 1.75% | .60% | .60% |
| 4/1/2013 and after: 30yr | 1.75% | 1.35% | 1.35% |
| 4/1/2013 and after 15yr | 1.75% | .70% | .70% |
| 1/26/2015 and after 30yr | 1.75% | .80% | .85% |

* The annual premium is .20% higher for 30-year mortgages above $625,500. The annual premium is .25% higher for 15-year mortgages above $625,500 above 90% LTV. The annual premium is .25% lower for 15-year mortgages below 78% LTV for any loan size.

* FHA Streamline refinances are the same as the schedule shown above. However, if the loan being refinanced was originated on or before May 31, 2009, the up-front cost is nominal at 0.01% and the annual premium is 0.55%. This change was implemented in June of 2012.

## FHA REVERSE MORTGAGE INSURANCE PREMIUMS
## Effective October 2, 2017

| **Initial MIP** | Annual MIP |
|---|---|
| 2.00 Percent | 0.5 Percent |

- Above premium schedule effective September 30, 2013
- Previously the up-front MIP was 2.0% for Reverse Mortgages and in September 2010, the HECM or Reverse Mortgage "Saver" Program was introduced with an upfront premium of only 0.01%.
- In September of 2013 the "Standard" and "Saver" options were consolidated into the above schedule.

**Table 2-5**

# NATIONAL FHA MAXIMUM LOAN LIMITS.

| **Limits above **$548,250** are also applicable to conforming loans* | ***1 Unit*** | ***2 Units*** | ***3 Units*** | ***4 Units*** | ***Percent of Conforming Limits*** |
|---|---|---|---|---|---|
| **Base Loan Limits:** | $356,362 | $456,275 | $551,500 | $685,400 | 65% |
| **Max. High Cost:*** | $822,375 | $1,053.00 | $1,272,750 | $1,581,750 | 150% |

## Northeast

| | | | | | |
|---|---|---|---|---|---|
| Connecticut | | New Hampshire | | | |
| Bridgeport | $601,450 | Manchester | $373,750 | Orange | 356,500 |
| Hartford | 356,362 | | | Rochester | 356,362 |
| New Haven | 356,362 | New Jersey | | Syracuse | 356,362 |
| New London | 356,362 | Atlantic City | $356,362 | | |
| Stamford | 601,450 | Atlantic/ | | Pennsylvania | |
| | | Cape May | 431,250 | Allentown | $372,600 |
| Delaware | | Bergen | 822,375 | Lancaster | 356,362 |
| Wilmington | $431,250 | Camden | 431,250 | Philadelphia | 431,250 |
| | | Newark/Edison | 822,375 | Pittsburgh | 356,362 |
| Maine | | Trenton | 356,362 | State College | 356,362 |
| Portland | $403,650 | | | York | 356,362 |
| | | New York | | | |
| | | Albany | $356,362 | Rhode Island | |
| Massachusetts | | Buffalo | 356,362 | Providence | $506,000 |
| Boston | $724,500 | Dutchess | 356,500 | | |
| Cambridge | 724,500 | Nassau-Suffolk | 822,375 | | |
| Nantucket County | 822,375 | New York/NJ | | Vermont | |
| Springfield | 356,362 | SMSA | 822,375 | Burlington | $379,500 |

## Southeast

| | | | | | |
|---|---|---|---|---|---|
| Alabama | | Kentucky | | South Carolina | |
| Entire State | $356,362 | Entire State | $356,362 | Charleston | $414,000 |
| | | | | Columbia | 356,362 |
| | | | | Hilton Head | 379,500 |
| Arkansas | | Louisiana | | | |
| Entire State | $356,362 | Entire State | $356,362 | Tennessee | |
| | | | | Nashville | $586,500 |
| District of Columbia | $822,375 | Maryland | | Memphis | 356,362 |
| VA/MD/WVA MSA | | DC MSA | $822,375 | | |
| | | Annapolis | 538,200 | | |
| Florida | | Baltimore | 538,200 | Texas | |
| Daytona | $356,362 | | | Austin | $416,300 |
| Destin | 441,600 | | | | |
| Ft Meyers | 356,362 | Mississippi | | Dallas | 411,700 |
| Ft. Lauderdale | 402,500 | Entire State | $356,362 | Houston | 356,362 |
| Jacksonville | 388,700 | | | San Antonio | 403,650 |
| Key West | 608,350 | | | | |
| Miami | 402,500 | North Carolina | | | |
| Naples | 460,000 | Boone | $356,362 | Virginia (DC MSA) | $822,375 |
| Orlando | 356,362 | Charlotte | 356,362 | Blacksburg/ | 356,362 |
| Sarasota | 356,362 | Durham | 437,000 | Lynchburg | |
| Tampa | 356,362 | Elizabeth City | 805,000 | Charlottesville | 437,000 |
| West Palm Beach | 402,500 | Jacksonville | 356,362 | Norfolk/ | 458,850 |
| | | Raleigh | 371,450 | Virginia Beach | |
| Georgia | | Wilmington | 356,362 | Richmond | 535,900 |
| | | | | Winchester | 356,362 |
| Athens | $391,000 | Puerto Rico | | | |
| Atlanta | 412,850 | San Juan | $385,250 | West Virginia (DC) | $822,375 |
| Columbus | 356,362 | | | Martinsburg | 356,362 |

**Table 2-6**

## Midwest

| | | | | | |
|---|---|---|---|---|---|
| Idaho | | Kansas | | North Dakota | |
| Boise City | 415,150 | Kansas City | $389,850 | Billings County | $356,362 |
| Blaine | 483,000 | | | | |
| Illinois | | Michigan | | Ohio | |
| Chicago | 379,500 | Ann Arbor | $356,362 | Akron | $356,362 |
| Rockford | 356,362 | Detroit | 356,362 | Cincinnati | 356,362 |
| | | Kalamazoo | 356,362 | Cleveland | 356,362 |
| | | | | Columbus | 397,900 |
| Indiana | | | | Dayton | 356,362 |
| Gary | $379,500 | Minnesota | | | |
| Indianapolis | 379,500 | Minneapolis/ St. Paul | $402,500 | South Dakota | |
| | | | | Entire State | $356,362 |
| Iowa | | Missouri | | | |
| Entire State | $356,362 | Kansas City | $389,850 | Wisconsin | |
| | | St. Louis | 356,362 | Kenosha/Chicago | $379,500 |
| | | | | Madison | 356,362 |
| | | Nebraska | | Milwaukee | 362,650 |
| | | Lincoln | $356,362 | | |

## West

| | | | | | |
|---|---|---|---|---|---|
| Alaska | | Colorado | | Oregon | |
| Anchorage | $417,450 | Aspen | $822,375 | Bend | $460,000 |
| Juneau | 483,000 | Boulder | 654,350 | Eugene | 356,362 |
| | | Denver | 596,850 | Portland | 517,500 |
| Arizona | | Vail | 822,250 | Medford | 356,500 |
| Phoenix | $368,000 | | | | |
| Tucson | 356,362 | Hawaii | | Utah | |
| Flagstaff | 389,850 | Honolulu | $721,050 | Ogden | $646,300 |
| | | Kauai County | 719,900 | Provo | 439,300 |
| California | | Maui County | 723,350 | Salt Lake City | 453,100 |
| Bakersfield | $356,362 | | | St George | 414,000 |
| Fresno | 356,362 | Montana | | | |
| Los Angeles | 822,375 | Billings | $356,362 | Washington | |
| Marin | 822,375 | Missoula | 388,700 | Bremerton | $435,850 |
| Modesto | 396,750 | | | Bellingham | 442,750 |
| Monterey | 739,450 | Nevada | | Olympia | 405,950 |
| Oakland | 822,375 | Carson City | $379,500 | Seattle | 776,250 |
| Orange County | 822,375 | Las Vegas | 362,250 | Tacoma | 776,250 |
| Sacramento | 598,000 | Reno | 460,000 | Vancouver | 517,500 |
| Santa Barbara | 660,100 | | | | |
| San Bernardino | 477,250 | | | | |
| San Francisco | 822,375 | New Mexico | | Wyoming | |
| San Diego | 753,250 | Albuquerque | $356,362 | Jackson | $822,375 |
| San Jose | 822,375 | Los Alamos | 495,650 | Rock Springs | 356,362 |
| San Luis Obispo | 701,500 | Santa Fe | 414,000 | | |
| San Mateo | 822,375 | | | | |
| Santa Cruz | 822,375 | Oklahoma | | | |
| Santa Rosa | 707,250 | Entire State | $356,362 | | |
| Vallejo | 550,850 | | | | |
| Ventura | 739,450 | | | | |

*Note: This chart represents a sample of major metropolitan areas designated as base and high cost areas and published by FHA as of January 2021 and may change during the year. It does not represent all areas designated by FHA. Maximum limits are 1.5% higher in Alaska, Hawaii, Guam and the Virgin Islands.*

**Table 2-6 (Continued)**

- *FHA streamline refinances.* As discussed previously, FHA streamline refinances are simplified refinances that allow the borrower to lower the rate on current FHA mortgages with minimum documentation. Any refund of the MIP due under the three-year schedule from the refinance of the old mortgage would be applied to the new MIP due. For example:

  - Original Base Mortgage Amount: $100,000 ($101,000 with MIP)
  - New Base Mortgage Amount $101,750 w/MIP
  - MIP Refund from Previous Mortgage: $500 (loan just over one year old)
  - New MIP: $102,000 x 1.75% = ($1,750 - $500 refund) $1,250

  Note that premiums for streamline refinances for loans closed before May 31, 2009 have reduced up-front and monthly premiums. The up-front cost is nominal at 0.01% and the annual premium is 0.55%. This change was implemented in June of 2012. Effective 1/27/2017, the annual premiums for these streamline refinances were lowered to 0.25% for the 15-year terms.

- *Additional Considerations.* While there are no other unusual costs associated with procuring an FHA mortgage, there are a few other rules that are interesting to note:

  - *Non-allowable FHA closing costs.* In January of 2006, FHA eliminated the practice of prohibiting the borrower from paying certain lender fees, except the tax service fee. Before this time, the seller was required to pay most miscellaneous lender fees and the fees could not be charged at all on refinances. Those obtaining reverse (HECM) mortgages continue to be prohibited from paying these fees.
  - *Seller Contributions.* The seller is not allowed to *contribute* more than 6.0% of the sales price toward the borrower's closing costs. Allowable seller *contributions* include: discount points, prepaids, closing costs, and funds toward a temporary buydown. Any contribution over 6.0% increases the down payment to the purchaser.
  - *Grant Programs.* FHA allows the down payment and closing costs to come from a grant or a loan from a local or state housing agency. Previously FHA allowed grants from non-profit agencies that were funded through the seller, but this practice was eliminated in 2008.
  - *Lender paid closing costs.* The borrower may opt for a higher interest rate that will enable the lender to give a credit towards the borrower's closing costs. This does not affect the required FHA down payment in any way, unless the discount points to the seller are increased to accommodate this credit.
  - *FHA prepayments.* For loans closed before January 25, 2015, during the payoff of an FHA mortgage, the lender has the right to collect interest to the end of the month in which the payoff occurs. This is important to note because a homeowner selling or refinancing a home with an FHA mortgage should schedule the closing towards the end of the month, but not the last day because this may not leave enough time for the closing agent to get the payoff to the present lender. If the payoff is received by the lender one day late, the lender will be entitled to charge an extra month's interest.

## FHA qualification requirements

The qualification requirements for FHA mortgages are less stringent than comparable conventional mortgages. The following differences highlight the extent of this leniency:

- *Qualification ratios.* While standard conventional qualification ratios are 28/36, FHA allows a housing ratio of 31% and a debt ratio of 43%. These ratios were expanded from 29/41 in April of 2005. Ratios for mortgages with energy efficiency improvements (EEMs) were expanded to 33/45. If the published ratios are exceeded on manually underwritten mortgages, one or more of the following *compensating factors* must be present—these factors were updated with the release of the new FHA Handbook 4000.1 in September of 2015:
  - Documented cash reserves (3 months reserves for 1-2 units, 6 months reserves for 3-4 units).
  - No discretionary debt.
  - Positive residual income using VA family support factors.
  - A minimal increase in housing expense.
  - The borrower receives compensation not reflected in the effective income, but directly affecting the ability to pay the mortgage and other obligations.
  - The ratios may be exceeded by 2% when the dwelling has been identified as energy efficient.

It should be noted that most FHA mortgages are now underwritten through automated underwriting systems and these systems may approve ratios significantly higher than 31/43 when positive factors such as high credit scores exist. However, lenders may have standards that are more stringent than FHA.

- *Cash requirements are less.* The cash requirements for an FHA transaction can be less than those for a comparable conventional transaction:
  - FHA requires less than the typical 5.0% down payment required on comparable conventional mortgages. Conventional mortgages requiring less than 5.0% down typically require higher credit scores, a higher interest rate, higher mortgage insurance costs and/or maximum income limits.
  - FHA does not require cash reserves, except for loans that are required to be manually underwritten. Three months of reserves are required on 2-4 unit properties.[7] These reserves cannot come from a gift.
  - All cash may come from a gift from an immediate family member, or someone with a *family-type* relationship. Many conventional mortgages require 5.0% of the cash to be from the purchaser's own funds. If deposited in a supervised account, gifts from a bridal registry or other legitimate occasion where substantial gifts are typically received are allowed.
  - The funds for down payment and closing costs can be borrowed, but the loan must be secured and the borrower must qualify for the additional monthly payments. Funds for the down payment can be borrowed from or be provided by a government agency.
  - All mortgage insurance can be financed in the mortgage amount rather than paid in cash.
- *Credit Scores.* FHA does not have a minimum credit score requirement. During the three-month implementation of the risk-based insurance schedule in 2008, FHA did vary insurance costs by credit score. Low credit scores also will significantly affect the results of automated underwriting systems. In May of 2004, FHA required the use of its TOTAL Mortgage Scorecard as a tool to evaluate the results of automated underwriting systems. Note that lenders can always be more stringent than FHA and it is typical for lenders have a minimum credit score for FHA

[7] 15 Days prepaid interest must be made a part of the required cash for qualification purposes. In other words, the lender must assume that the closing will take place in the middle part of the month.

loans. In October of 2010, FHA implemented a minimum score requirement of 580 for down payments of less than 10%. If the automated underwriting system "refers" a loan or it cannot be decisioned because of insufficiency of credit or other factors, it must be manually underwritten, and special guidelines apply to manually underwritten loans.

- *FHA co-borrower rules.* FHA allows co-borrowers to help qualify for the mortgage and these co-borrowers do not have to live in the property (one-unit properties only).[8] Non-owner occupant co-borrowers must be an immediate family member or have a *family-type* relationship, and cannot contribute the vast majority of resources (cash and income) to the transaction. In other words, it must make sense that the occupant can make the payments and that the co-borrower is not an investor.
- *Non-citizens.* Borrowers do not have to have a *green card* [9] to receive an FHA mortgage. They must have a valid social security number and must be in the country legally. The social security number will be validated by FHA. Lender requirements may be more stringent in this regard.
- *Second mortgages.* Governmental agencies may lend money for second mortgages to defray the purchase costs for qualified purchasers. Otherwise, FHA is more stringent than most mortgage programs with respect to the placing of the second mortgage behind an FHA mortgage during a purchase transaction. FHA does allow the placing of a second mortgage but:
  - The combination of the first and second mortgage cannot lower the required down payment.
  - Regardless of the loan-to-value on the first mortgage due to the existence of the second mortgage, the purchaser must still pay FHA mortgage insurance.
  - In 2010, FHA changed two requirements with regard to second mortgages. First, the combined mortgage amount of the first and second trust now can exceed FHA maximum mortgage limits set in the local jurisdiction. Second, refinances are now subject to CLTV restrictions as noted earlier in this section.

    In other words, other than exceeding the maximum mortgage limits in a particular jurisdiction, there is no advantage to placing a second mortgage behind an FHA first mortgage. There are no restrictions regarding placing a second mortgage behind an FHA mortgage when the FHA mortgage is being assumed by the purchaser of the property, lessening the cash required.
- *Disadvantages.* No loan program comes without disadvantages. FHA mortgages are less advantageous than conventional alternatives when a larger down payment is made (or there is significant equity in a refinance) because mortgage insurance is always required. FHA also requires many forms in addition to forms required by conventional alternatives (see Chapter 7).
- *Manually Underwritten Loans.* In early 2014, FHA issued additional guidelines for loans which are not approved through their automated TOTAL Scorecard Program. If the loan is underwritten manually the minimum credit score is 580 and:
  - Ratios of 31/43 (33/45 for energy efficient loans) may not be exceeded if no compensating factors are present.
  - Ratios of 37/47 may not be exceeded if one compensating factor is present.
  - Ratios of 40/50 may not be exceeded if two compensating factors are present.

[8] They are therefore referred to as non-owner occupant co-borrowers.
[9] A green card is a document that makes a non-citizen residing in the United States a resident alien, or one who can reside in the United States.

- Ratios of 40/40 for those without any discretionary debt besides housing.
- Compensating factors include three months of reserves for 1-2 unit properties, increase in payment limited to 5% or $100, whichever is less, with no more than one 30-day late within the past 12 month (no late payments allowed for cash out refinances) and a positive residual.

For category 3 above, the factor of additional verified income not counted is added.

## The Department of Veterans Affairs (VA)

The VA program was established in 1944 to provide for the veteran by providing a guaranty against foreclosure. The word "guaranty" is very important in this regard. Unlike FHA mortgages that are insured against default in a program paid for by the users of that program:

- The VA program is not an insurance program, but a benefit program for veterans. Throughout its history, VA losses are not offset by insurance premiums. It was only later in the program history that VA began collecting a *Funding Fee* to offset administrative expenses.
- The VA program guarantees only a *portion* of the mortgage against default while an FHA mortgage is 100% insured against default. If the loss in a foreclosure process exceeds the amount of the VA mortgage guaranty, the lender is at risk. Basically, when a VA mortgage goes into default, VA has the option of taking over the problem by auctioning the house and paying off the lender, or remitting to the lender the amount of guaranty in cash and letting the lender dispose of the property. The latter situation is called a *VA no-bid*. Congress sets the formula by which VA determines which defaults result in *no-bids*. VA lending can be riskier than FHA lending because the lender is giving *recourse*, or is at-risk for future losses beyond those covered with the guaranty. Because of this extra risk, it is not unusual for lenders to charge higher points for VA mortgages as compared to FHA.
- The VA home loan program benefits a specific population group comprising veterans, active military and the members of the armed forces reserves. They also make “Native American Direct” mortgages under a special program. FHA is geared to benefit the population as a whole. Like FHA, VA does not provide funds for the mortgage—it just facilitates lending by providing assurance against default.

## Who is eligible to obtain VA mortgages?

Any Veteran who served on continuous active duty for the number of days required during the time frames listed below and has received an honorable release or discharge is eligible for the program:

| | | |
|---|---|---|
| Post Korean | 2/01/55 to 8/04/64 | 181 Days |
| Vietnam Conflict | 8/05/64 to 5/07/75 | 90 Days |
| Post-Vietnam | 5/08/75 to 8/1/80 | 181 Days (10/16/81 for officers) |
| Enter After | 9/07/80 to 8/1/90 | 24 Months |
| | 10/17/81 to 8/1/90 | 24 Months (Officers) |
| Persian Gulf | 8/2/90 on | 2 Years or Period called to active duty (not less than 90 days) |

Note: If applicants are active military personnel, they need to have served 181 days to be eligible. If they are separated from service, they need to have had 24 months continuous duty to be eligible.

In addition, the following are also eligible:

- Commissioned Public Health Officers, National Oceanic and Atmospheric Administration Officers, Environmental Science Service Administration Officers, and Coast and Geodetic Survey Officers.
- A veteran discharged because of service-related disability without minimum qualifying time may still be eligible.
- A surviving spouse (not remarried) of a veteran who died, either in service or after separation, as a result of a service-connected injury or disease.
- Under the Veterans Home Loan Program Amendments of 1992, individuals who have completed a total of at least six years in the Reserves or National Guard but are subject to a higher funding fee.

There is no limit to the number of VA mortgages a veteran can obtain as long as there is remaining *guaranty* or *eligibility* for each mortgage. Funding fee schedules indicate a higher cost for second time usage. There are some exceptions to the 24-month rule for reductions in force and other discharges for the convenience of the government.

## Types of transactions financed under VA

*Owner-occupied purchase transactions.* The vast majority of VA mortgages are owner-occupied purchase transactions. The purpose of the program is to assist the veteran in obtaining housing.

*Interest rate reduction refinances.* A veteran can refinance his/her present VA mortgage to reduce the interest rate[10] under the *VA Interest Rate Reduction Refinance Loan (IRRRL) Program*. The veteran does not need to continue to live in the home to apply for an interest rate reduction refinance, and a new guaranty is not necessary. VA does not require the verification of income or a new appraisal on these *Interest Rate Reduction Refinance Loans* though lenders may require a new appraisal. All closing costs can be rolled into the new loan amount under this refinance program. VA issued a rule in early 1996 directing that lenders charge no more than two discount points on VA refinances. If the loan exceeds two discount points, a statement must be signed by the borrower and the amount exceeding two points must be paid in cash.

The IRRRL Program requires that the new payment be lower in the new mortgage. The veteran can move to a 15-year mortgage which increases payments under this refinance program. A veteran may refinance out of an ARM, even if the new payment is higher. The lender must certify that the veteran is able to make the new payment in cases where the PITI is increased by 20% or more. In 2017, Ginnie Mae added a requirement that the existing loan must have six payments made before refinancing. In 2018, VA added rules to implement this requirement, including requiring a net benefit for refinances. This net benefit includes a requirement for a 0.5% reduction in rate when refinancing from a fixed-rate VA and a three year recovery of costs requirement.

*VA full documentation refinances*. If the present mortgage is not a VA mortgage, it still can be refinanced under VA full documentation guidelines as long as the veteran occupies the home and has enough unused entitlement. Full documentation refinances, including cash-out transactions, are allowed at a maximum of 90% of the appraised value of the property. VA also allows the financing of the costs of energy-efficiency improvements of up to $6,000, including within an IRRL. Note again that lenders may be more stringent—for example, they may not offer 90% financing for VA cash-out refinances. Note that the

[10] A requires that the new payment be lower. The veteran can move to a 15-year mortgage which increases payments under this refinance program. A veteran may refinance out of an ARM. Even if the new payment is higher the lender must certify that the veteran is able to make the new payment in cases where the PITI is increased by 20% or more.

borrower cannot pay miscellaneous lender charges such as a tax service fee or underwriting fee for any type of VA refinance.

*Assumptions.* VA mortgages are freely assumable at the same rate and terms by owner occupants or investors, with a credit check required for mortgages closed after March 1, 1988, but the veteran will not receive his/her eligibility back without a substitution of entitlement. For processing assumptions, the lender can charge $300, and 0.5% is charged by VA for a funding fee.

## Types of properties eligible for VA

The types of properties eligible for VA financing mirror FHA programs for the most part:

- 1-4 unit single-family properties. Unlike FHA, the maximum mortgage amount is not increased for multiple unit properties.
- Properties located in planned unit developments (PUDs).
- Properties located in condominium developments.

Condominium developments have to be approved by VA and the guidelines are similar to those employed by FHA. The most pronounced exception is the fact that VA does not have a 51% owner-occupancy requirement for condominium projects and VA does not require environmental assessments for condominiums. In September of 2000, the VA lender handbook was updated to eliminate the requirement that planned unit developments need VA approval. When FHA updated its condominium requirements in 2009, VA stopped accepting projects with FHA approval.

VA appraisals traditionally were called *Certificates of Reasonable Value* (CRVs) and appraisals of new projects were called *Master Certificates of Reasonable Value* (MCRVs). In 2005, VA began accepting the use of conventional appraisal forms as revised by Fannie Mae/Freddie Mac and CRV began to be known as a *Notice of Value* (NOV). New homes must have plans and specifications approved by VA, however a small number of homes can be allowed on a *spot* basis with an approved homeowner's warranty program. In these cases the appraisal would be ordered at what is called the *customer preference stage*. At this stage the home is completely finished, except for items the purchaser chooses: carpet, tile, appliances, etc. After these items are installed, a final inspection is ordered and performed by the appraiser. VA. In 2006, VA released a simplification of the processing procedures for proposed construction in which the need for VA inspections was eliminated in most cases. Because values are good for one year from date of issuance, in May of 2009 VA stopped issuing MCRVs because of declining market conditions, a policy which expired January 1, 2013.

Under a program called *LAPP (Lender Appraisal Processing Program)*, the appraiser sends the appraisal directly to the lender to process. Under normal VA procedures, all appraisals are sent to the Property Valuation Section of VA and VA issues the appraisal, or CRV. The lender can issue its approval after receiving the appraisal if the lender is a VA Automatic lender.

## Mortgage types offered under VA

- *Fixed rates.* By far the most prevalent VA mortgages are 30-year fixed rates. Until November of 1992, VA set an interest rate ceiling that could be charged to the veteran for all VA mortgages except for refinances. The veteran was also not allowed to pay any discount points charged in connection with the mortgage. Under the Veterans Home Loan Program Amendments of 1992, this interest rate ceiling

was lifted and veterans were permitted to pay discount points directly.[11]

- *Temporary buydowns.* Temporary buydowns of VA fixed rate mortgages have not been popular in the past few years. The reasons for this are:
  - *Qualification*. VA does not allow qualification at the bought down rate unless it can be proven that the income will increase in the future. Cost of living increases are specifically excluded and the increase must be proven. VA will allow the lower payment to offset a debt payment that will be paid off in the near future.
  - *Point premium.* Like FHA buydowns, Ginnie Mae treats buydowns differently for securitization purposes and this can result in a premium in addition to the actual cost of the buydown.

*VA ARMs.* Under the Veterans Home Loan Program Amendments of 1992, Congress authorized a test program to offer one-year adjustable rate mortgages that are identical to those offered under the FHA mortgage program (1% adjustment cap and 5% life cap with a "T" Bill index). The veteran is qualified at 1% over the initial interest rate. The authority expired in 1995 and was not renewed by Congress until December 2004. In December 2002, Congress authorized the creation of a new pilot program to test hybrid ARMs (such as a 3/1) that were similar in characteristics to the new FHA hybrid ARMs. In 2005, 5/1 adjustables were authorized at a higher annual cap of 2.0%, which is the same as the FHA caps for this hybrid adjustable.

*Energy efficient mortgages.* The 1992 Amendments also authorized the financing of improvements to properties to make the property energy efficient. From $3,000 to $6,000 (depending upon the degree of utility savings) can be added to the mortgage for these improvements for purchase and refinance transactions. This provision can be utilized even if the veteran is financing the maximum amount for which he/she is eligible.

## Maximum VA mortgage amount

VA does not actually set a mortgage limit—it limits the amount of *guaranty* that can be extended for each mortgage. This guaranty allows for no-down-payment loans of up to the conforming limit ($548,250 for 2021). As the maximum conforming loan amount rises, so does the maximum amount of guarantee and thus the maximum VA mortgage amount with no-money down. Conforming limits are 50% higher in high cost areas, ($822,375 for 2021) and these higher limits also apply to VA no-money down loans. Above conforming limits, VA does not limit lenders from making larger VA loans, but a down payment of 25% would be required on the amount of financing which exceeds the limit. Effective January of 2020, VA lifted the VA loan limits for all loans for veterans with full eligibility. Therefore, they would not be constrained by the conforming loan limits (except for partial eligibility). It is too soon to tell in what form and with what restrictions these loans will be offered by lenders.

## Costs to obtain a VA mortgage

*Down payment.* It is within the discussion of down payment that we must advance and define the concept of the words *guaranty*, *eligibility*, and *entitlement* that keep turning up within our exploration of VA mortgages. Basically, each veteran is *eligible* or *entitled* to have a certain portion of a VA mortgage

[11] Under the rules implementing this legislation, veterans were not allowed to roll in the cost of discount points in VA refinance transactions. This rule has since been rescinded.

*guaranteed* against default. Usually, 25% of the mortgage amount is guaranteed by VA. This guaranty serves as a substitute for cash equity in the eyes of the lender because the lender knows VA will send the equivalent in cash if the mortgage defaults. Therefore, the amount of guaranty will allow a maximum VA mortgage without a down payment by the Veteran.

Example: If the Veteran has *eligibility* for a *$70,000 guaranty*, the maximum VA mortgage without a down payment would be:

$70,000 x 4 = *$280,000* (This means that VA will guaranty 25% of $280,000, or $70,000.)

How do we determine how much entitlement a veteran currently has? Basically, if the veteran never has used his/her VA eligibility in the past, the veteran would have a maximum entitlement of twenty-five percent of the maximum limit published by VA. If the veteran had a VA mortgage in the past and did not regain the used entitlement,[12] the veteran would have lost a certain amount of guaranty. Congress has periodically increased the guaranty throughout the history of the VA mortgage program. The amount of increase would give the veteran who has already used all or most of his/her entitlement what is called a *partial entitlement*.

**History of VA Entitlement**

| | |
|---|---|
| $4,000..... | World War II |
| $7,500..... | Increase 7/12/50 |
| $12,500..... | Increase 5/7/68 |
| $25,000..... | Increase 10/2/78 |
| $27,500..... | Increase 10/1/80 |
| $36,000..... | Increase 2/1/88 |
| $46,000..... | Increase 12/18/89 |
| $50,750..... | Increase 10/13/94* |
| $60,000..... | Increase 12/27/01* |
| $89,912..... | Increase 01/01/05* |
| $104,250..... | Increase 01/01/06* |

VA will currently guaranty:

- 50% of mortgages up to $45,000
- $22,500 maximum for mortgages over $45,000 and up to $56,250
- The lesser of $36,000 or 40% of the mortgage for mortgages of $56,250 up to $144,000
- 25% of the conforming limit on loans up to $510,400 or the limit in a high cost area published by VA.
- In 2020 VA eliminated the restriction to conforming loan limits for those with full eligibility.

*The increases were originally effective only for purchases over $144,000. As of 10/16/2008 these include refinances as well.

**Table 2-7**

For example:

- If a veteran purchased a home in 1979 for *$100,000*, the veteran would have used *$25,000* in entitlement.
- In 1988 the entitlement was increased to *$36,000*, giving the veteran a partial entitlement of *$11,000*.
- In 1989 the entitlement was increased to *$46,000* (1994 to *$50,750*, and in 2001 to $60,000, but only for the purpose of purchasing a home with a sales price greater than *$144,000*). Therefore, the partial remains at *$11,000* for a sales price below *$144,000* and *$35,000* for the purchase of a home over *$144,000*.
- In 2005, the entitlement was increased to 25.0% of the conforming limit.

[12] A veteran regains used entitlement in one of two ways. The most common method is reinstatement, which means that the property is sold and the mortgage is paid off (both events must occur). In October 1994, Public Law 103-446 was passed which allowed a one-time only restoration for a veteran whose loan has been paid in full but had not disposed of the property. The second method is substitution of eligibility, which means that the home is sold and the VA mortgage is assumed by another veteran who substitutes his/her eligibility of an equal amount during the process of assuming the mortgage. In either case, if the veteran is selling his/her home and purchasing another, back-to-back settlements are not usually possible because the COE must be updated. In a back-to-back settlement, the home seller leaves one settlement table to go to the next settlement as the purchaser of another home on the same day.

The veteran can purchase a second home under the VA mortgage program without disposing of the first home as long as the next purchase is also for an owner-occupied home (the first home would have to be converted to a rental property), and as long as the new home has at least 25% in guaranty by VA or cash down payment by the veteran. In the above example, the veteran has only a partial of $35,000 and can only purchase four times that amount with no money down. Therefore, the veteran would have to make a 25% down payment for any portion of the sales price above $140,000.

The formula for figuring the maximum mortgage amount with partial entitlement would be:

Sales Price x 75% + Eligibility = Maximum Mortgage Amount

$160,000 x 75% = $120,000 + $35,000 = $155,000 ($5,000 down payment)

The amount of entitlement is designated on a VA form called a *Certificate of Eligibility*, or *COE*. This form is obtained through each Regional VA Office and can be updated every time there is a change in entitlement.

*Funding fee.* Though the VA mortgage program is not financed through user paid insurance, the veteran must pay a *funding fee* to reimburse the VA for the cost of administering the program. Effective October 1, 1993 veterans using their VA eligibility for a second time must pay a higher fee. The cost of the funding fee stated as a percent of the mortgage amount effective October 1, 2004:

**Funding Fees**

**Active Military and Veterans**

| Down Payment | Funding Fee First-Time Use | Funding Fee Subsequent Use |
|---|---|---|
| 0->5.0% | 2.30% | 3.60% |
| 5.0-10% | 1.50% | 1.50% |
| >10% | 1.25% | 1.25% |
| IRRRL Refis | 0.50% | 0.50% |
| Cash-Out Refis | 2.15% | 3.30% |
| Mobile Homes | 1.00% | 1.00% |
| Assumptions | 0.50% | 0.50% |

As of 2020, Reservists and National Guardsman do not pay a higher fee.

**Table 2-8**

VA allows the funding fee to be financed into the mortgage amount without affecting the amount of eligibility.

Example:

| | |
|---|---|
| Sales Price: | *$100,000* |
| Mortgage Amount: | *$100,000* |
| Amount of Funding Fee: | *2.30%,* or *$2,300* |
| Mortgage Including Funding Fee: | *$102,300* |

Veterans receiving VA disability are eligible to have their funding fee waived by VA. In September of 2011, VA began including this exemption on the Certificate of Eligibility and lenders no longer have to send a *VA Verification of Benefits* to VA for the determination except on refinances or where the information on the COE is unclear.

*Non-allowable VA closing costs.* VA does not allow the veteran to pay miscellaneous fees above and beyond the loan origination fee. Therefore, on purchase transactions the tax service, lender inspection, and other fees will typically be paid by the seller. These fees cannot be charged on refinances.

The seller can pay all discount points, temporary buydown funds, closing costs, and prepaid associated with the transaction. With no down payment and the seller paying all closing costs, the veteran can literally move in with no cash utilized in the transaction. There is a limit of 4% of the sales price that the seller can *contribute* towards the borrower's costs in the transaction; however typical discount points and closing costs do not count towards the 4% limitation.

## VA qualification requirements

VA makes home buying more affordable and achievable for veterans in several ways:

- *Residual method.* VA is the only major mortgage source that continues to use the *residual method* of qualification. The *residual method* figures qualification by subtracting all expected expenses from a veteran's income. If the *residual figure* is positive, the veteran qualifies. If the *residual figure* is negative, the veteran does not qualify. Generally, the residual method is a more liberal and realistic qualification standard than the widely utilized ratio method. A more in-depth discussion of this concept can be found in Chapter 4, *Qualifying for A Mortgage*.
- *Higher ratios.* VA also applies a second qualification standard: a *debt ratio* of 41%. Generally, if the second ratio exceeds 41% the lender must have compensating factors to approve the loan. This would include recalculation of the residual method to determine if the residual remains positive after 20% is added to the family support category. With most conventional standards employing a 36% debt ratio, the second standard of VA qualification remains more liberal than comparable conventional mortgages.
- *Cash requirements.* The cash requirement for a VA mortgage is less than any other major mortgage source (keep in mind that lender requirements can be more stringent than VA):
  - No down payment is required if there is full entitlement.
  - The VA funding fee can always be financed (up to the high cost limit).
  - The seller can pay for all closing costs and prepaids.
  - There is no requirement for cash reserves after closing.
  - The veteran can receive gift funds for any and all cash requirements.
  - The veteran can borrow on unsecured terms for any cash requirements, except to pay above the appraised value of the property if the sales price exceeds the appraised value.

Not all qualification requirements for VA mortgages are less stringent than conventional mortgages. There are some standards that are very strict:

- *Co-borrower requirements.* Since the VA mortgage program is a benefit program for veterans, it is quite understandable that the participation of *non-veterans* is restricted. Non-owner occupant co-borrowers are strictly forbidden in the VA mortgage program. There are basically only two classes of owner-occupant co-borrowers that are allowed:
  - The spouse of the veteran is an eligible co-borrower. In addition, if the spouse of the veteran is also, an eligible veteran, either entitlement can be utilized to acquire the VA mortgage.
  - Another eligible veteran. Two non-related veterans can purchase a home together if they both are

going to live in the house. In this case, a portion of the entitlement will be utilized by both veterans. These mortgages must be approved directly by VA, even if the lender has VA automatic authority.

- Non-veterans (not a spouse). Though VA may approve a loan purchased with a non-veteran, these loans are not likely to be guaranteed in full and therefore not eligible to be purchased by Ginnie Mae. Because the loan cannot be sold, most lenders will not be able to make such a loan.

- *Secondary financing.* A second mortgage behind a VA first mortgage is not allowed to decrease the cash down payment required by the veteran (if there is one). For example, if the veteran has remaining eligibility of $15,000 and the sales price is $100,000:

  $100,000 x 75% = $75,000 + $15,000 = $90,000 maximum mortgage
  $100,000 - $90,000 = $10,000 minimum down payment
  The VA mortgage is $90,000. The $10,000 must be in cash. A second trust is not allowed to "lower" the down payment.

At times, lenders have offered VA "Jumbo" mortgages, which require a 25% down payment over the maximum allowable loan limit, utilizing a second mortgage. For example, if the maximum conforming loan amount is $500,000 in a high cost area and the sales price is $600,000, the lender might allow a first mortgage to $500,000 and a second mortgage for $75,000 with a $25,000 down payment. Or, as an alternative, the lender could offer a $575,000 VA "jumbo" loan.

## 30 YEAR MORTGAGE RATE CHANGES – A 60+ YEAR HISTORY

| Effective Date | Percent | Effective Date | Percent | Effective Date | Percent |
|---|---|---|---|---|---|
| April 2, 1953 | 4 1/2% | April 13, 1981 | 14 1/2% | July 17, 1989 | 9 1/2% |
| December 3, 1956 | 5% | May 8, 1981 | 15 1/2% | February 23, 1990 | 10% |
| August 5, 1957 | 5 1/4% | August 17, 1981 | 16 1/2% | November 19, 1990 | 9 1/2% |
| September 23, 1959 | 5 3/4% | September 14, 1981 | 17 1/2% | February 5, 1991 | 9% |
| February 2, 1961 | 5 1/2% | October 12, 1981 | 16 1/2% | June 17, 1991 | 9 1/2% |
| May 29, 1961 | 5 1/4% | November 16, 1981 | 15 1/2% | August 12, 1991 | 9% |
| February 7, 1966 | 5 1/2% | January 25, 1982 | 16 1/2% | September 18, 1991 | 8 1/2% |
| April 11, 1966 | 5 3/4% | March 2, 1982 | 15 1/2% | December 20, 1991 | 8% |
| October 3, 1966 | 6% | August 9, 1982 | 15% | February 24, 1992 | 8 1/2% |
| May 7, 1968 | 6 3/4% | August 24, 1982 | 14% | July 6, 1992 | 8% |
| January 24, 1969 | 7 1/2% | September 24, 1982 | 13 1/2% | August 12, 1992 | 7 1/2% |
| January 5, 1970 | 8 1/2% | October 12, 1982 | 12 1/2% | October 28, 1992 | VA Dereg.* |
| December 2, 1970 | 8% | November 15, 1982 | 12% | November 1992 | 8.31% |
| January 13, 1971 | 7 1/2% | July 11, 1983 | 12 1/2% | January 1993 | 7.99% |
| January 18, 1971 | 7% | May 9, 1983 | 11 1/2% | July 1993 | 7.21% |
| August 10, 1973 | 7 3/4% | June 8, 1983 | 12% | January 1994 | 7.07% |
| August 25, 1973 | 8 1/2% | August 1, 1983 | 13 1/2% | July 1994 | 8.61% |
| January 22, 1974 | 8 1/4% | August 23, 1983 | 13% | January 1995 | 9.15% |
| April 15, 1974 | 8 1/2% | November 1, 1983 | 12 1/2% | July 1995 | 7.61% |
| May 13, 1974 | 8 3/4% | November 30, 1983 | FHA Dereg.* | January 1996 | 7.03% |
| July 5, 1974 | 9% | March 21, 1984 | 13% | July 1996 | 8.25% |
| August 14, 1974 | 9 1/2% | May 8, 1984 | 13 1/2% | January 1997 | 7.82% |
| November 24, 1974 | 9% | June 8, 1984 | 14% | January 1998 | 6.99% |
| January 21, 1975 | 8 1/2% | August 13, 1984 | 13 1/2% | January 1999 | 6.79% |
| March 3, 1975 | 8% | October 22, 1984 | 13% | July 1999 | 7.63% |
| April 28, 1975 | 8 1/2% | November 21, 1984 | 12 1/2% | January 2000 | 8.21% |
| September 3, 1975 | 9% | March 25, 1985 | 13% | January 2001 | 7.03% |
| January 3, 1976 | 8 3/4% | April 19, 1985 | 12 1/2% | January 2002 | 7.00% |
| March 30, 1976 | 8 1/2% | May 21, 1985 | 12% | July 2002 | 6.49% |
| October 18, 1976 | 8% | June 5, 1985 | 11 1/2% | January 2003 | 5.92% |
| May 31, 1977 | 8 1/2% | November 20, 1985 | 11% | January 2004 | 5.71% |
| February 28, 1978 | 8 3/4% | December 13, 1985 | 10 1/2% | January 2005 | 5.71% |
| May 23, 1978 | 9% | March 3, 1986 | 9 1/2% | January 2006 | 6.15% |
| June 29, 1978 | 9 1/2% | November 24, 1986 | 9% | July 2006 | 6.76% |
| April 23, 1979 | 10% | January 19, 1987 | 8 1/2% | January 2007 | 6.22% |
| September 26, 1979 | 10 1/2% | April 10, 1987 | 9 1/2% | July 2007 | 6.70% |
| October 26, 1979 | 11 1/2% | May 5, 1987 | 10% | January 2008 | 5.76% |
| February 11, 1980 | 12% | September 4, 1987 | 10 1/2% | December 2009 | 4.93% |
| February 28, 1980 | 13% | October 5, 1987 | 11% | December 2010 | 4.71% |
| April 4, 1980 | 14% | November 10, 1987 | 10 1/2% | December 2011 | 3.96% |
| April 28, 1980 | 13% | February 1, 1988 | 9 1/2% | December 2012 | 3.35% |
| May 15, 1980 | 11 1/2% | April 3, 1988 | 10% | December 2013 | 4.46% |
| August 20, 1980 | 12% | May 20, 1988 | 10 1/2% | December 2014 | 3.86% |
| September 22, 1980 | 13% | November 1, 1988 | 10% | December 2015 | 3.96% |
| November 24, 1980 | 13 1/2% | December 19, 1988 | 10 1/2% | December 2016 | 4.20% |
| | | | | December 2017 | 3.95% |
| | | | | December 2018 | 4.64% |
| | | | | December 2019 | 3.72% |
| | | | | December 2020 | 2.88% |

**Note: Following the FHA/VA maximum interest rate over the years provides a good insight to the movement of interest rates during the "modern era" of mortgage lending. After deregulation of the maximum VA interest rate, the number provided from November 1992 forward is the Freddie Mac Primary Mortgage Market Survey for 30-year fixed mortgages (does not include average points charged). Mid-Year pricing shown only when the July average differs from January by more than 0.5%.**

***Represent dates the FHA and VA rates were deregulated.**

## State and local bond issues

Financing for homes is provided by State and local governments through the Federal Bond Subsidy Act. This legislation authorizes these governments to issue tax-free bonds to the public. The purchasers of these bonds receive income at a specified interest rate, but the interest income earned is not taxable by state and federal governments. Because of the bonds' *tax-free* status, the interest rates paid by the governments can be less than what is paid by banks and other interest rate denominated investments. These lower interest rate bonds finance mortgages that also carry below market interest rates.

These below market rate mortgages are available to first-time homebuyers[13] whose income is not more than 100% of the median income for the area (moderate income), or 80% of the income for the area (low income). The local agency may offer lower interest rates to low income individuals.

The sales prices for the homes are limited to 90% of the average area purchase price[14] applicable for such homes. The term *acquisition cost* is utilized in the legislation to ensure that the maximum sales price is not exceeded by the purchase of an unfinished property. The *acquisition cost* is defined as the purchase price and the estimated cost to finish the property. This *acquisition cost* cannot exceed the maximum sales price. Typically, separate maximum sales prices for new homes and existing homes may exist. There also is usually a limitation as to the allowable cash assets of the participants in the programs.

There are *targeted areas* that are qualified census tracts, or areas of chronic economic distress in which 70% or more of the families have income 80% or less of the statewide median family level. In these areas the interest rate may be lower, or there may be leniency in one or more of the qualification rules or eligibility standards necessary to procure the mortgages. These include exceptions to the first time homebuyer requirement, and increased sales prices up to 110% of the average purchase price of the area. At least 20% of a particular bond issue must be available for lending within targeted areas.

## Who is eligible for bond issues?

The eligibility standards may vary from program to program, but minimum standards include the principal residence of buyers who have not had an ownership interest in real property for the previous three years. The income of these buyers cannot exceed 100% of the median area income and there are maximum cash asset requirements. There may be exceptions of eligibility requirements for targeted lower income areas. Table 2-10 presents the medium income limits for major areas within the United States.

## Types of transactions financed

Generally, lending is limited to owner-occupied purchase transactions. Refinances are prohibited. However, there are provisions for the agencies to issue loans for the rehabilitation of properties and home improvement loans. During the real estate crisis starting in 2007-2008, there appeared some temporary stimulus-based refinance programs.

## Types of properties eligible

Generally, any types of properties that can be financed through FHA and VA can be financed through these programs, including condominium projects and planned unit developments. The home cannot be utilized for the generation of income. While the agencies may enforce this restriction differently, the

[13] By definition, a first-time homebuyer is one who has not had an interest in real property for the previous three years.

[14] The term *acquisition cost* is utilized in the legislation to ensure that the maximum sales price is not exceeded by the purchase of an unfinished property. The *acquisition cost* is defined as the purchase price and the estimated cost to finish the property. This *acquisition cost* cannot exceed the maximum sales price.

regulations state that if over 15% of the home is utilized for business, the home would not qualify for financing. Two to four- unit properties are not excluded, yet the maximum sales price is not increased for these properties. It is expected that the square footage dedicated to rental income would provide a problem concerning the aforementioned restriction regarding business use of the home.

## Mortgage types offered

It would be unusual for anything other than a fixed rate mortgage and a temporary buydown of that fixed rate mortgage to be offered. Each bond issue would typically carry one or two rate and point options. These agencies may also offer special programs with funds provided by the Federal Government. For example, targeted funds from the *Economic Stimulus Act* were funneled through these agencies and may be used for objectives such as purchasing vacant homes

Some programs offer second mortgages or grants that can lessen the cash requirements of a first mortgage program. The first mortgage might also be offered under a Bond Program, or the first mortgage may be an FHA, VA, or Conventional mortgage. Fannie Mae, Freddie Mac, and FHA have special provisions of their low-to-moderate income programs that allow the borrower to procure some portion of the cash from a government agency—either as a loan, grant or a secured second mortgage.

Many of the mortgages offered under this program can be insured by FHA or guaranteed by VA. In effect, FHA/VA mortgages are offered, but a government agency is lowering the interest rate and providing funds. In these cases, the borrower must meet the eligibility guidelines of the *Federal Bond Subsidy Act*, the local governmental entity as well as the qualification guidelines of FHA/VA.

## Maximum mortgage amounts

The maximum mortgage amount will be governed by the sales price limitations in each jurisdiction. If the maximum sales price is $100,000 and the program requires a 5% down payment, then the maximum mortgage amount in this case will be $95,000, plus any mortgage insurance or funding fee that can be financed.

## Costs to obtain a bond issue mortgage

The costs to obtain mortgages originated under the *Federal Bond Subsidy Act* will vary from program to program but the most common variations are as follows:

- *Down payments.* Required down payments vary for those programs insured by conventional private mortgage insurance, for VA guaranteed mortgages, for FHA insured mortgages and local entities that offer government sponsored mortgage insurance or second mortgages.
- *Mortgage insurance.* If FHA or VA is the insuring or guaranteeing agency, then the costs will mirror those programs. The cost of programs with local and state government sponsored mortgage insurance varies from jurisdiction to jurisdiction. If private mortgage insurance is offered, the costs mirror those costs for a conventional mortgage with a similar down payment, unless a higher or lower standard of coverage is required.
- *Recapture tax.* While the homebuyer will receive a significant advantage through a below market interest rate, the participation in these mortgage programs may carry costs further down the road. For loans closed after December 31, 1990, if the resale of the property occurs within ten years of the original purchase date, the homeowner may be subject to a *recapture tax* of up to 6.25% of the original loan amount. The amount of tax will vary in accordance with various income levels, the amount of gain on the sale and the length of time between purchase and sale.

## Bond issue qualification guidelines

Bond issue mortgages are generally more restrictive because of the eligibility requirements that include maximum income and liquid asset guidelines. Once the eligibility requirements are met the qualification guidelines may be more lenient than conventional mortgages, for example the allowance of higher acceptable ratios. If VA or FHA mortgage options are offered, the qualification guidelines of VA or FHA must be followed in addition to other requirements. Most jurisdictions do not allow non-owner occupant co-borrowers or non-citizens without green cards. Certain requirements, such as maximum income limits, may be waived if the home is located within a low-income targeted area.

## Mortgage Credit Certificates

Another use of Mortgage Revenue Bonds is to finance Mortgage Credit Certificates (MCCs). These "certificates" are credits the homeowner can use to obtain a credit against their taxes for interest paid on a portion of a mortgage, typically 20.0%; however, the rest of the interest paid is tax deductible. The benefit of a credit is that it is a dollar-for-dollar benefit. Two thousand dollars is the maximum amount of credit that can be claimed annually and though these credits can be attached to a wide variety of loans, they can't be combined with reduced rate mortgages offered by the agencies.

## Rural Housing Service (USDA)

The Federal Government also guarantees mortgages as well as making direct loans for rural properties under a program administered by the rural development mission area of the U.S. Department of Agriculture. Direct loans are made only for those who are at 80% or less of the median income for the area. The Guarantee program is called the Guaranteed Rural Housing (GRH) loan program. These mortgages can be purchased by Fannie Mae, Freddie Mac, and Ginnie Mae. The program – commonly referred to as USDA -- is limited to rural areas at a maximum of 10,000 to 25,000 in population (*raised to 35,000 in accordance with a bill passed by Congress in 2014*), depending upon the category as defined in the RHS handbook. The program only finances purchases of residential, owner-occupied properties, and does not provide mortgages for farms. Refinances of existing RHS guaranteed or direct loans are allowed as well. Six months seasoning is required. The borrowers must have an income at or below 115% of the median income for the area (adjustments can be made for family size and child care) and provides 100% financing.

Up front and annual guaranty fees are required with a goal to make the program self-funding and eliminate previous issues of limited availability of funds. The upfront guaranty fee can be financed into the loan amount. In 2011, the up-front fee was set at 2.0% and the annual fee at 0.3%. The fees for refinances were set at 1.0% up-front and 0.3% annually. In 2012, the annual fee was raised to 0.4% and it moved to 0.5% as of October 1, 2014. The upfront fee was raised to 2.75% as of October 1, 2015. Starting on October 1, 2016, the Rural Housing Service lowered the fee structure to 1.0% up-front and 0.35% annually. The government guarantees to 90% of any loss. The mortgages are 30 year fixed. Applicants must be U.S. citizens or permanent resident aliens and the qualification ratios are typically 29/41.

## Conforming mortgages

Conventional conforming mortgages are those that are eligible for purchase through the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) through authority granted by Congress. These agencies are chartered with governmental authority but are private enterprises known as *government sponsored enterprises (GSEs) or quasi-governmental institutions.* Wary of a future savings and loan-type bailout and concerned with progress the institutions have made in achieving public interests (such as providing financing for inner city housing and for

minorities), Congress gave the Department of Housing and Urban Development the authority to regulate and oversee these institutions in 1992. Because of major accounting issues uncovered in the years 2003 and 2004 and continuing through 2006, this oversight was expanded to the Office of Federal Housing Enterprise Oversight (OFHEO) in 2004. The current fiscal crisis led to the government takeover of the conforming agencies in 2008 and oversight became the responsibility of the Federal Housing Finance Agency (FHFA). Some years later, the agencies still operate as government conservatorships.

Automated underwriting has enabled each agency to publish more liberal standards for loans that are more highly rated by these systems. During the past decade, because of individual commitments to large lenders, conforming products and qualification standards varied greatly by lender, especially with regard to first-time homebuyer programs. During the current fiscal crisis many of these differences have disappeared as the conforming agencies have tightened their lending standards. Because of rapidly changing standards, you should check the Fannie Mae and Freddie Mac websites for updates to requirements set forth in this book. As an added feature, we are including Fannie Mae Lender Letters that set out eligibility requirements, including maximum LTVs, for each product as well as pricing premiums as part of the Appendices of this book.

## Who is eligible for conforming mortgages?

There is no limitation on eligibility. Fannie Mae and Freddie Mac restrict loans to those who are lawfully residing in the U.S. as permanent or non-permanent resident aliens. A living trust is an eligible borrower if the trustee is the occupant of the property. There are restrictions on how many homes the borrower can have financed for investor and second home transactions.

## Types of transactions financed

As stated, the rules of conforming lending may vary slightly from lender to lender. Here we Will attempt to outline the typical transactions financed:

- *Owner-occupied purchase and rate reduction refinance transactions.* Conforming programs normally offer an owner-occupied purchase and rate reduction refinance at a maximum 90-95% LTV, with programs available with the lower down payment for low-to-moderate income borrowers and borrowers with high credit scores. A larger down payment is typically required on 3-4 unit properties. In 2014, both Fannie Mae and Freddie Mac reintroduced 3.0% down programs. The lower down payment is effective only for owner occupants of 1-unit properties in which one borrower is a first-time homeowner. It cannot be used with anything but a fixed rate loan and is restricted to base conforming loan amounts. In 2018, Freddie Mac introduced the 3.0% down HomeOne Mortgage Program for first time buyers, which has no income restriction.

- *Second home purchase and rate reduction refinance transactions.* A second home can be financed typically at a lower LTV as primary purchases. In addition, the person applying for a mortgage on a second home must have no more than 6 to 10 additional residential properties that are mortgaged, depending upon whether the loan is underwritten manually or through DU. Additional reserves may be required as well, depending upon the credit score and underwriting method.

- *Investor purchase and rate reduction refinance transactions.* Investor transactions typically require more equity in the property and carry higher interest rates as compared to owner-occupied transactions. The mortgage must be a fixed rate with no temporary buydown, and seller contributions are limited to 2% of the sales price. Fannie's limit of additional financed properties applies to investor as well as second home mortgages. The borrower must have reserves of up to 12 months PITI after closing and must contract for rental-loss insurance.

- *Cash-out refinances.* The amount of cash out is limited to 80% to 85% of the value of the home for owner-occupied refinances. Investor properties will have more stringent cash-out refinance requirements as well as those with lower credit scores. In addition, cash-out transactions carry additional fees. Early in 2003, both agencies classified the paying off of any junior liens not used for the purchase of the home as a cash-out transaction.

    - *Streamline refinance transactions.* In the past, if a homeowner approached the present servicer to refi-

nance an existing Fannie Mae and Freddie Mac mortgage solely to reduce the rate, streamline refinance programs were offered that limited documentation, qualification, and valuation requirements. In early 2009, the President released the *Home Affordable Refinance Program (HARP)* which opened new alternatives for refinancing conforming mortgages and effectively replaced streamline refinances. Included in the guidelines was the ability to refinance the value of the home while subordinating existing seconds to 105% LTV. This program was extended to December 31, 2015 and the maximum LTV increased to 125% and then was waived, though individual lenders may require a maximum LTV of 125% or less. More recently, the program was extended until September 30, 2017.

- *Rehabilitation and reverse mortgages.* Fannie Mae in the past has had programs to finance construction and home improvements under their HomeStyle™ program and reverse mortgages under their HomeKeeper™ program. In September of 2008**,** Fannie Mae announced the end to the HomeKeeper™ program because of Federal expansion of the FHA Reverse Mortgage Program.

## Types of properties eligible

Generally, residential properties of one to four units are eligible for conventional mortgages. Properties of 2-4 units usually require higher down payments. In 2005**,** both Fannie Mae and Freddie Mac simplified their condominium approval guidelines with Fannie Mae implementing their Condo Project Manager (CPM) a web-based application designed to expedite condominium reviews. Ineligible projects include condominium hotels, timeshares, houseboat projects, multi-dwelling units, those that do not conform to current zoning and those involved in litigation to which the owner's association or developer is a party. In 2009, Fannie Mae added three new classifications of ineligible projects: projects with excessive sales/financing structures, projects with excessive non-residential space, and projects where a single entity owns an excessive percentage of units. Fannie Mae also has a 51% owner-occupant requirement for existing projects if the loan is for an investor, but no such requirement if the loan is for an owner-occupant or second home. Bank-owned properties for sale are counted as owner-occupied.

- *Fannie Mae Classifications*. Lenders have the option of submitting new projects for review and approval using the PERS (Project Eligibility Review Service). As of January 2009, PERS is required for all new projects and conversions in the State of Florida.

    - *Lender-delegated Limited Review*. The lender may review existing owner-occupied condos using DU to 90% maximum LTV (75% for second homes).
    - *Fannie Mae Review (1028).* Fannie Mae will approve condominium and planned unit developments that are 70.0% "sold" to owner-occupants in the project or phase.
    - *Lender-delegated Expedited Review.* Using the CPM for projects not requiring Fannie Mae Review, the lender answers a series of questions entering a streamlined level of project data on new and established projects. No more than 5% of the units can be 30 days behind in condo dues.
    - *FHA Approved Projects.* Fannie Mae no longer accepts FHA approval as of late 2009, except if

they are purchasing and FHA loan.

- *Freddie Mac Classifications*
  - *Established Project.* All units and common areas have been completed, 90% of the units have been conveyed to purchasers other than the developer and the developer has turned over control to the homeowner's association. If financing an investor unit, 51% of the units must be owner-occupied.
  - *New Project.* Doesn't meet the requirements for established projects above. Lender must certify 70% owner-occupants in project or legal phase.
  - *Streamline Reviews* are allowed for owner-occupied mortgages at an LTV of 90% for LP Accept and 80% otherwise. Second home mortgages are limited to 75% LTV and investor mortgages are not eligible. In Florida the limits are 75% LTV.
  - *FHA Approved Projects.* Freddie Mac will purchase FHA loans with FHA project approvals.

## Mortgage types offered

There is a wider variety of mortgages available through Fannie Mae and Freddie Mac than government mortgage sources. It should be noted that Fannie Mae and Freddie Mac previously purchased second trust mortgages up to 50% of the limit for first trust mortgages, but do not presently do so. They do allow the use of second mortgages to pay for the closing costs and down payment if issued by government housing agencies – community or affordable seconds – for low to moderate income borrowers.

- *Fixed rate mortgages.* Fixed rate mortgages typically are available from a 15-year to 30-year term. Generally,15-year mortgages carry an interest rate approximately .375% to 1.00% less than 30-year mortgages – depending upon prevailing interest rate spreads. The rates on 20-year mortgages may be slightly below or the same as 30-year rates.
- *Balloon mortgages.* The agencies in the past offered balloon mortgages, with the 7/23 and 5/25 programs being the most popular. These products included a conditional refinancing option allowing the borrower to convert to a fixed rate at maturity. Balloon mortgages were very popular in the past because of their lower rates. Their popularity decreased as hybrid ARMS such as the 5/1 and 7/1 became more available and these alternatives are not currently offered.
- *Adjustable rate mortgages.* Both Fannie Mae and Freddie Mac offer a wide variety of adjustable rate mortgages (ARMs). The more common adjustment periods range from one to ten years and they are typically based upon Treasury or Libor indices. Qualification standards for adjustable programs are more stringent than their fixed rate counterparts. Especially for shorter-term adjustable programs, qualification may be the start rate plus 2% or at the Fully Indexed Accrual Rate (FIAR) – whichever is higher.

- *Temporary buydowns.* Most fixed rates can be offered with temporary buydowns as long as it is not an investor transaction or a cash-out refinance.
- *Rehabilitation mortgages.* Fannie Mae's HomeStyle™ Program offers purchases and refinances which finances repairs on the subject properties.

## Maximum conforming mortgage amount

The maximum mortgage that Fannie Mae and Freddie Mac can purchase is indexed yearly, in tandem with the median sales price financed with a conventional mortgage in October of each year.

The new conforming mortgage amount is announced in November of each year and is effective 1st of the following year. The current mortgage limits are delineated in Table 2-8.[15]

## The costs to obtain conforming mortgages

*Down payment.* For owner-occupied transactions, a minimum 5% down payment is required. The 3.0% down options were reintroduced in 2014 and restrictions for this option were listed previously in the Types of Transactions Financed section.

*Conventional mortgage insurance (MI).* Fannie Mae and Freddie Mac both require coverage from a private mortgage insurance company if less than a 20% down payment is made. This insurance protects the lender against default and coverage is required that will protect the lender against any risk typically beyond a 75% LTV. In the example on page 45, the mortgage insurance would cover the first $28,500 of the loan amount. If the mortgage defaults, the lender would have to absorb losses if less than $66,500 is recovered in a foreclosure or short-sale transaction.

**A History of Conforming Mortgage Limits**

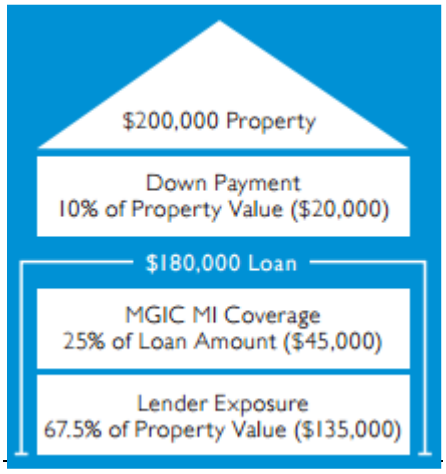
| | 1 Unit | 2 Units | 3 Units | 4 Units |
|---|---|---|---|---|
| 1995 | 203,150 | 259,850 | 314,100 | 390,400 |
| 1996 | 207,000 | 264,750 | 320,050 | 397,800 |
| 1997 | 214,600 | 274,550 | 331,850 | 412,850 |
| 1998 | 227,150 | 290,650 | 351,300 | 436,600 |
| 1999 | 240,000 | 307,100 | 371,200 | 461,350 |
| 2000 | 252,700 | 323,400 | 390,900 | 485,800 |
| 2001 | 275,000 | 351,950 | 425,400 | 528,700 |
| 2002 | 300,700 | 384,900 | 465,200 | 578,150 |
| 2003 | 322,700 | 413,100 | 499,300 | 620,500 |
| 2004 | 333,700 | 427,150 | 516,300 | 641,650 |
| 2005 | 359,650 | 460,400 | 556,500 | 691,600 |
| 2006 | 417,000 | 533,850 | 645,300 | 801,950 |
| 2007 | 417,000 | 533,850 | 645,300 | 801,950 |
| 2008 | 417,000 | 533,850 | 645,300 | 801,950 |
| 2009 | 417,000 | 533,850 | 645,300 | 801,950 |
| 2009[1] | 625,500 | 800,775 | 967,950 | 1,202,925 |
| 2009[2] | 729,750 | 934,200 | 1,129,250 | 1,403,400 |
| 2017 | 424,100 | 543,000 | 656,350 | 815,650 |
| 2017[1] | 636,150 | 814,500 | 984,525 | 1,223,475 |
| 2018 | 453,100 | 580,150 | 701,250 | 871,450 |
| 2018[1] | 679,650 | 870,225 | 1,051,875 | 1,307,175 |
| 2019 | 484,350 | 620,200 | 749,650 | 931,600 |
| 2019[1] | 765,525 | 930,300 | 1,124,475 | 1,397,400 |
| 2020 | 510,400 | 653,550 | 789,950 | 981,700 |
| 2020[1] | 765,600 | 980,325 | 1,184,925 | 1,472,550 |
| 2021 | 548,250 | 702,000 | 848,500 | 1,054.500 |
| 2021[1] | 822,375 | 1,053.00 | 1,272,750 | 1,581,750 |

*1: Standard high cost limits (same 2009-2016)*
*2: Economic Stimulus Act high cost limits (from 2009 to 2011)*

***Table 2-10***

[15] The limits are 50.0% higher in high cost areas and higher in higher cost areas (Alaska, Guam and Hawaii). Special limits as well as permanent high-cost limits were put into effect in 2008. See Table 2-5 for these higher-cost permanent and temporary limits as well as Table 2-5 for specific localities designated as high-cost areas.

**How Mortgage Insurance Works**




**Monthly Private Mortgage Insurance Example**

| | |
|---|---|
| Sale price | $200,000 |
| Loan-to-value | x 90% |
| Mortgage amount | $180,000 |
| Insurance rate | x .30% |
| Annual insurance | $540 |
| Monthly payment | $45.00 |

**See Table 2-11**
**For Sample Rates**

Generally, the cost of this insurance will vary according to the loan-to-value of the mortgage, covering percentage, mortgage terms and type and the borrower's credit score. The highest cost would be for higher LTV mortgages and low credit score borrowers. Costs can also vary from one private mortgage insurance company to the next[16] and for different regions of the country. In most states, the state agency regulating the insurance industry must approve rate schedules. There are several options are available:

- The borrower-paid monthly option carries a monthly MI payment but no up-front cost[16]
- A second option would be to have a single up-front payment but no monthly MI payment. This program typically includes "refundable" and "non-refundable" options which would allow for a refund based upon early payoff of the mortgage. Refundable premiums would be at a higher cost under this "borrower-paid" option. The availability of this option may be restricted under the Qualified Mortgage Rules because borrower paid insurance would be calculated as part of the 3.0% fee limitation set out by the rule (see Chapter 4). There is a combination option, a split, which would have a reduced up-front premium combined with a reduced monthly payment.
- The option exists to finance the entire up-front MI premium rolling the cost into the mortgage amount.[17] The advantage of this is having the entire premium financed so that it can qualify to be deducted from taxes as interest if the borrower is eligible for a deduction. Note that the LTV, calculated by including the MI premium, is used to determine the maximum LTV allowed for the transaction. The allowable maximum LTV varies by investor. Again, the availability of this option may be restricted under the Qualified Mortgage Rules.
- The option exists to finance the entire up-front MI premium rolling the cost into the mortgage amount. The advantage of this is having the entire premium financed so that it can qualify to be deducted from taxes as interest if the borrower is eligible for a deduction. Note that the LTV, calculated by including the MI premium, is used to determine the maximum LTV allowance for the

[16] For example, a 95% LTV mortgage with the up-front premium eliminated would result in a higher monthly premium.
[17] Note that the loan-to-value including the mortgage insurance may be restricted to 95%. If the mortgage insurance causes the loan-to-value to rise over 90% LTV, the qualification standards of a 95% mortgage will be utilized.

transaction. The allowable maximum LTV varies by investor. Again, the availability of this option may be restricted under the Qualified Mortgage Rules.

- An option called lender-paid mortgage insurance absorbs MI cost through a higher interest rate rather than monthly insurance or an increased mortgage amount. In essence, the lender is able to pay for the premium by selling the higher than market rate mortgage for a premium within the secondary markets. The advantage of this program is as follows: No up-front cash is required and the total payment is tax deductible – assuming that the borrower can deduct the interest. The disadvantage of lender-paid insurance is the higher rate can never be reduced from the payment even if the LTV of the mortgage eventually drops below 80%.

*Deductibility of mortgage insurance.* In December of 2006, a law was enacted that made mortgage insurance deductible for the period January 1, 2007 until December 31, 2007 and was subsequently extended until December 31, 2020. It currently is waiting for Congressional action to be extended again. This provision is for new originations of primary residences and nonrental second homes. Households with adjusted gross incomes of $100,000 or less are able to deduct 100% of their MI premiums. The deduction is reduced by 10% for each additional $1,000 of adjusted gross household income, phasing out after $109,000.

*Cancellation of private mortgage insurance.* The Homeowner's Protection Act of 1998 (HPA), covers single-family primary residences whose sales were closed on or after July 29, 1999. HPA provides for borrower-requested cancellation and lender-required cancellation. By writing the lender, borrowers can request for MI cancellation when their equity reaches 20% of the original value of the home based upon initial amortization. The borrower must have a good payment history and establish that there has been no decline in the home's value. Mortgage insurance is automatically cancelled by the lender when the loan balance reaches 78% of the original value of the home and the borrower is current on their payments as required by the terms of the mortgage.

HPA does not address MI cancellation based on a property's current value. Individual investors establish the criteria for cancelling MI based on the current value. To cancel MI based on current value, Fannie Mae and Freddie Mac typically require the loan be seasoned for at least 2 years, the borrowers have an acceptable payment history and the LTV is 80% or less based on the current value of the home if more than five years have elapsed since the origination date or 75% or less if more than two years have elapsed. Many non-conforming lenders will also follow agency guidelines with regard to cancellation of mortgage insurance.

*Alternatives to MI.* LTV greater than 80%, a second mortgage can be placed behind a first mortgage, as long as the LTV of the first mortgage is no more than 80% and the combined loan-to-value of the two mortgages (CLTV) is no more than 90% to 95%, depending upon the program guidelines. It should be noted that the fiscal crisis has caused a decrease in availability of second mortgages, especially as lenders did not have adequate risk protection.

**Second Mortgage**
**(80-10-10 Mortgage)**

| | |
|---|---|
| Sale price | $100,000 |
| 1st mortgage (80%) | -$80,000 |
| 2nd mortgage (10%) | -$10,000 |
| Down payment (10%) | $10,000 |

Why would a borrower want to eliminate MI in favor of paying a higher rate or procuring a second mortgage?

- Mortgage insurance premiums may not be tax deductible as is monthly mortgage interest. See the previous paragraph regarding the exception for low-to-middle income borrowers.

- If the private mortgage insurance company has a guideline more stringent than the lender.

- Though second mortgage rates are higher than first mortgage rates, the borrower would be paying the higher rate on a smaller portion of the loan as opposed to the entire balance, as is the case with mortgage insurance. This must be weighed against the disadvantage that MI insurance can be eliminated in 2-5 years, but a second mortgage may last much longer than this period.

*Other costs associated with conforming mortgages.* Unlike FHA and VA, lender fees are completely negotiable on conforming mortgages, and it does not matter whether the purchaser or seller pays points or lender fees as long as general seller contribution limits are not violated.

MGIC

## Borrower-Paid Monthly Premiums

**30-Year Purchase & Rate/Term Refinances – Fixed** for the first 5 years

| LTV | Coverage | 760+ | 740-759 | 720-739 | 700-719 | 680-699 | 660-679 | 640-659 | 620-639 |
|---|---|---|---|---|---|---|---|---|---|
| 97% -95.01% | 35% | .55% | .75% | .95% | 1.15% | 1.40% | 1.90% | 2.05% | 2.25% |
| | 25 | .44 | .63 | .77 | .93 | 1.15 | 1.52 | 1.67 | 1.81 |
| | 18 | .37 | .54 | .65 | .78 | .98 | 1.18 | 1.33 | 1.43 |
| 95% -90.01% | 30 | .41 | .59 | .73 | .87 | 1.08 | 1.42 | 1.50 | 1.61 |
| | 25 | .37 | .52 | .64 | .75 | .94 | 1.21 | 1.28 | 1.37 |
| | 16 | .32 | .44 | .54 | .64 | .78 | 1.02 | 1.10 | 1.20 |
| 90% -85.01% | 25 | .30 | .41 | .50 | .60 | .73 | 1.00 | 1.05 | 1.10 |
| | 12 | .23 | .30 | .36 | .41 | .50 | .65 | .69 | .77 |
| 85% & Below | 12 | .19 | .20 | .23 | .27 | .32 | .41 | .43 | .45 |
| | 6 | .18 | .19 | .22 | .26 | .31 | .40 | .42 | .43 |

**30-Year Purchase & Rate/Term Refinances – Nonfixed**

| LTV | Coverage | 760+ | 740-759 | 720-739 | 700-719 | 680-699 | 660-679 | 640-659 | 620-639 |
|---|---|---|---|---|---|---|---|---|---|
| 97% -95.01% | 35% | .69% | .94% | 1.19% | 1.44% | 1.75% | 2.38% | 2.56% | 2.81% |
| | 25 | .55 | .79 | .96 | 1.16 | 1.44 | 1.90 | 2.09 | 2.26 |
| | 18 | .46 | .68 | .81 | .98 | 1.23 | 1.56 | 1.75 | 1.88 |
| 95% -90.01% | 30 | .51 | .74 | .91 | 1.09 | 1.35 | 1.79 | 1.95 | 2.16 |
| | 25 | .46 | .65 | .80 | .94 | 1.18 | 1.55 | 1.69 | 1.85 |
| | 16 | .40 | .55 | .68 | .80 | .98 | 1.28 | 1.38 | 1.50 |
| 90% -85.01% | 25 | .38 | .51 | .63 | .75 | .91 | 1.25 | 1.35 | 1.49 |
| | 12 | .30 | .38 | .45 | .51 | .63 | .81 | .86 | .96 |
| 85% & Below | 12 | .24 | .25 | .29 | .34 | .40 | .51 | .56 | .61 |
| | 6 | .23 | .24 | .28 | .33 | .39 | .50 | .53 | .56 |

SAMPLE

**Table 2-11**

**For Up-to-Date Rates Go To:** https://www.mgic.com/rates/rate-cards

## Qualification guidelines

*Income Qualification.* The ratio method is employed on conventional mortgages with the most common ratios being 28/36. The use of automated underwriting systems has greatly reduced reliance on qualification ratios. These AUS systems may facilitate the approval of loans with ratios much higher than standard. In 2008 Fannie Mae announced a maximum debt ratio of 45% for manually underwritten loans and this was changed in 2014 to 43% under the Qualified Mortgage Guidelines.

*Affordable Programs.* Congress has directed the agencies to focus on programs that help home buyers with low-to-moderate incomes. These programs are restricted to borrowers whose incomes typically do not exceed 100% of the median income of the particular region with a higher limit in designated areas such as those with higher costs. There are options for "*community or affordable seconds*" that may be offered through non-profits or government agencies. These second mortgages may be at below-market interest rates and/or have deferred payments and are designed to lessen the ash requirements for purchase programs.

Freddie Mac's "*Home Possible"* and Fannie Mae's *Home Ready* programs include provisions that may lower cash requirements—including cash assets, reserves, down payment and liberalized qualification standards. There is also an option for reduced mortgage insurance payments. Here is more detail on Fannie Mae's HomeReady® Mortgage Program:

- Replaces Fannie Mae's MyMortgageCommunity Program in December of 2015.
- 3.0% down payment required to base conforming limits and 5.0% for high-balance loans.
- The applicant does not have to be a first-time homebuyer; however, homebuyer education is required for first time buyers.
- Gifts are allowed for entire cash needs.
- Non-owner occupant co-signers allowed with a 5.0% down payment.
- Non-borrower household income can be used as a compensating factor to stretch ratios.
- Boarder income can be used to qualify with proper documentation.
- Income limits are increased or waived in lower-income targeted areas.
- Eliminated Loan Level Price Adjustments for loans to base conforming amount and lowered them for high-balance loans.
- Required standard mortgage insurance coverage is lowered to 25%.

Freddie Mac's Home Possible® Program has similar guidelines; however, Freddie Mac does not allow high balance loans, is more restrictive with regard to the use of household/boarder income and borrowers cannot own other homes, with a few specific exceptions.

*Cash requirements.* Conventional conforming mortgage programs require that the borrower invest at least 5% of their own cash in any purchase transaction and have the equivalent of two months mortgage payment in reserve after closing. This 5% can be borrowed as long as the purchaser can qualify for the additional debt and an owned asset secures the loan. Beyond the 5% cash requirement, total cash outlays can be reduced as follows:

- *Gift*. A gift from an immediate family member for closing costs. For an owner-occupied one-unit property, a borrower can procure a gift for all cash requirements. Otherwise the borrower must put 20% down to use the gift for the entire cash required.
- *Contributions*. The seller can pay closing costs (not including prepaids) within the following limitations of total seller contributions which are based upon the sales price:

| | | |
|---|---|---|
| 95% LTV | 3% Maximum Seller Contribution | Investor Transactions: |
| 90% LTV or below | 6% Maximum Seller Contribution | 2% Maximum Contributions |
| 75% LTV or below | 9% Maximum Seller Contribution | |

  Sales concessions such as furniture or other incentives must be subtracted from the sales price before calculated from the LTV. Payment abatements are not allowable.

- *Reduced closing cost programs.* Since the fees and rates are negotiable, lenders may offer programs

with no points or reduced closing costs coupled with a higher interest rate. These programs do not increase the necessary down payment, thereby reducing the cash required.

- *Low-to-moderate income programs.* These aforementioned programs may require less from the purchaser's own funds and may require less cash reserves after closing.
- *Co-borrowers.* At a 95% LTV, co-borrowers may be required to live in the property under conforming guidelines, unless there is an acceptance through automated underwriting systems. In either case, the occupant must make the down payment from his/her own funds. Certain exceptions can be obtained for parents purchasing homes for adult children who are physically handicapped or developmentally disabled.
- *Secondary financing.* Second mortgages are permitted but the first mortgage may be limited to a lower LTV and a higher minimum down payment may be required. In addition, there may be requirements for the type of second mortgagee allowable, including:
    - The second mortgage must not balloon in less than five years.
    - There must be regular payments required.
    - There must be no deferred interest.
    - For an *open* equity line, the amount of available credit will be used to calculate maximum CLTV or combined loan-to-value of the first and second trust.

A second mortgage that meets these requirements and therefore is acceptable for placement behind a conforming first trust mortgage is called a *conforming second mortgage*. In the past few years, programs proliferated that allow more liberal secondary financing, however; the present financial crisis has limited the options as lenders, including conforming agencies, take a more conservative approach.

# HUD Estimated Median Family Income Limits

**https://www.huduser.gov/portal/datasets/il/il2021/select_Geography.odn**

Note: Median income limits are utilized for a variety of purposes including HUD housing/rental subsidy programs and also to determine benchmarks for Fannie Mae and Freddie Mac affordable lending program limits that may range from 80% to 170% of median family income limits.
Example: $31,700 x 115% = $36,455. Note: These limits are subject to change. Figures published by HUD as of 1-31-2021.

## Northeast

| | | | | | |
|---|---|---|---|---|---|
| Connecticut | | New Hampshire | | Pennsylvania | |
| Bridgeport | $98,000 | Bridgewater | $92,600 | Allentown | $78,200 |
| Danbury | 122,000 | Manchester | 83,600 | Altoona | 60,000 |
| Hartford | 97,400 | Nashua | 113,600 | Erie | 71,500 |
| New Haven | 91,200 | Portsmouth | 102,800 | Harrisburg | 85,000 |
| New London | 91,800 | | | Johnstown | 62,700 |
| Norwalk | 143,400 | | | Lancaster | 79,500 |
| Stamford | 143,400 | New Jersey | | Philadelphia | 96,600 |
| Waterbury | 80,300 | Atlantic/Cape May | $84,300 | Pittsburgh | 83,000 |
| | | Bergen-Passaic | 104,200 | Reading | 62,700 |
| Delaware | | Jersey City | 76,900 | Scranton/Wilkes | 71,700 |
| Dover | $68,400 | Middlesex | 119,500 | Sharon | 66,700 |
| Wilmington | 96,600 | Monmouth | 109,400 | State College | 88,700 |
| | | Newark | 106,000 | Williamsport | 64,800 |
| Maine | | Trenton | 108,700 | York | 82,200 |
| Bangor | $72.,900 | Vineland | 67,700 | | |
| Lewiston | 75,900 | | | Rhode Island | |
| Portland | 100,900 | New York | | Newport County | $100,900 |
| | | Albany | $99,200 | Providence/ | 87,000 |
| | | Binghamton | 76,900 | Warwick | |
| Massachusetts | | Buffalo | 77,600 | | |
| Boston | $119,000 | Elmira | 73,600 | Vermont | |
| Brockton | 95,200 | Glens Falls | 76,600 | Burlington | $89,700 |
| Fitchburg | 83,200 | Nassau-Suffolk | 126,600 | | |
| Lawrence | 98,000 | New York | 78,700 | | |
| Lowell | 108,000 | Rochester | 76,400 | | |
| New Bedford | 74,300 | Syracuse | 75,800 | | |
| Pittsfield | 90,900 | Utica-Rome | 71,700 | | |
| Springfield | 77,200 | Westchester | 125,800 | | |
| Worcester | 98,200 | | | | |

## Southeast

| | | | | | |
|---|---|---|---|---|---|
| Alabama | | Arkansas | | Florida | |
| Anniston | $61,500 | Fayetteville | $73,600 | Daytona Beach | $64,900 |
| Birmingham | 73,100 | Fort Smith | 54,200 | Ft. Lauderdale | 74,800 |
| Columbus | 73,100 | Little Rock | 72,200 | Ft. Myers | 68,700 |
| Decatur | 63,600 | Pine Bluff | 52,600 | Ft. Pierce | 67,500 |
| Dothan | 61,300 | Texarkana | 69,800 | Ft. Walton Beach | 81,600 |
| Florence | 64,200 | | | Gainesville | 69,800 |
| Gadsden | 65,000 | District of Columbia | $126,000 | Jacksonville | 75,000 |
| Huntsville | 85,300 | VA/MD/DC | | Lakeland | 58,800 |
| Mobile | 61,400 | | | Melbourne | 69,200 |
| Montgomery | 65,700 | | | | |
| Tuscaloosa | 67,800 | | | | |

**Table 2-12**

## Southeast (Continued)

| | |
|---|---|
| Miami | 59,100 |
| Naples | 82,300 |
| Ocala | 55,000 |
| Orlando | 68,100 |
| Panama City | 72,000 |
| Pensacola | 65,900 |
| Tallahassee | 72,700 |
| Tampa/ St. Petersburg | 69,200 |
| West Palm Beach | 79,100 |
| **Georgia** | |
| Albany | $52,300 |
| Athens | 65,600 |
| Atlanta | 82,700 |
| Augusta | 65,900 |
| Columbus | 62,300 |
| Macon | 41,700 |
| Savannah | 72,000 |
| **Kentucky** | |
| Clarksville | $56,400 |
| Evansville | 74,800 |
| Lexington | 79,400 |
| Louisville | 77,500 |
| Owensboro | 63,400 |
| **Louisiana** | |
| Alexandria | $58,400 |
| Baton Rouge | 78,500 |
| Houma | 67,200 |
| Lafayette | 65,200 |
| Lake Charles | 70,800 |
| Monroe | 56,700 |
| New Orleans | 70,400 |
| Shreveport | 56,700 |
| St. James Parish | 67,300 |
| **Maryland** | |
| Baltimore | $104,000 |
| Hagerstown | 79,800 |
| Suburban D.C. | 126,000 |
| **Mississippi** | |
| Biloxi | $60,900 |
| Jackson | 69,100 |
| **North Carolina** | |
| Asheville | $72,500 |
| Charlotte | 83,500 |
| Fayetteville | 58,000 |
| Greensboro | 66,600 |
| Hickory | 61,000 |
| Jacksonville | 57,700 |
| Raleigh | 94,100 |
| Wilmington | 81,000 |
| Winston Salem | 68,600 |
| **South Carolina** | |
| Charleston | $81,000 |
| Columbia | 72,600 |
| Florence | 56,100 |
| Greenville | 74,900 |
| Myrtle Beach | 57,400 |
| **Tennessee** | |
| Chattanooga | $72,600 |
| Clarksville | 68,900 |
| Jackson | 46,800 |
| Knoxville | 73,900 |
| Memphis | 67,900 |
| Nashville | 82,300 |
| **Texas** | |
| Abilene | $64,800 |
| Amarillo | 66,900 |
| Austin | 82,200 |
| Beaumont | 67,500 |
| Brazoria | 104,200 |
| Brownsville | 47,800 |
| Corpus Christi | 66,600 |
| Dallas | 86,200 |
| El Paso | 52,500 |
| Ft. Worth | 81,500 |
| Houston | 78,800 |
| Killeen | 63,900 |
| Laredo | 50,600 |
| Longview | 64,800 |
| Lubbock | 69,200 |
| McAllen | 45,100 |
| Odessa | 65,500 |
| San Angelo | 72,400 |
| San Antonio | 72,000 |
| Sherman | 76,000 |
| Texarkana | 69,800 |
| Tyler | 65,000 |
| Victoria | 68,800 |
| Waco | 65,700 |
| Wichita Falls | 64,700 |
| **Virginia** | |
| Charlottesville | $93,900 |
| Danville | 58,900 |
| Lynchburg | 72,400 |
| Norfolk/ VA Beach | 82,500 |
| Richmond | 56,500 |
| Roanoke | 76,700 |
| Suburban D.C. | 126,000 |
| Warren County | 81,400 |
| **West Virginia** | |
| Charleston | $55,700 |
| Huntington | 59,100 |
| Jefferson | 55,700 |
| Parkersburg | 64,300 |
| Wheeling | 68,900 |

## Midwest

| | |
|---|---|
| **Idaho** | |
| Boise City | 74,800 |
| **Illinois** | |
| Champaign | $83,600 |
| Chicago | 91,000 |
| Davenport | 68,700 |
| Decatur | 71,300 |
| DeKalb Co. | 83,700 |
| Grundy Co. | 88,900 |
| Kankakee | 76,500 |
| Kendall Co. | 107,300 |
| Peoria | 79,600 |
| Rockford | 69,600 |
| Springfield | 85,200 |
| St. Louis | 82,900 |
| **Indiana** | |
| Bloomington | $74,900 |
| Cincinnati | 64,700 |
| Elkhart | 70,200 |
| Evansville | 74,800 |
| Fort Wayne | 71,100 |
| Gary-Hammond | 74,900 |
| Indianapolis | 82,000 |
| Kokomo | 63,900 |
| Lafayette | 79,100 |
| Muncie | 64,600 |
| South Bend | 70,800 |
| Terre Haute | 63,900 |
| **Iowa** | |
| Cedar Rapids | $85,200 |
| Davenport | 75,400 |
| Des Moines | 89,200 |
| Dubuque | 82,900 |
| Iowa City | 101,200 |
| Sioux City | 75,200 |
| Waterloo | 71,600 |

**Table 2-12 (Continued)**

## Midwest (Continued)

| | |
|---|---|
| Kansas | |
| Kansas City | $86,000 |
| Lawrence | 88,800 |
| Topeka | 77,700 |
| Wichita | 72,600 |
| Michigan | |
| Ann Arbor | $101,500 |
| Battle Creek | 61,100 |
| Detroit | 78,500 |
| Flint | 62,400 |
| Grand Rapids | 80,200 |
| Jackson | 66,400 |
| Kalamazoo | 79,000 |
| Lansing | 80,700 |
| Muskegon | 62,900 |
| Saginaw | 62,900 |
| Minnesota | |
| Duluth | $71,900 |
| Minneapolis/ St. Paul | 100,000 |
| Rochester | 93,800 |
| St. Cloud | 76,300 |
| Missouri | |
| Columbia | $77,900 |
| Joplin | 63,300 |
| Kansas City | 86,000 |
| Springfield | 65,300 |
| St. Joseph | 63,600 |
| St. Louis | 82,900 |
| Nebraska | |
| Lincoln | $82,100 |
| Omaha | 87,000 |
| Sioux City | 75,200 |
| North Dakota | |
| Bismarck | $96,000 |
| Fargo | 89,400 |
| Grand Forks | 89,200 |
| Ohio | |
| Akron | $76,300 |
| Canton | 69,500 |
| Cincinnati | 86,300 |
| Cleveland | 76,000 |
| Columbus | 84,500 |
| Dayton | 72,800 |
| Lima | 67,100 |
| Mansfield | 66,300 |
| Steubenville | 62,400 |
| Toledo | 71,900 |
| Youngstown | 60,700 |
| South Dakota | |
| Rapid City | $76,000 |
| Sioux Falls | 86,200 |
| Wisconsin | |
| Appleton | $86,400 |
| Eau Claire | 76,700 |
| Green Bay | 82,300 |
| Janesville | 70,300 |
| Kenosha | 77,700 |
| La Crosse | 76,800 |
| Madison | 100,100 |
| Milwaukee | 83,800 |
| Racine | 84,600 |
| Sheboygan | 73,400 |
| Wausau | 79,900 |

## West

| | |
|---|---|
| Alaska | |
| Anchorage | $97,300 |
| Arizona | |
| Phoenix | $77,800 |
| Tucson | 68,400 |
| Yuma | 56,500 |
| California | |
| Fresno | $61,700 |
| Los Angeles | 77,300 |
| Oakland | 119,200 |
| Sacramento | 86,300 |
| San Diego | 92,700 |
| San Francisco | 143,100 |
| San Jose | 141,600 |
| Santa Barbara | 87,700 |
| Santa Cruz | 110,000 |
| Santa Rosa | 102,700 |
| Vallejo | 95,400 |
| Ventura | 97,800 |
| Colorado | |
| Boulder | $115,100 |
| Colorado Springs | 81,600 |
| Denver | 100,000 |
| Ft Collins | 99,400 |
| Greeley | 84,300 |
| Pueblo | 61,200 |
| Hawaii | |
| Honolulu | $101,600 |
| Montana | |
| Billings | $76,600 |
| Great Falls | 67,400 |
| Nevada | |
| Las Vegas | $70,800 |
| Reno | 79,600 |
| New Mexico | |
| Albuquerque | $69,100 |
| Las Cruces | 52,100 |
| Santa Fe | 76,000 |
| Oklahoma | |
| Fort Smith | $54,200 |
| Lawton | 67,100 |
| Oklahoma City | 74,400 |
| Tulsa | 68,600 |
| Oregon | |
| Eugene | $72,200 |
| Medford | 65,100 |
| Portland | 92,100 |
| Salem | 70,600 |
| Utah | |
| Provo-Orem | $80,400 |
| Salt Lake City/ Ogden | 86,300 |
| Washington | |
| Bellingham | $86,300 |
| Bremerton | 91,700 |
| Olympia | 86,700 |
| Richland | 77,500 |
| Seattle | 113,300 |
| Spokane | 78,500 |
| Tacoma | 87,300 |
| Vancouver | 92,100 |
| Yakima | 57,200 |
| Wyoming | |
| Casper | $79,300 |
| Cheyenne | 78,100 |

*Note: Source FHA. Does not include non-metropolitan counties. Some local areas may have community lending income limits higher than the standard 100% to 170% of median incomes. Other areas may have contiguous counties that have different incomes in the same metropolitan area.*

**Table 2-12 (Continued)**

## Conventional non-conforming

If we consider conventional non-conforming mortgages to be those that are not insured by FHA, guaranteed by VA or Rural Housing, issued under the authority of the Federal Bond Subsidy Act, or purchased by Fannie Mae or Freddie Mac, then this category is the whole universe of mortgages that do not fit into the most common categories. Since we are talking about a whole universe of mortgages, it is quite impossible to summarize their common characteristics. What we will attempt to accomplish in this section is to list the most common types of non-conforming mortgages and demonstrate how they differ from their conforming counterparts:

- *Jumbo mortgages*. Mortgages that exceed Fannie Mae/Freddie Mac conforming loan limits are usually referred to as *jumbo* mortgages. The vast majority of these mortgages are underwritten to Fannie Mae and Freddie Mac guidelines and would require private mortgage insurance coverage commensurate with conforming mortgages. Interest rates for jumbo mortgages may typically be anywhere from .25% to 1.00% above conforming alternatives. At times banks or other investors may offer jumbo mortgages at or below conforming rates.

- *Non"A" credit mortgages (subprime).* Fannie Mae, Freddie Mac and most jumbo mortgage investors purchase mortgages made to borrowers who have relatively good credit histories, stable income and reasonable income qualification. Those who do not meet these criteria may be classified as *B, C* and *D* credit borrowers. There are sources which focus on the purchase of these mortgages, usually at a much higher interest rate and requiring a larger down payment than A credit mortgages. During the boom of 2000 to 2006, the non-conforming (B&C Lending) market exploded and it became easier to classify borrowers in accordance within their category of credit. These options included low or no-down-payments. Once again, the fiscal crisis of the past few years has caused many of these options to disappear and make the remaining options more expensive and more conservative.

Non "A" credit mortgages are not limited to those with poor credit payment histories. They may include borrowers who do not meet normal eligibility guidelines such as being self-employed for a short period of time, non-resident aliens, investors with many investment properties and more. Again, the current fiscal crisis has limited these options.

- *Non-conforming properties*. Non-conforming properties include those located in condominium projects not approved by major agencies, partial commercial usage, excess acreage, a high "land-to-value" ratio, cooperatives, etc. Local banks may provide funding for non-conforming properties for customers of those institutions.

- *Self-insured/portfolio mortgages*. In the past, many savings and loan institutions offered mortgages that were not insured through conventional mortgage insurance companies. A higher interest rate was charged to absorb the risk of insuring the mortgages through the savings institution. The savings and loan crisis of the late 1980's greatly minimized the sources of mortgages that are self-insured. However, when the fiscal crisis caused the secondary markets for jumbo mortgages to collapse, many banks began to portfolio jumbo loans.

- *Non-conforming mortgage products*. There were many mortgage products offered, but not salable to Fannie Mae and Freddie Mac. Examples included *cost of funds index (COFI)* based adjustables with potential negative amortization and monthly payment (Option ARMs) or 30 year amortized mortgages with 15-year balloons. Other examples might include conforming firsts that have non-conforming seconds: for example, conforming standards might require an "80-10-10." Non-

conforming mortgages may allow an "80-15." The fiscal crisis caused the availability of these products to disappear from the markets for the most part.

The qualification standards for these non-conforming mortgages may or may not follow conforming guidelines in many respects. Generally, following these guidelines may help in the eventual sale of these non-conforming mortgages in the secondary market after the mortgages are *seasoned*.

# 3

# Types of Mortgages

As the secondary market for mortgages has grown, so have the varieties of mortgages available to the average consumer. Twenty years ago, the only choices would have been a 30-year fixed rate, a 15-year fixed rate and an adjustable rate mortgage. Ten years ago, an applicant could walk into a mortgage company and choose from hundreds of products, even interest-only. Today, the financial crisis has taken some of these choices off the market—but there are still many alternatives to choose. This chapter will try to give some basis for comparing and selecting among these products.

This discussion is organized by categorizing all mortgages within three major groups--

Fixed rate and fixed payment mortgages;
Fixed rate hybrids: non-fixed payments and balloons;
Adjustable rate mortgages.

## Fixed rate/fixed payment mortgages

A fixed rate mortgage, occasionally abbreviated as FRM, is the simplest and the most common of all mortgage instruments. During the past several decades, fixed rate mortgages have ranged from a low of 25% to a high of 85% of the total residential first mortgages originated in the United States. The volume of fixed rate activity tends to increase as market rates decrease, which makes the higher payments of fixed rates more affordable. The only variation among fixed rate mortgages is in the mortgage *term*. The *term* is the life of a mortgage: the period of time over which the money is lent. To be considered fixed rate, the mortgage must have two major characteristics:

One, the interest rate and payments must be fixed over the term of the mortgage.
Secondly, at the end of the mortgage it must be paid of completely.

A mortgage that is paid off completely by the end of its term is said to be *fully amortized*. To *amortize* is simply to decrease the principal balance on the mortgage on a monthly basis, or to *pay down* the mortgage balance. An *amortization schedule* may be produced for any mortgage, laying out the payments over the life of the mortgage. In this section, we have illustrations of annual amortization schedules for the most common fixed rate mortgage terms: 30, 20, and 15 years. Annual amortization schedules show the principal reduction each year.

The example amortization schedules are based on a $100,000 mortgage because it provides an easy basis for extrapolating to other mortgage amounts. If you are seeking a mortgage of $50,000, you can simply divide all amounts shown in the chart by two. If you are seeking a mortgage of $250,000, then multiply the amounts in the chart by two and one-half times.

Most applicants receive amortization schedules during the financing process. It is an important document that enables you to follow the progress in paying down the mortgage. It is also important to know how an amortization schedule is calculated. Too many borrowers merely look at the schedule, but have no idea how the interest is actually calculated. To illustrate how a monthly amortization schedule is calculated, we will manually compute the first three months of a schedule.

## Computation of an amortization schedule

We will use a $100,000 mortgage with a 30-year term, at a 5% interest rate. First, we need to know the monthly payment for this loan. Calculating monthly payments is quite complex, requiring either a special table or a financial calculator. Using such a method, we find that the monthly payment for this loan is *$536.82*.[18] Next, we need to find the monthly interest rate by dividing the annual rate by 12 (5% ÷ 12 = *0.417%*). Since this is a fixed rate mortgage, neither of these numbers will change at all during the life of the loan.

To perform the amortization calculation for the first month, we take the loan amount and multiply it by the monthly interest rate ($100,000 x 0.417% = *$417.00*). Thus, $417.00 of the first month's payment goes to pay interest. Subtracting this amount from the payment reveals the portion that goes toward payment of the principal ($536.82 – $417.00 = *$119.82*). We now subtract this amount from the original loan amount to find how much principal remains as of the end of the first month ($100,000 – 119.82 = *$99,880.18*).

**Annual Amortization Table**
**20 Year Term**
**$100,000 Loan Amount**
**5% Fixed Rate Loan**

| Year | Monthly Payment | Total Annual Principal | Total Annual Interest | Remaining Balance |
|---|---|---|---|---|
| 1 | $659.96 | $2987.35 | $4932.17 | $97,012.65 |
| 2 | $659.96 | $3139.50 | $4780.02 | $93,873.15 |
| 3 | $659.96 | $3300.83 | $4618.69 | $90,572.32 |
| 4 | $659.96 | $3469.70 | $4449.82 | $87,102.62 |
| 5 | $659.96 | $3647.22 | $4272.30 | $83,455.40 |
| 6 | $659.96 | $3833.82 | $4085.70 | $79,621.59 |
| 7 | $659.96 | $4029.96 | $3889.56 | $75,591.62 |
| 8 | $659.96 | $4236.14 | $3683.38 | $71,355.48 |
| 9 | $659.96 | $4452.87 | $3466.65 | $66,902.61 |
| 10 | $659.96 | $4680.69 | $3238.83 | $62,221.92 |
| 11 | $659.96 | $4920.16 | $2999.36 | $57,301.76 |
| 12 | $659.96 | $5171.89 | $2747.63 | $52,129.87 |
| 13 | $659.96 | $5436.49 | $2483.03 | $46,693.38 |
| 14 | $659.96 | $5714.63 | $2204.89 | $40,978.75 |
| 15 | $659.96 | $6007.00 | $1912.52 | $34,971.75 |
| 16 | $659.96 | $6314.33 | $1605.19 | $28,657.41 |
| 17 | $659.96 | $6637.39 | $1282.13 | $22,020.03 |
| 18 | $659.96 | $6976.97 | $942.55 | $15,043.06 |
| 19 | $659.96 | $7333.92 | $585.60 | $7,709.14 |
| 20 | $659.96 | $7709.14 | $210.38 | $0.00 |

**Table 3-1**

**Annual Amortization Table**
**15 Year Term**
**$100,000 Loan Amount**
**5% Fixed Rate Loan**

| Year | Monthly Payment | Total Annual Principal | Total Annual Interest | Remaining Balance |
|---|---|---|---|---|
| 1 | $790.79 | $4593.80 | $4895.68 | $95,406.20 |
| 2 | $790.79 | $4829.35 | $4660.13 | $90,576.85 |
| 3 | $790.79 | $5075.91 | $4413.57 | $85,500.94 |
| 4 | $790.79 | $5335.61 | $4153.87 | $80,163.33 |
| 5 | $790.79 | $5608.59 | $3880.89 | $74,556.75 |
| 6 | $790.79 | $5895.53 | $3593.95 | $68,661.22 |
| 7 | $790.79 | $6197.16 | $3292.32 | $62,464.06 |
| 8 | $790.79 | $6514.22 | $2975.26 | $55,949.84 |
| 9 | $790.79 | $6847.50 | $2641.98 | $49,102.35 |
| 10 | $790.79 | $7197.83 | $2291.65 | $41,904.52 |
| 11 | $790.79 | $7566.08 | $1923.40 | $34,338.44 |
| 12 | $790.79 | $7953.18 | $1536.30 | $26,385.26 |
| 13 | $790.79 | $8360.08 | $1129.40 | $18,025.19 |
| 14 | $790.79 | $8787.79 | $701.69 | $9,237.39 |
| 15 | $790.79 | $9237.39 | $252.09 | $0.00 |

**Table 3-2**

[18]Note: This book contains a table of interest rate factors which will enable you to quickly calculate a payment for 30, 20, or 15 year mortgages. This is a "short-factor" table may result in the loan payment being a few cents off, especially at higher loan amounts.

We repeat this procedure for the second month. The interest paid this month is calculated from the new principal balance and the monthly interest rate ($99,880.18 x 0.417% = *$416.50*).

Subtracting the interest from the payment gives the principal paid in the second month ($536.82 – 416.50 = *$120.32*). Subtracting this from the principal gives the principal remaining as of the end of the second month ($99,880.18 – 120.32 = *$99,759.86*).

And the third month—

-Interest paid $99,759.86 x 0.417% = *$415.99*
-Principal paid $536.82 – 415.99 = *$120.83*
-Principal remaining $99,759.86– 120.83 = *$99,639.03*

Now that we understand how amortization schedules are derived, we can appreciate how computers and sample amortization schedules eliminate the tedium of having to go through the above process for each month of a 360-month (30- year) loan!

**Annual Amortization Table**
**30 Year Term**
**$100,000 Loan Amount**
**5% Fixed Rate Loan**

| Year | Monthly Payment | Total Annual Principal | Total Annual Interest | Remaining Balance |
|---|---|---|---|---|
| 1 | $536.82 | $1,475.35 | $4,966.50 | $98,524.66 |
| 2 | $536.82 | $1,551.17 | $4,890.67 | $96,973.49 |
| 3 | $536.82 | $1,630.19 | $4,811.65 | $95,343.31 |
| 4 | $536.82 | $1,713.59 | $4,728.25 | $93,629.72 |
| 5 | $536.82 | $1,801.26 | $4,640.58 | $91,828.45 |
| 6 | $536.82 | $1,893.42 | $4,548.42 | $89,935.04 |
| 7 | $536.82 | $1,990.29 | $4,451.55 | $87,944.75 |
| 8 | $536.82 | $2,092.11 | $4,349.73 | $85,852.63 |
| 9 | $536.82 | $2,199.15 | $4,242.69 | $83,653.48 |
| 10 | $536.82 | $2,311.66 | $4,130.18 | $81,341.82 |
| 11 | $536.82 | $2,429.93 | $4,011.91 | $78,911.89 |
| 12 | $536.82 | $2,554.25 | $3,887.59 | $76,357.63 |
| 13 | $536.82 | $2,684.93 | $3,756.91 | $73,672.70 |
| 14 | $536.82 | $2,822.30 | $3,619.54 | $70,850.40 |
| 15 | $536.82 | $2,966.69 | $3,475.15 | $67,883.70 |
| 16 | $536.82 | $3,118.48 | $3,323.36 | $64,765.23 |
| 17 | $536.82 | $3,278.02 | $3,163.82 | $61,487.20 |
| 18 | $536.82 | $3,455.73 | $2,996.11 | $58,041.47 |
| 19 | $536.82 | $3,622.30 | $2,819.82 | $54,419.45 |
| 20 | $536.82 | $3,807.33 | $2,643.51 | $50,612.11 |
| 21 | $536.82 | $4,002.12 | $2,439.72 | $46,609.99 |
| 22 | $536.82 | $4,206.88 | $2,234.96 | $42,403.11 |
| 23 | $536.82 | $4,422.11 | $2,019.73 | $37,981.00 |
| 24 | $536.82 | $4,648.36 | $1,793.48 | $33,332.64 |
| 25 | $536.82 | $4,886.17 | $1,555.67 | $28,446.47 |
| 26 | $536.82 | $5,136.16 | $1,305.68 | $23,310.31 |
| 27 | $536.82 | $5,398.94 | $1,042.90 | $17,911.38 |
| 28 | $536.82 | $5,675.16 | $766.68 | $12,236.22 |
| 29 | $536.82 | $5,965.51 | $476.33 | $6,270.71 |
| 30 | $536.82 | $6,270.71 | $171.13 | 0 |

**Table 3-3**

## Fixed loan alternatives

We previously mentioned that fixed rate loans are most commonly available in 15, 20, and 30- year terms. Of these three, which is the most popular and what advantages does one have over the other? The 30-year mortgage is easily the most popular fixed rate mortgage, averaging the lion's share of the fixed rate market even in times of low market rates that have made 15-year mortgages more affordable. The source of this popularity is simple: the 30-year fixed rate mortgage requires the lowest payment of the three. More of the payment goes to interest (and less to principal), maximizing the tax deduction. In comparison, the 15-year mortgage would have a higher payment, a lower interest deduction, and faster payoff of the principal. Thus, the purpose of a 15-year mortgage is early payoff and interest savings over the mortgage term. During the sub-prime boom of the past decade, many lenders began offering 40-year mortgage terms.

**Fixed Rate Monthly Payments**
**5.0% Interest/$100,000 Mortgage**

| Term Years | Total Payment | Principal Payment | Interest Payment |
|---|---|---|---|
| 15 | $790.79 | $374.12 | $416.67 |
| 20 | $659.96 | $243.29 | $416.67 |
| 30 | $536.82 | $120.15 | $416.67 |
| 40 | $482.20 | $65.53 | $416.67 |

**Table 3-4**

Table 3-4 integrates this 40-year example. This table clearly illustrates the immediate differences between the various fixed rate mortgages. Each has the same initial monthly interest, but the 15-year mortgage has an extra payment of $253.97 over the

30-year alternative that goes entirely to pay off the principal. While the interest payment is the same for the first month under each mortgage, the interest paid monthly will reduce much more slowly under the 30-year and 40-year instruments.

Table 3-5 illustrates interest savings and payment comparisons for each of these mortgages. One can look at the interest savings and payment savings over the life of the mortgage. In this instance, we can see that the 15-year mortgage saves over $50,900 in interest over its 15-year term (compared to the 30-year alternative). Also, note that the 20-year mortgage saves over $34,800 over its 20-year term (again, compared to the 30-year mortgage).

The 20-year mortgage achieves two-thirds of the prepayment of a 15-year mortgage, using a 30-year mortgage as a basis of comparison. Yet the additional payments required for a 20-year mortgage are only 48% of the additional payments for a 15-year mortgage ($123 extra vs. $254).

Typically, 15 year mortgages will be .3875% to 1.0% below 30-year mortgages with 20-year mortgages priced closer to 30-year mortgages. The payments figuring in a "hypothetical" interest spread? In this case, the payment of a 20-year mortgage has 54% of the increase of a 15-year mortgage, but the benefit is still 66.67% - 10 out of 15 years of early payoff.

**Comparison of Fixed Rate Mortgages**

$100,000 Loan Amount
5% Fixed Rate Loan

| | Mortgage Term in Years | | |
|---|---|---|---|
| | 30 | 20 | 15 |
| Monthly Payment | $536.82 | $659.96 | $790.79 |
| Extra Payment | $0 | $123 | $254 |
| Total Payment | $193,256 | $158,389 | $142,343 |
| Interest Savings | $0 | $34,867 | $50,913 |

**Table 3-5**

*Note: This table does not take into account variances in interest rates between the three choices as 15-year mortgages can be obtained for as much as 1.0% less than 30 year mortgages. This interest rate "spread" will vary.*

$100,000 Loan amount

| | 30-year | 20-year | 15-year |
|---|---|---|---|
| Interest Rate | 5.0% | 4.875% | 4.25% |
| Payment (rounded) | $537.00 | $653.00 | $752.00 |

How can this be? It is because the prepayment is more difficult for each extra year of prepayment. As you shorten the mortgage, it gets harder and harder (requires greater extra payments) to shorten the life. For example, a 10-year payoff would require an extra payment of $528 per month as compared to the 30-year payment of $536. In other words, it takes an extra $254 per month to reduce the term from 30 to 15 years, but another $274 each month to reduce the term from 15 to 10 years.

The monthly prepayment chart (Table 3-6) illustrates this concept quite vividly and could be very helpful if you are considering prepaying an existing mortgage. It shows that $20 of an extra payment on a $100,000 mortgage saves nearly three years off the term of the mortgage. It takes $50 to achieve the next three years of savings. Each level of extra payment achieves less result. In comparing a 20-year mortgage to a 15-year mortgage, we achieve almost 70% of the result for 45% of the extra payment, making the 20-year mortgage a more efficient prepayment instrument.

However, these numbers change somewhat when we factor in the effect of interest *income* that could be earned by not paying the extra payment of a 20 or 15-year mortgage. If one chose to make the lower payments of a 30-year mortgage, theoretically one could place the extra payment in an investment account on a regular basis and earn investment income on that money. However, keep in mind that the investment interest earned on savings that are accrued after the mortgage is paid off would easily make up for this omission.

Before leaving our comparison of fixed rate, fixed payment instruments, we must cover three additional points:

*Prepayment penalties*. Many mortgage applicants ask whether they can prepay their mortgage without incurring some form of prepayment penalty. This penalty is a sum of money that must be paid if the mortgage is paid off before the term is up or even paid down faster than the amortization schedule requires. Prepayment penalties are no longer common in the mortgage industry--although they made somewhat of a comeback during the subprime boom, especially with regard to adjustable rate mortgages that tend to prepay more quickly. Mortgages sold to VA, FHA and the conforming agencies generally cannot carry these penalties and as the subprime boom has ended, few conventional mortgage options carry these as well.

***Mortgage factors example***

The 30-year factor for a 5% mortgage is 5.37. Therefore, the monthly mortgage payment is $537.00 for a $100,000 mortgage (5.37 x 100).

*Mortgage payments*. With our chart examples comparing the payment characteristics of a mortgage, we would do well to spend a few minutes giving our readers the ability to figure the payment. Within this book, there is a payment factor chart that gives the payment factors for 40, 30, 20, and 15-year mortgages at a variety of interest rates. These factors are the payment factors per $1,000; one need only multiply by the mortgage amount.

Actually, the factors shown are *short factors* that are abbreviations of factors, which are many decimal places long. This means the payments calculated with the short factors may be as much as one dollar per month off from the exact number. This is a level of inaccuracy that we are willing to accept in the interest of simplifying the calculations.

**Effect of Monthly Payment**

**$100,000 Loan at 5%, 30-year Amortization**

| Extra Payment | Principal & Interest | Months to Payoff | Years to Payoff | Total of Payments | Pmt. Savings Over Term |
|---|---|---|---|---|---|
| 0 | $537 | 360 | 30.0 | $193,320 | $0 |
| 20 | $557 | 332 | 27.7 | $184,924 | $8,396 |
| 50 | $587 | 298 | 24.8 | $174,926 | $18,394 |
| 75 | $612 | 275 | 22.9 | $168,300 | $25,020 |
| 100 | $637 | 256 | 21.3 | $163,072 | $30,248 |
| 150 | $687 | 224 | 18.7 | $153,888 | $39,432 |
| 200 | $737 | 200 | 16.7 | $147,400 | $45,920 |

**Table 3-6**

*Note: Calculations do not take into account investing the payment savings over the term for the remainder of the term of the mortgage (from 15 to 30 years or from 20 to 30 years). Numbers are rounded for ease of comparison.*

## The bi-weekly mortgage

A variation of the fixed rate mortgage instrument is the bi-weekly mortgage. The *bi-weekly mortgage* was imported from Canada and takes advantage of today's pay patterns of the American population. Many years ago, workers were paid either weekly or monthly. Now more and more people are paid every two weeks. The concept is to make one-half of what would otherwise be your monthly mortgage payment every two weeks.

When one makes one-half of a monthly mortgage payment every two weeks, one actually makes an extra monthly mortgage payment each year:

There are 52 *weeks* in *one year*.
Therefore, *every other week* would be *26 mortgage payments* (one-half of one month each).
There are *12 months in one year*.
If one were to make *one-half of each* mortgage payment, one would then make *24 payments in one year*. Therefore, you are making *two extra one-half* mortgage payments, or *one month extra* each year.

What is the result of this extra mortgage payment each year? The bi-weekly is a fixed rate/fixed payment mortgage that pays off in approximately 23 to 25 years, depending upon the interest rate.

The bi-weekly mortgage is simply a convenient way to match your personal pay method with an early payoff of your mortgage. There are a few disadvantages of bi-weekly mortgages:

1. The secondary market for bi-weekly mortgages is not as developed. Therefore, one is not likely to receive the benefit of a lower interest rate for the shorter term of this mortgage. In other words, bi-weekly mortgages are more likely to be priced as 30-year instruments rather than 15- year mortgages.

2. The 26 payments each year will cause more work for a *mortgage servicer*. The mortgage servicer actually receives the mortgages payments each month, applies the principal, pays real estate tax bills when they are due, etc. Most mortgage companies offering a bi-weekly option will require that the mortgage payment be transferred directly from the bank of the borrower. This is called *direct payment* and is similar to having your paycheck *direct deposited* in your bank account. Though many people prefer this option for paying their mortgage because of the convenience, others prefer to have the flexibility of making the payment during the 15-day *grace* period after which a mortgage is due. This period is called a grace period because the mortgage servicer will not charge a late payment until the mortgage is actually 16 days late. With the bi-weekly option, you lose some payment flexibility.

### *Bi-Weekly Mortgage Example*

- $100,000 mortgage
- 5% interest rate

| | |
|---|---|
| Monthly pmt. | $536.82 |
| Bi-weekly pmt. | $268.41 |
| Extra yearly pmt. | $536.82 |

Payoff in:
624 bi-weekly pmts.
312 months
25 years

Increased monthly payment to achieve same payoff:
$47.77 per month for
$584.59 total payment

### *The Bi-Weekly Advantage*

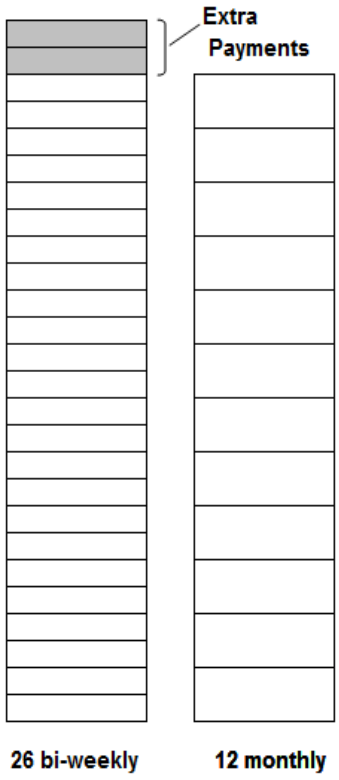



**Figure 3-1**

Finally, companies have developed programs that will offer to convert your present mortgage to a bi-weekly option. These companies are not making new mortgages—they are simply arranging for a different payment schedule on your present mortgage. Before paying a fee for such a service, bear in mind that you can just as easily add an amount to each monthly payment yourself to achieve the same prepayment effect as the bi-weekly mortgage. If the charge is $500, then you could have funded several months of extra payments in the above bi-weekly example.

## Interest-only programs

During the real estate boom of 2001 to 2006, interest-only programs became extremely popular. In the wake of the financial crisis and implementation of the Qualified Mortgage Regulations, this trend has reversed. When offered, these programs would likely carry higher rates when compared to fully amortized mortgages. The major advantage of these programs is obviously a lower payment --

| | | | |
|---|---|---|---|
| $100,000 | Mortgage | $536.82 | Payment |
| 5.0% | Rate | $416.67 | Interest-only payment |
| 22% | Payment decrease | | |

Earlier versions of these programs typically included a balloon payment at the end of a particular term and this option still exists for some commercial mortgages. Newer versions are more likely to have a fixed period followed by annual adjustments that are fully amortized for the remainder of the term (for example, a 5/1 ARM). Another alternative is a longer fixed rate period (10 years), with one adjustment and full amortization for the remaining 30-year term (10/20). Table 3-7 gives a comparison of interest-only payments at different interest rates. Note that the percentage savings changes radically as rates move up or down.

**Interest Only at Different Rates**
$100,000 Loan Amount

| Interest Rate | 30-Year Payment | Interest Only Payment | Dollar Savings | Percentage Savings |
|---|---|---|---|---|
| 4.0% | $477.42 | $333.33 | $144.09 | 30% |
| 5.0% | $536.82 | $416.67 | $120.16 | 22% |
| 6.0% | $599.55 | $500.00 | $99.55 | 17% |
| 7.0% | $665.30 | $583.33 | $81.97 | 12% |
| 8.0% | $733.76 | $666.67 | $67.09 | 9% |

**Table 3-7**

*Note that the percentage savings is the dollar savings divided by the 30-Year payment*

## Fixed rate hybrids

The category of fixed rate hybrids includes all fixed rate mortgages that either do not have a fixed payment or do not pay off completely at the term of the mortgage (are not fully amortized). We will further divide this classification into subcategories:

- *Balloon mortgages*
- *Graduated payment mortgages (GPMs)*

**Annual Amortization Table**
30 Year Amortization, 5 Year Term
$100,000 Loan Amount
5% Fixed Rate Loan

| Year | Monthly Payment | Total Annual Principal | Total Annual Interest | Remaining Balance |
|---|---|---|---|---|
| 1 | $536.82 | $1,475.34 | $4,966.50 | $98,524.66 |
| 2 | $536.82 | $1,551.17 | $4,890.67 | $96,973.49 |
| 3 | $536.82 | $1,630.19 | $4,811.65 | $95,343.31 |
| 4 | $536.82 | $1,713.59 | $4,728.25 | $93,629.72 |
| 5 | $536.82 | $1,801.27 | $4,640.58 | $91,828.73 |
| Balloon | | $91,828.45 | | |

**Table 3-8**

## Balloon mortgages

Balloon mortgages are usually fixed rate and fixed payment mortgages that do not amortize completely. Regular monthly payments

are made during a certain specified time interval, and at the end of that interval a lump sum payment of all remaining principal is due. Balloons are also called *bullets* or *calls*, referring to the one-time payment.

For example, a *30 due in 5, 30/5 or 5/25*, mortgage would have payments that are amortized over 30 years, but with a balloon payment at the end of the fifth year. That balloon payment would include any principal due at the end of the fifth year. Table 3-8 gives an example of this type of mortgage instrument. Note that this loan is identical to a 30-year fixed rate loan for the first four years. The fifth year is also the same, up until the very last payment (the 60th payment). That payment is the sum of the normal $536.82, plus the entire remaining principal of $91,828.45, for a *total of $92,365.27*

Why would anyone choose such a financing instrument? Since the lender need only guarantee the interest rate for five years, there is less risk if rates should later increase. That lower risk means that the lender can offer the balloon loan at a lower interest rate and thus lower payment.

By opting for the shorter-term instrument, the lower payment helps one qualify for a larger mortgage though more recent rules are likely to require qualification at a higher rate. Even if qualification is not an issue, the mortgage payment becomes more affordable. Those opting for this mortgage instrument would be gambling on either moving or refinancing before the five-year term is complete. But what if there is a recession that prevents resale of the property (moving) and the owner loses his/her job and cannot refinance? The balloon instrument also carries a risk that comes with the reward of lower rates and payments.

Freddie Mac and Fannie Mae in the past addressed this risk in an effort to make balloon products more popular financing instruments. Their option carried a *conditional right to refinance*. This conditional right to refinance enabled the applicant to refinance the mortgage to a fixed rate for the remaining term of the mortgage after the balloon occurs (maturity). The rate is fixed according to a formula that is set against whatever that agency's fixed rates are at the time of conversion.[20] The right to refinance is called conditional because certain conditions must be met to give the borrower a right to convert to a fixed rate:

- No payments can be more than 30 days late during the past year;
- Restrictions as to the second mortgages that can be placed against the property;
- The rate of conversion can be no more than 5.0% over the current note rate;
- A written request must be made to the mortgage holder requesting the reset.[21]

Despite this lesser risk associated with a balloon mortgage due to the ability to reset the rate at the end of five or seven years, balloons lessened in popularity as more lenders started offering hybrid adjustable rate mortgages, especially 3/1 and 5/1 adjustable programs. These programs offer the lower starting rate of an adjustable for a fixed period but automatic conversion to a one-year adjustable rate after the fixed period is over. There are no conditions attached to this

[20]A typical formula for conversion to fixed rate offered in the Fannie Mae 7-Year Balloon Product is the Fannie Mae's required net yield for 30-year fixed rate mortgages subject to a 60-day mandatory delivery commitment, plus .5%, rounded to the nearest .125%.

21Many borrowers feel that this cap is protecting the borrower such as a life cap would on an adjustable rate mortgage. Actually, the option not to convert under high market rate conditions may be at the lender's discretion.

conversion, alleviating all risk except the risk of a higher rate at conversion. In the past few years, Fannie Mae and Freddie Mac have stopped offering the balloon hybrids.

## Graduated payment mortgages

A graduated payment mortgage, also known as a GPM, is a class of fixed rate mortgages that has fixed rate, but also a payment that can vary during the term of the mortgage. As opposed to an adjustable rate mortgage that typically has a rate and payment that varies over the term of the mortgage, a graduated payment mortgage has payment variations that are known at the inception of the mortgage term, i.e., the borrower will know what his/her payments will be over the life of the mortgage even though the payments are changing. Payment changes on an adjustable rate mortgage will typically vary in accordance with future changes in interest rates and therefore are unknown.

There are two distinct types of graduated payment mortgages that we will address in this section:

*Growing equity mortgages (GEMs)*
*Temporary buydown mortgages*

## Growing equity mortgages

Growing equity mortgages, or *GEMs*, increase their rate of mortgage payoff with each increase in payment. Therefore, with a GEM one might start with 30-year amortization but wind up paying off the mortgage in less than 30 years. Or, the loan may start with a 15-year amortization but at a payment that is much lower than attributed to prevailing 15-year market rates. In the distant past, Freddie Mac offered the Equal Program. The Equal Program carried 15-year amortization at a below market rate and payment increases equal to 7.5% of the previous year's payment. With GEMs, you start with the equivalent 30-year fixed rate payment and end with a payment higher than the initial 15-year payment would have been. The theory here is simply:

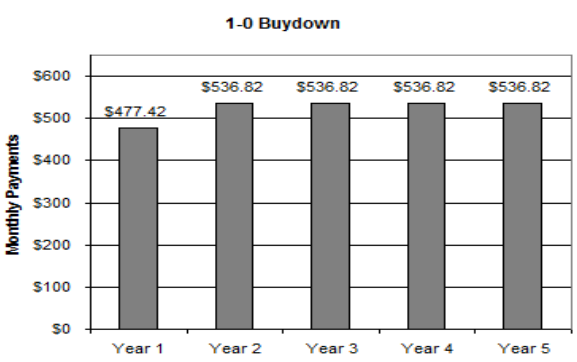
***Delay of pain***

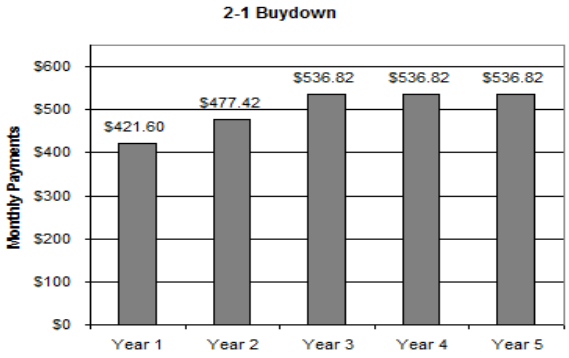
Many would like to have the equity build-up of a 15-year mortgage, but almost no one wants to deal with the higher payments. Growing equity mortgages allow one to start at 30-year amortization and graduate to 15-year amortization, delaying the pain of higher payments for future years. Even a 4% cost of living income increase would be almost double the effect of a 7.5% increase in mortgage payment. Thus, the mortgage is increasing more slowly than even conservative income growth. GEMs are obviously not a mortgage for those with incomes that are likely to remain fixed in future years. Despite the advantage of GEMs, their popularity seems to have peaked during the 1980s.

## Temporary buydown mortgages

To buy down a mortgage is to lower the interest rate. A temporary buydown lowers the interest rate during a certain period of the mortgage's term, usually the first few years. The purpose of a temporary buydown is to make the payments affordable during the early years of the mortgage, allowing the borrower's income to grow into the higher payment of later years. Unlike a growing equity mortgage, the purpose of a temporary buydown is not necessarily to delay the pain of a quicker payoff of the mortgage balance, though temporary buydowns can be used on 15-year instruments to accomplish a similar purpose as a GEM. The temporary buydown is typically used to help a purchaser qualify for a larger mortgage amount—similar to the use of an adjustable rate or balloon mortgage. The advantage of a temporary buydown over an adjustable rate mortgage is that the long-term interest

rate and payment of a temporary buydown is fixed which adds security. In short, a temporary buydown of a fixed rate mortgage gives many of the short-term advantages of an adjustable with the long-term security of a fixed rate.




**Figures 3-2 & 3-3**

A temporary buydown is quite simple:

• 5.0% 30-year fixed rate $100,000 mortgage
• A *1.0%* buydown would have a *4.00%* rate for one year.

Therefore, the mortgage would be:

• *4.0%* for year *1* (payment $*477.42* for *12* months)
• *5.0%* for years *2-30* (payment *$536.82* for *348* months)

This example is called a 1-0 annual buydown. The interest rate is bought down 1.0% for one year. The buydown is typically named after the extent of the buydown: a *2-1* buydown would lower a 5.0% fixed rate to 3.0% in the first year and 4.0% in year two:

- *3.0%* for year 1 (payment *$421.60* for the first *12* months)
- *4.0%* for year 2 (payment *$477.42* for the second *12* months)
- *5.0%* for years 3-30 (payment *$536.82* for the last *336* months)

## How much does a buydown cost?

It stands to reason that the lower payments and interest rate of a temporary buydown does not come without a cost. Calculating the actual cost of a temporary buydown is also very easy. Simply calculate the difference in payments over the period of the mortgage in which the interest rate is lowered. To illustrate, let's return to the examples already brought forth, using the $100,000 loan amount at a 5% rate with a 30-year term. First, the 1-0 buydown:

| Year | Monthly Payment at 5% | Payment at Buydown Rate | Difference times 12 |
|---|---|---|---|
| 1 | $536.82 | $477.42 (4%) | $713.00 |

Expressed in terms of points, the cost would be: *$713 ÷ $100,000, or 0.71 points*.[22]

Now, for the 2-1 buydown:

| Year | Monthly Payment at 5% | Payment at Buydown Rate | Difference times 12 |
|---|---|---|---|
| 1 | $536.82 | $421.60 (3%) | $1,383 |
| 2 | $536.82 | $477.42 (4%) | $713 |
| Total | | | $2,096 |

Expressed in terms of points, the cost would be *$2,096 ÷ $100,000, or 2.1 points.*

The cost in terms of points would vary depending upon the interest rate. As the rate that is being bought down approaches 10.0%, the cost of a 2-1 buydown would approach three points. It should also be noted that the lower payments might not be the only costs associated with a temporary buydown. These are merely the cost of *subsidizing* the payment over the period of time of the buydown. These *extra* points are placed into an escrow account so that the actual payments can be supplemented during the term of the buydown. For this reason, a temporary buydown is sometimes called a *subsidy* and if the loan is paid off before the buydown is completed, the servicing entity would typically have to apply unused subsidy funds towards a principal reduction or what is otherwise known as *principal curtailment*.

The cost of this subsidy may not cover the full cost of the buydown because the loan may carry a premium in the secondary market. The investor purchasing the mortgage knows that the borrower is not making the full-required payment in the early years of the mortgage and may have been qualified at the lower payment. This increases the risk of default over a fixed rate-fixed payment mortgage and makes the mortgage worth less in the secondary market (or increases its costs in terms of points). A second factor decreases the loan's value in the secondary market. The eventual fixed rate on a temporary buydown is likely to be higher than market fixed rates. Therefore, the borrower is more likely to refinance out of the instrument after the fixed rate is achieved. We say that this type of mortgage instrument is more likely to *prepay* and therefore carries less *servicing value.*

Temporary buydowns became widely acceptable on mortgage markets during the real estate boom, making these secondary premiums less common. However, extremely low rates in the wake of the financial crisis caused their popularity to wane. FHA and VA buydowns are more like to carry premiums because of Ginnie Mae securitization requirements. The premium can cost up to one point more than their fixed rate/fixed payment counterparts. Again, this extra cost is in addition to the actual cost of the buydown.

Unfortunately, under the qualified mortgage regulations, temporary buydowns cannot qualify at the start rate on conventional loans. Current VA rules preclude using a temporarily bought down rate to qualify any borrower unless there is clear evidence that the income will increase. The lower payment can be used to offset a borrower's debt payment that will expire before the mortgage reaches the note rate. FHA ceased allowing qualification on the bought down rate in 2004.

***Example of an "Odd" Buydown***

| | | |
|---|---|---|
| Note Rate: | | 5% |
| Buydown Type: | | *1.5%-0.5%* |
| Rate | Year 1: | 3.5% |
| | Year 2: | 4.5% |

[22] A point is a cost equal to 1% of the loan amount.

There are several other variations of temporary buydowns in addition to the popular *1-0* and *2-1* examples already brought forth:

*3-2-1*—A mortgage that is bought down 3.0% the first year, 2.0% the second year and 1.0% the third year is certainly going to be comparatively expensive. Such a deep buydown will cost over five points and is typically offered only by sellers and builders endeavoring deep concessions to dispose of a property. In addition, many programs will not qualify the borrower at a first-year payment rate that is in excess of 1.0% below the fixed rate[23] of the mortgage.[24]

*Odd buydowns*—The buydowns we have described up to this point involve buying down the note rate a full percentage point each year. It is possible to buy the note rate down less than a full percentage point. There is no rule that precludes such odd buydowns as long as one basic rule is followed: each year the rate of the mortgage cannot increase more than 1.0%. The advantage of odd buydowns is the ability to customize a mortgage to the needs of an individual borrower. If the purpose of the temporary buydown is to help a home purchaser qualify for a larger sales price, yet a full buydown of 2% below the note rate is not needed, then a 1.5% buydown the first year will be less costly.

*Compressed buydowns*—The buydowns we have introduced have rate increases each year of the mortgage. *Annual* buydowns are overwhelmingly the most common class of temporary buydowns. In the past, temporary buydowns have been introduced that allow rate increases every six months. These are called *compressed buydowns*. Because the period of the buydown is cut in half, so is the cost of the buydown. For example, a *2-1* buydown would cost approximately 1.25 points instead of approximately 2.5 points. Of course, the borrower would be subjected to much more rapid payment increases. Knowing this, many lenders and agencies did not qualify the borrower at the bought down rate because the mortgage can increase more than 1.0% each year. Compressed buydowns are currently not a popular mortgage alternative.

## Lender subsidized buydowns

To fully explain the concept of a lender-subsidized buydown we would have to delve into the world of mortgage costs and the secondary market. We will briefly explore the purchaser's view of the lender- subsidized buydown here.

The advantages of a temporary buydown are quite clear:

1. Starting at a lower rate and payment than prevailing fixed rate mortgages;
2. Increasing payments are limited to the early years of the mortgage; and
3. Long term fixed rate and payment security.

The one disadvantage is also quite clear: the cost of the buydown. As seen earlier, a typical 2–1 buydown on a 30-year fixed rate mortgage can cost approximately 2.5 points. The cost of these extra points can be borne by the seller or the purchaser in a real estate transaction. Because a fixed

[23] The fixed rate of a mortgage bought down is referred to as the *note rate*, or the rate that is contained on the legal document (note), which sets out the terms of the loan. Anytime there is a mortgage that is a non-fixed payment, we refer to the *note rate* as the eventual rate of the mortgage or the rate upon which the mortgage is based.

[24] Current VA rules preclude using a temporarily bought down rate to qualify any borrower unless there is clear evidence that the income will increase. The lower payment can be used to offset a borrower's debt payment that will expire before the mortgage reaches the note rate. FHA ceased allowing qualification on the bought down rate in 2004.

rate mortgage already may have closing costs, the total cost can be quite high. If one were opting for a temporary buydown, it would be an advantage to buy the rate down from a rate that carries fewer points:

**2-1**

| **Starting Rate** (percent) | **Fixed-Rate Quote** (percent & points) | | **Buy-down Cost** (points) | | **Total Cost** (points) |
|---|---|---|---|---|---|
| 2.75% | 4.75% & 3 | + | 2.5 | = | 5.5 |
| 3.00% | 5.00% & 1 | + | 2.5 | = | 3.5 |
| 3.25% | 5.25% & 0 | + | 2.5 | = | 2.5 |
| 3.50% | 5.50% & -1 | + | 2.5 | = | 1.5 |

In this example, if the seller were paying three points as a *sales concession* to persuade the purchaser to buy the home, the purchaser might opt for a 30-year fixed rate at 5.0%. What if the seller was not paying *any points* and the purchaser was very short on cash and could not afford to pay points as well? In most cases, we can then continue to *buy up* the fixed rate to lower the total points of the buydown. As we increase the note rate, the points actually are reduced to zero. Increasing the rate further above prevailing interest rates (up to 5.5% in this example) actually reduces the points to a negative number. Creating a significant "yield-spread" premium. These points are credited to the purchaser, reducing the points required for the buydown.

The example at 5.5% illustrates the concept of the *lender-subsidized buydown*. The total cost of the mortgage in terms of points is less than the cost of the buydown. The *3.5%–4.5%–5.5%* buydown has a total cost of 1.50 points, or one point less than the total cost of the buydown. When the total cost of the mortgage is actually less than the cost of the buydown, the mortgage is called a *lender-subsidized buydown* because the lender is actually supplying some of the points necessary for the *escrow* of the buydown funds. The lender will be reimbursed for these funds when the loan is sold in the secondary market at a premium (known as a yield spread premium). It should be noted that there is a point of diminishing returns as the rate moves above market. There will be less credit at higher rates on a proportional basis because the servicing value of the loan will diminish.

The popularity of temporary buydown mortgages increases when two factors are present. First, when we are in a buyers' market and sellers must offer concessions. A fixed rate mortgage with a lower start rate is always an attraction to buyers. Second, when there is a small spread between fixed rate and adjustable rate mortgages. For example, when fixed rates are at 6.0% and a 3/1 adjustable starts at 2.0%, the 3/1 would be more popular. When fixed rates are at 4.0% and a 3/1 adjustable starts at 3.5%, the fixed rate will be more popular. In this instance, you could easily formulate a 1-1-1 buydown that would be more attractive than the 3/1 adjustable. Which would you choose?

- 3/1 adjustable starting at 3.5% that can adjust to 5.5% after three years; or
- 4.50-4.50-4.50/5.50% fixed rate with a 1-1-1 buydown?

Again, the availability of temporary buydowns will vary in different environments. During the recovery from the great recession, these offerings virtually disappeared; however, rates were so low during this period of that there was not great demand for the option. Rising rates could change this scenario.

**Continued on Page 71**

## HISTORY OF MAJOR ARMS INDICES

| | | | | | | One-Year Treasury | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **JAN** | 5.06 | 2.71 | 0.44 | 0.35 | 0.27 | 0.12 | 0.15 | 0.12 | 0.20 | 0.54 | 0.83 | 1.80 | 2.58 | 1.53 |
| **FEB** | 5.05 | 2.05 | 0.62 | 0.35 | 0.29 | 0.16 | 0.16 | 0.12 | 0.22 | 0.53 | 0.82 | 1.96 | 2.55 | 1.41 |
| **MAR** | 4.92 | 1.54 | 0.64 | 0.40 | 0.26 | 0.19 | 0.15 | 0.13 | 0.25 | 0.66 | 1.01 | 2.06 | 2.49 | 0.33 |
| **APR** | 4.93 | 1.74 | 0.55 | 0.45 | 0.25 | 0.18 | 0.12 | 0.11 | 0.23 | 0.56 | 1.04 | 2.15 | 2.42 | 0.18 |
| **MAY** | 4.91 | 2.06 | 0.50 | 0.37 | 0.19 | 0.19 | 0.12 | 0.10 | 0.24 | 0.59 | 1.12 | 2.27 | 2.34 | 0.16 |
| **JUN** | 4.96 | 2.42 | 0.51 | 0.32 | 0.18 | 0.19 | 0.14 | 0.10 | 0.28 | 0.55 | 1.20 | 2.33 | 2.00 | 0.18 |
| **JUL** | 4.96 | 2.28 | 0.48 | 0.29 | 0.19 | 0.19 | 0.12 | 0.11 | 0.30 | 0.51 | 1.22 | 2.39 | 1.96 | 0.15 |
| **AUG** | 4.47 | 2.18 | 0.46 | 0.26 | 0.11 | 0.18 | 0.13 | 0.11 | 0.38 | 0.57 | 1.23 | 2.45 | 1.77 | 0.13 |
| **SEP** | 4.14 | 1.91 | 0.40 | 0.26 | 0.10 | 0.18 | 0.12 | 0.11 | 0.37 | 0.59 | 1.28 | 2.56 | 1.80 | 0.13 |
| **OCT** | 4.10 | 1.42 | 0.37 | 0.23 | 0.11 | 0.18 | 0.12 | 0.10 | 0.26 | 0.66 | 1.40 | 2.65 | 1.61 | 0.13 |
| **NOV** | 3.50 | 1.07 | 0.31 | 0.25 | 0.11 | 0.18 | 0.12 | 0.13 | 0.48 | 0.74 | 1.56 | 2.70 | 1.57 | 0.12 |
| **DEC** | 3.26 | 0.49 | 0.37 | 0.29 | 0.12 | 0.16 | 0.13 | 0.21 | 0.65 | 0.87 | 1.70 | 2.66 | 1.55 | 0.10 |

| | | | | | | Three-Year Treasury | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **JAN** | 4.79 | 2.51 | 1.13 | 1.49 | 1.03 | 0.36 | 0.39 | 0.78 | 0.90 | 1.14 | 1.48 | 2.15 | 2.52 | 1.51 |
| **FEB** | 4.75 | 2.19 | 1.37 | 1.40 | 1.28 | 0.38 | 0.40 | 0.69 | 0.99 | 0.90 | 1.47 | 2.36 | 2.48 | 1.35 |
| **MAR** | 4.51 | 1.80 | 1.31 | 1.51 | 1.17 | 0.51 | 0.39 | 0.82 | 1.02 | 1.04 | 1.59 | 2.42 | 2.37 | 0.36 |
| **APR** | 4.60 | 2.23 | 1.32 | 1.64 | 1.21 | 0.43 | 0.34 | 0.88 | 0.87 | 0.92 | 1.44 | 2.52 | 2.31 | 0.26 |
| **MAY** | 4.69 | 2.69 | 1.39 | 1.32 | 0.94 | 0.39 | 0.40 | 0.83 | 0.98 | 0.97 | 1.48 | 2.66 | 2.16 | 0.21 |
| **JUN** | 5.00 | 3.08 | 1.76 | 1.17 | 0.71 | 0.39 | 0.58 | 0.90 | 1.07 | 0.86 | 1.49 | 2.65 | 1.78 | 0.19 |
| **JUL** | 4.82 | 2.87 | 1.55 | 0.98 | 0.68 | 0.33 | 0.64 | 0.97 | 1.03 | 0.79 | 1.54 | 2.70 | 1.80 | 0.16 |
| **AUG** | 4.34 | 2.70 | 1.65 | 0.78 | 0.38 | 0.37 | 0.70 | 0.93 | 1.03 | 0.85 | 1.48 | 2.71 | 1.51 | 0.15 |
| **SEP** | 4.06 | 2.32 | 1.48 | 0.74 | 0.35 | 0.34 | 0.78 | 1.05 | 1.01 | 0.90 | 1.51 | 2.84 | 1.59 | 0.16 |
| **OCT** | 4.01 | 1.86 | 1.46 | 0.57 | 0.47 | 0.37 | 0.63 | 0.88 | 0.93 | 0.99 | 1.68 | 2.94 | 1.53 | 0.21 |
| **NOV** | 3.35 | 1.51 | 1.32 | 0.67 | 0.39 | 0.36 | 0.58 | 0.96 | 1.20 | 1.22 | 1.81 | 2.91 | 1.61 | 0.22 |
| **DEC** | 3.13 | 1.07 | 1.36 | 0.99 | 0.39 | 0.35 | 0.69 | 1.06 | 1.28 | 1.49 | 1.96 | 2.67 | 1.63 | 0.17 |

| | | | | | Five-Year Treasury | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **JAN** | 4.75 | 2.98 | 1.60 | 2.48 | 1.99 | 0.84 | 0.81 | 1.65 | 1.37 | 1.52 | 1.92 | 2.38 | 2.54 | 1.55 |
| **FEB** | 4.71 | 2.78 | 1.87 | 2.36 | 2.26 | 0.83 | 0.85 | 1.52 | 1.47 | 1.22 | 1.90 | 2.60 | 2.49 | 1.37 |
| **MAR** | 4.48 | 2.48 | 1.82 | 2.43 | 2.11 | 1.02 | 0.82 | 1.64 | 1.52 | 1.38 | 2.01 | 2.63 | 2.37 | 0.51 |
| **APR** | 4.59 | 2.84 | 1.86 | 2.58 | 2.17 | 0.89 | 0.71 | 1.70 | 1.35 | 1.26 | 1.82 | 2.70 | 2.33 | 0.37 |
| **MAY** | 4.67 | 3.15 | 2.13 | 2.18 | 1.84 | 0.76 | 0.84 | 1.59 | 1.54 | 1.30 | 1.84 | 2.82 | 2.19 | 0.35 |
| **JUN** | 5.03 | 3.49 | 2.71 | 2.00 | 1.58 | 0.71 | 1.20 | 1.68 | 1.68 | 1.17 | 1.77 | 2.78 | 1.83 | 0.34 |
| **JUL** | 4.88 | 3.30 | 2.46 | 1.76 | 1.54 | 0.62 | 1.40 | 1.70 | 1.63 | 1.07 | 1.87 | 2.78 | 1.83 | 0.27 |
| **AUG** | 4.43 | 3.14 | 2.57 | 1.47 | 1.02 | 0.71 | 1.52 | 1.63 | 1.54 | 1.13 | 1.78 | 2.77 | 1.49 | 0.26 |
| **SEP** | 4.20 | 2.88 | 2.37 | 1.41 | 0.90 | 0.67 | 1.60 | 1.77 | 1.49 | 1.18 | 1.80 | 2.89 | 1.57 | 0.27 |
| **OCT** | 4.20 | 2.73 | 2.33 | 1.18 | 1.06 | 0.71 | 1.37 | 1.55 | 1.39 | 1.27 | 1.98 | 3.00 | 1.53 | 0.38 |
| **NOV** | 3.67 | 2.29 | 2.23 | 1.35 | 0.91 | 0.67 | 1.37 | 1.62 | 1.67 | 1.60 | 2.05 | 2.95 | 1.64 | 0.39 |
| **DEC** | 3.49 | 1.52 | 2.34 | 1.93 | 0.89 | 0.70 | 1.58 | 1.64 | 1.70 | 1.96 | 2.18 | 2.68 | 1.68 | 0.37 |

| | **Six-Month Libor-Fannie Mae (replaced by private indices in July 2007)** | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **JAN** | 5.40 | 4.59 | 1.75 | 0.43 | 0.46 | 0.81 | 0.51 | 0.35 | 0.36 | 0.85 | 1.34 | 1.84 | 2.87 | 1.91 |
| **FEB** | 5.37 | 3.04 | 1.66 | 0.38 | 0.46 | 0.78 | 0.47 | 0.34 | 0.37 | 0.86 | 1.35 | 1.97 | 2.80 | 1.74 |
| **MAR** | 5.32 | 2.93 | 1.80 | 0.39 | 0.46 | 0.75 | 0.45 | 0.33 | 0.38 | 0.89 | 1.43 | 2.22 | 2.69 | 1.38 |
| **APR** | 5.36 | 2.61 | 1.74 | 0.44 | 0.44 | 0.73 | 0.44 | 0.33 | 0.40 | 0.90 | 1.42 | 2.45 | 2.65 | 1.17 |
| **MAY** | 5.38 | 2.97 | 1.57 | 0.53 | 0.43 | 0.73 | 0.42 | 0.32 | 0.41 | 0.90 | 1.41 | 2.51 | 2.62 | 0.76 |
| **JUN** | 5.38 | 2.91 | 1.24 | 0.75 | 0.40 | 0.74 | 0.41 | 0.32 | 0.42 | 0.99 | 1.43 | 2.47 | 2.52 | 0.51 |
| **JUL** | 5.37 | 3.11 | 1.11 | 0.75 | 0.41 | 0.73 | 0.41 | 0.33 | 0.44 | 0.92 | 1.46 | 2.50 | 2.20 | 0.37 |
| **AUG** | 5.32 | 3.10 | 0.93 | 0.67 | 0.43 | 0.73 | 0.40 | 0.34 | 0.49 | 1.11 | 1.45 | 2.53 | 2.20 | 0.31 |
| **SEP** | 5.53 | 3.12 | 0.75 | 0.50 | 0.48 | 0.71 | 0.39 | 0.33 | 0.53 | 1.24 | 1.47 | 2.54 | 2.04 | 0.31 |
| **OCT** | 5.13 | 3.99 | 0.63 | 0.46 | 0.56 | 0.64 | 0.37 | 0.33 | 0.53 | 1.24 | 1.54 | 2.60 | 2.06 | 0.26 |
| **NOV** | 4.83 | 3.12 | 0.56 | 0.45 | 0.62 | 0.54 | 0.35 | 0.33 | 0.55 | 1.25 | 1.63 | 2.80 | 1.92 | 0.24 |
| **DEC** | 4.91 | 2.60 | 0.49 | 0.46 | 0.75 | 0.53 | 0.35 | 0.33 | 0.56 | 1.29 | 1.76 | 2.90 | 1.90 | 0.25 |

| | | | | Moving Treasury Average (12-MTA) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **JAN** | 4.98 | 4.33 | 1.63 | 0.46 | 0.31 | 0.17 | 0.18 | 0.13 | 0.13 | 0.35 | 0.64 | 1.28 | 2.40 | 1.97 |
| **FEB** | 5.01 | 4.08 | 1.51 | 0.44 | 0.31 | 0.16 | 0.18 | 0.13 | 0.13 | 0.38 | 0.66 | 1.38 | 2.45 | 1.87 |
| **MAR** | 5.03 | 3.79 | 1.44 | 0.42 | 0.30 | 0.15 | 0.17 | 0.12 | 0.14 | 0.41 | 0.69 | 1.46 | 2.48 | 1.69 |
| **APR** | 5.03 | 3.53 | 1.34 | 0.41 | 0.28 | 0.15 | 0.17 | 0.12 | 0.15 | 0.44 | 0.73 | 1.56 | 2.50 | 1.50 |
| **MAY** | 5.02 | 3.29 | 1.21 | 0.40 | 0.26 | 0.15 | 0.16 | 0.12 | 0.16 | 0.47 | 0.77 | 1.66 | 2.51 | 1.32 |
| **JUN** | 5.01 | 3.08 | 1.05 | 0.39 | 0.25 | 0.15 | 0.16 | 0.12 | 0.18 | 0.49 | 0.83 | 1.75 | 2.48 | 1.17 |
| **JUL** | 4.98 | 2.86 | 0.90 | 0.37 | 0.24 | 0.15 | 0.15 | 0.12 | 0.19 | 0.51 | 0.89 | 1.84 | 2.45 | 1.02 |
| **AUG** | 4.93 | 2.67 | 0.76 | 0.35 | 0.23 | 0.15 | 0.15 | 0.12 | 0.22 | 0.52 | 0.94 | 1.95 | 2.40 | 0.88 |
| **SEP** | 4.86 | 2.48 | 0.63 | 0.34 | 0.22 | 0.16 | 0.14 | 0.12 | 0.24 | 0.54 | 1.00 | 2.05 | 2.33 | 0.74 |
| **OCT** | 4.79 | 2.26 | 0.54 | 0.33 | 0.21 | 0.16 | 0.14 | 0.11 | 0.25 | 0.57 | 1.06 | 2.16 | 2.24 | 0.62 |
| **NOV** | 4.66 | 2.05 | 0.48 | 0.33 | 0.20 | 0.17 | 0.13 | 0.11 | 0.29 | 0.60 | 1.13 | 2.26 | 2.15 | 0.50 |
| **DEC** | 4.52 | 1.82 | 0.47 | 0.32 | 0.18 | 0.17 | 0.13 | 0.12 | 0.32 | 0.61 | 1.20 | 2.33 | 2.05 | 0.38 |

| | | | | 11th District Cost of Funds (COFI) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **JAN** | 4.39 | 3.97 | 2.46 | 1.79 | 1.48 | 1.22 | 0.96 | 0.77 | 0.69 | 0.66 | 0.61 | 0.78 | 1.13 | 0.98 |
| **FEB** | 4.38 | 3.56 | 2.00 | 1.61 | 1.47 | 1.20 | 1.00 | 0.71 | 0.70 | 0.67 | 0.59 | 0.82 | 1.17 | 0.99 |
| **MAR** | 4.30 | 3.28 | 1.63 | 1.86 | 1.45 | 1.16 | 0.97 | 0.70 | 0.68 | 0.68 | 0.58 | 0.81 | 0.96 | 0.88 |
| **APR** | 4.22 | 3.11 | 1.38 | 1.83 | 1.36 | 1.14 | 0.97 | 0.68 | 0.68 | 0.69 | 0.64 | 0.90 | 1.10 | 0.74 |
| **MAY** | 4.29 | 2.92 | 1.82 | 1.79 | 1.36 | 1.12 | 0.95 | 0.67 | 0.68 | 0.69 | 0.65 | 0.89 | 1.15 | 0.75 |
| **JUN** | 4.28 | 2.83 | 1.60 | 1.80 | 1.34 | 1.12 | 0.95 | 0.67 | 0.65 | 0.69 | 0.65 | 0.93 | 1.14 | 0.68 |
| **JUL** | 4.28 | 2.70 | 1.47 | 1.75 | 1.35 | 1.09 | 0.95 | 0.67 | 0.64 | 0.69 | 0.71 | 1.02 | 1.16 | 0.65 |
| **AUG** | 4.36 | 2.69 | 1.41 | 1.71 | 1.32 | 1.07 | 0.96 | 0.67 | 0.63 | 0.70 | 0.73 | 1.02 | 1.16 | 0.53 |
| **SEP** | 4.38 | 2.77 | 1.27 | 1.66 | 1.28 | 1.04 | 0.96 | 0.66 | 0.65 | 0.60 | 0.73 | 1.02 | 1.13 | 0.52 |
| **OCT** | 4.23 | 3.13 | 1.26 | 1.65 | 1.22 | 1.01 | 0.96 | 0.67 | 0.65 | 0.60 | 0.74 | 1.08 | 1.10 | 0.50 |
| **NOV** | 4.17 | 3.16 | 2.10 | 1.57 | 1.20 | 1.00 | 0.78 | 0.69 | 0.64 | 0.60 | 0.74 | 1.06 | 1.04 | 0.47 |
| **DEC** | 4.07 | 2.78 | 1.83 | 1.51 | 1.22 | 1.07 | 0.78 | 0.69 | 0.66 | 0.60 | 0.75 | 1.06 | 1.04 | 0.50 |

| | | | | | | Prime Rate | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2007** | **2008*** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **JAN** | 8.25 | 6.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 3.75 | 4.50 | 5.50 | 4.75 |
| **FEB** | 8.25 | 6.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 3.75 | 4.50 | 5.50 | 4.75 |
| **MAR** | 8.25 | 5.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 4.00 | 4.50 | 5.50 | 3.25 |
| **APR** | 8.25 | 5.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 4.00 | 4.75 | 5.50 | 3.25 |
| **MAY** | 8.25 | 5.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 4.00 | 4.75 | 5.50 | 3.25 |
| **JUN** | 8.25 | 5.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 4.25 | 4.75 | 5.50 | 3.25 |
| **JUL** | 8.25 | 5.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 4.25 | 5.00 | 5.50 | 3.25 |
| **AUG** | 8.25 | 5.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 4.25 | 5.00 | 5.25 | 3.25 |
| **SEP** | 7.75 | 5.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 4.25 | 5.00 | 5.25 | 3.25 |
| **OCT** | 7.50 | 4.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 4.25 | 5.25 | 5.00 | 3.25 |
| **NOV** | 7.50 | 4.00 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 4.25 | 5.25 | 4.75 | 3.25 |
| **DEC** | 7.25 | 3.20 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.50 | 3.75 | 4.50 | 5.50 | 4.75 | 3.25 |

## Adjustable rate mortgages

The last classification of mortgage types involves mortgages that have interest rate changes over time. These are called *adjustable rate mortgages, adjustables, ARMs, or AMLs. Adjustable rate mortgages* are more complex than their fixed rate/fixed payment counterparts because of these rate changes. We will first discuss these complexities before introducing the many types of adjustables that are available as mortgage instruments in today's marketplace. Note chart 3-9 which covers the history of several major ARM indices. Notice the variation through the years.

## Determining adjustable rates—the index

Adjustables must contain mechanisms to determine future rate changes. Every adjustable rate mortgage has an *index* that determines the rate of the mortgage in future years.

An *index* is an indicator or reference of particular interest rates that are being measured by that indicator. As this indicator or measure of rate increases, so will the rate on the adjustable mortgage in the future. One could devise an index for any interest rate. For example:

If we wanted to use the *average* lending rates of major banks (and they varied from bank-to-bank):

Bank A -- Average is presently *4.00%*
Bank B -- Average is presently *5.00%*
Bank C -- Average is presently *6.50%*

Our index would simply create an average:

*4.00% + 5.00% + 6.50% = 15.5%*
*15.5% ÷ 3 = 5.17%*

If we took this measurement over time (say, every six months) we could track our *Average Lending Rate Index* over the years:

| | | | |
|---|---|---|---|
| January, 2010 | *8.5%* | July, 2010 | *9.50%* |
| January, 2011 | *9.0%* | July, 2011 | *6.75%* |

An adjustable rate mortgage based upon this index might be called a *prime rate adjustable.* There seems to be no limit on the different type of indices that may rule the future rate changes of adjustable rate mortgages. However, the fiscal crisis caused the popularity of certain indices to decrease significantly. The following presents an introduction to many of the more common indices. Keep in mind that new indices may be introduced at any time and not all are presently in use.

## Common adjustable rate indices

- *Prime Lending Rate*. The prime-lending rate is the lowest rate charged to the *best customers* of the bank for short-term lending. A bank may lend using its own prime rate as the index upon which future adjustments of the rate will be based. It is more likely that banks will lend based upon an average of prime rates for major banks. Since each bank determines its own prime rate it would seem that the average would provide more protection for the borrower. However, typically the major banks move their prime lending rates in tandem and there is little variation in this measure within the industry. This rate tends to move in tandem with Federal Reserve Board changes in the Federal Funds Rate, the rate banks charge each other for overnight borrowing. This index is more likely to be used as a basis for home equity line (HELOC) lending.

- *Treasury Constant Maturity Indices*. Also known as the "T" Bill, TCM and CMT indices, these indices were actually the most common offered for first trust mortgages in the past. Treasury Securities are issued by the Federal Government to raise capital. These securities are offered in various denominations or lengths: from 3-months to 30-years. Short-term securities (for example, 3-month) are known as *"T" Bills*. Medium-term securities (for example, 3-year) are known as *"T" Notes*. Long-term securities (30-year) are known as *"T" Bonds*. A *TCM* index actually averages all outstanding securities with the term of the index left until maturity. For example, a 6-month index would be an average of all outstanding treasury securities with six months left in their term. This is what the term *averaged for a constant maturity* denotes. Typically, a one-year adjustable rate mortgage may carry a *1 Yr TCM*, or *1 Yr "T" Bill* index.
- *11th District Cost of Funds Index*. The State of California in the past has been the home of very large savings and loan institutions. These institutions created adjustable rate mortgage instruments tailored to the booming California real estate market during the 1980s. This market was characterized by rapidly escalating prices and an extreme amount of mobility among purchasers. The borrowers in California and other escalating markets were not interested in long-term security. They were interested in qualifying for the largest mortgage possible so that they could take advantage of rising prices.
- The *11th District* refers to the 11th Federal Home Loan Bank District that includes western states, including the State of California. The *Cost of Funds (COFI)* index is a measure of the expense these institutions incur to attract funds, or deposits. It makes sense that they would try to match the interest they charge on mortgages to their actual cost of doing business. These monthly adjustable rate mortgages became quite popular in the 1980s and were offered by many institutions outside of the 11th District. Because of mergers and the savings and loan crisis of the late 1980's, these large 11$^{th}$ District institutions have decreased in numbers and this particular index has become less popular over time, replaced by other options such as the MTA index described on the next page. However, the monthly adjustable product continued to soar in popularity, especially during the real estate boom of 2003 to 2006 before disappearing as a response to the fiscal crisis.
- Another version of the Cost of Funds Index is the Monthly Median Cost of Funds of all FSLIC-insured institutions. Though it would seem that a national index of the cost of funds for all savings institutions would become more of a standard, this index was not widely utilized.
- *Certificate of Deposits Index (CODI)*. Similar to the COFI is the *Certificate of Deposits Index (CODI)*. The COFI and CODI programs are calculated in a similar fashion. The CODI responds more quickly to changes in the market and the index is published mid-month. The CODI index is the average of the most recently published monthly yields on 3-month certificates of deposits for the 12 most recent calendar months as published by the Federal Reserve Board. This index was never a popular option for adjustable rate mortgages.
- *LIBOR Index*. The *LIBOR* Index is a relative newcomer to the mortgage scene but the instrument has become very popular and significant with regard to the development of foreign sources of funds for mortgages. *LIBOR* is short for London Interbank Offered Rates. It is the average rate of interest that major international banks are willing to pay each other in the London Interbank Market for US dollar-denominated deposits for various terms. It makes sense that if we were to attract foreign dollars to finance our mortgage markets, we would have

to integrate the measurements employed by overseas financial institutions as well as our own. For some time, Fannie Mae published their own *LIBOR* indices. Late in 2006 Fannie Mae announced that they would eliminate this separate measure in June of 2007. At the present time, there are private firms that publish replacement indices. In 2018, it was announced that the LIBOR will cease as an index by 2021. It is not clear what index will replace this instrument.

- *The Consumer Price Index*. The inflation rate is a major determinant of the future of interest rates, therefore; it is not surprising that there has been some interest in making the Consumer Price Index an index for adjustable rate mortgages. The Consumer Price Index is the government's main gauge for measuring the current inflation rate. In the past, FHA authorized a pilot program for PLAMs, or *Price Level Adjustment Mortgages*. The *PLAM* would have adjustments partially based on changes in the inflation rate and partially based on a more common index such as the 1-year TCM. Thus far, inflation based adjustables have not had an impact on the market.

- *Moving Treasury Average (also called Monthly Treasury Average) (MTA)*. The Monthly Treasury Average is a relatively new ARM index. This index is the 12-month average of the monthly average yields of U.S. Treasury securities adjusted to a constant maturity of one year. It is calculated by averaging the previous 12 monthly values of the 1-Year TCM. Because this index is an annual average, it moves more slowly than the 1-Year TCM indices. The MTA index generally fluctuates slightly more than the 11th District COFI, although its movements track each other very closely. The index is sometimes referred to as the 12-month moving average treasury or 12-MAT for short. This option has become more popular as an index in recent years.

## Determining adjustable rates—the margin

While the adjustable rate mortgage's rate movements are determined by the index, each adjustable also has a *margin* to determine exactly where the rate will be fixed after each rate change. It makes sense that financial institutions would not lend money exactly at the yield of treasury securities, because they could receive that yield from the federal government. In the case of the Cost of Funds Index, the savings institutions cannot afford to lend money out at the same rate they are paying depositors. Therefore, you can think of the *margin* as a *profit margin* over the index for an adjustable rate mortgage.

What are common margins for adjustable rate mortgages? The most common adjustable rate mortgage for first trust mortgages is a 1-year adjustable that has a rate change every year (or changes years after a fixed period). A common index for the *1-year adjustable* is the *1-Year "T" Bill* or *TCM* index. A common margin used with this mortgage instrument is 2.75% over the value of the index. Adjustable rate mortgage margins will typically range from 2.0% for an FHA adjustable to 3.0%+% for mortgages on properties that are not owner-occupied (investor).

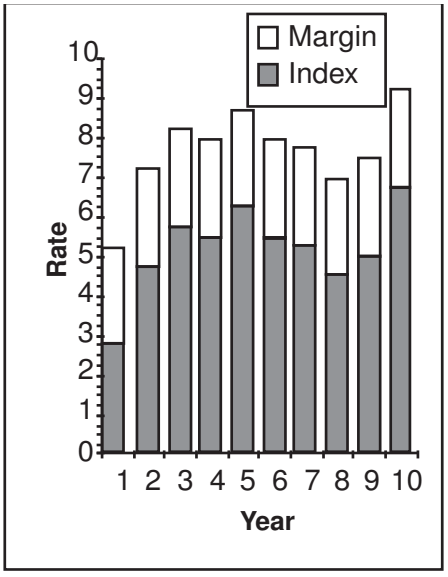
Once we know the index and the margin, the formula is simple: *the index* + *the margin* = *the new rate* each time the ARM is adjusted. However, since most indices

***Index and Margin—Determining the Rate of an ARM***

At each rate change, the new rate is determined by the index plus the margin. For example:

| | | | |
|---|---|---|---|
| | Index | = | 5.00% |
| + | Margin | = | 2.75% |
| | New rate | = | 7.75% |

Over time, the rates might change as follows:



can have any value (for example, the one year TCM can be at 4.05) and mortgages are commonly limited to "increments of one-eighth percent" (4.000%, 4.125%, or 4.250%); there is some question as to how the rate is actually figured at adjustment. There are actually four possibilities:

1. Round the rate to the *nearest* one-eighth of a percent;
2. Round the rate *up* to the next one-eighth of a percent;
3. Round the rate *down* to the next one eighth of a percent;
4. No rounding (more likely with a rate that is set monthly).

Let's take an example to illustrate the first three:

| Index | One Year TCM |
|---|---|
| Value at Adjustment | *3.95* |
| Margin | *2.75* |
| Index plus Margin | *6.70* |
| 1. ***Nearest*** one-eighth of a percent | *6.75%* |
| 2. Round ***up*** | *6.75%* |
| 3. Round ***down*** | *6.625%* |

The most common form of adjustment calculation is the second example, rounding *up* to the next one-eighth of one percent.

## Determining adjustable rates—the starting rate

The initial rate for an adjustable will be chosen from one of two options:

*Fully indexed accrual rate (FIAR)*. The *fully indexed accrual rate* is simply the present value of the index plus the margin. Therefore, if the index is presently at 4.0% and the margin is set at 2.75%, the *FIAR* will be 6.75%. It should be noted that the FIAR based on the present index would be used to calculate the annual percentage rate as required by the *Truth In Lending Act*. A *TIL* disclosure (now replaced by the Loan Estimate) would assume that "today's index" used for calculating the rate will remain constant throughout the term of the mortgage.

***Adjustables are Named After Their Adjustment Periods:***

*One Year ARM—*
rate changes every year

*Three Year ARM—*
rate changes every 3 years

*Three/One ARM*
fixed for 3 years, then rate changes annually

*Teaser rate*. The FIAR would seem to be the logical starting rate for an adjustable rate mortgage. Unfortunately, the FIAR typically causes starting rates for ARMs to be at a level that is too high to be attractive to consumers. Basically, the FIAR puts the starting rate of an adjustable too close to the starting rates of fixed rate mortgages. Without a *spread*, or a guaranteed lower rate for a certain period of time, consumers generally will not choose adjustable rate mortgages over fixed rate alternatives. Adjustables are therefore marketed with what are called *teaser rates*, or starting rates that are below market or the FIAR. In the previous example with a FIAR at 6.75%, the starting rate of the adjustable might be 4.75%. Of course, these teaser rates more or less guarantee future increases in rates for the mortgage, even if market rates (the index values) stay the same in the future. Going back to the *TIL Disclosure or Loan Estimate*, this adjustable would disclose a rate of 4.75% the first year and 6.75% for years 2-30.

## Determining adjustable rates—time periods

There are literally hundreds of adjustable rate mortgages on the market today and the most significant variable among these mortgages is the *adjustment period*. The *adjustment period* is simply the frequency of the rate changes.

A very popular adjustable rate mortgage is the *1 Year ARM* which has rate changes annually. There are adjustables that change monthly, every six months, every three years, and even once in ten years. Adjustables that have more frequent rate changes will carry lower starting rates than long-term *adjustables* that have rate changes only every three or more years. These *short-term* adjustables will have a greater risk of rate increases because of the more frequent rate changes.

It is also possible that the period of rate change may not be fixed on an adjustable. For example, a *prime-based* home equity loan (HELOC) is a second mortgage which may have a rate change every time the prime rate changes. This means that the rate may not change for two years or it may change every month, depending upon how often the banks change their prime-lending rate.

The period of rate change on an adjustable may also change during the term of the mortgage. The most common example of these are the *3/1, 5/1, 7/1*, and *10/1*, also known as *hybrid ARMs*. These adjustables have fixed rates for a certain period of time and then change into one-year adjustables after that period. For example, a *3/1 ARM* will have a fixed rate for three years and then will adjust annually every year thereafter. This may be compared with a *3/3 ARM* that has rate changes every three years over the term of the mortgage. A *3/3 ARM* is also known as a *true three- year adjustable*. Another variation, a *"2-28"* can have a fixed rate for two years and then change every six months or every year over the remaining term. This option was popular during the sub-prime lending area.

## Determining adjustable rates—protection against unlimited rate changes

The risk would be unpalatable for any borrower or mortgage purchaser if an adjustable rate mortgage's interest rate could increase without limits with each adjustment. For this reason, the vast majority of ARMs marketed today offer limits on future rate adjustments. These limits are called *caps*. There are two types of interest rate caps typically offered:

1. *Adjustment period caps limit each rate change*. A one-year adjustable would have an annual cap and a three-year adjustable would have a cap every three years. By far the most common cap is 2.0% during each rate change with some notable exceptions:

- A six-month adjustable is likely to have a 1.0% cap each six months, which is the equivalent of 2.0% each year.
- Many *5/1, 7/1*, and *10/1* adjustables allow maximum (life cap) adjustments after the fixed rate term expires and before the annual changes begin. Once the annual changes are in effect, there is typically a 2.0% annual cap in place. For example, a 5/1 ARM that starts at 5.0% may have a rate fixed at 5.0% for five years. If there is a life cap of 5.0%, the adjustable can move to 10.0% after the fifth year. Every year thereafter, there is an annual cap on rate adjustments of 2.0%. This example would be quoted as *"5/2/5"* caps (as opposed to "*2/2/5,"* an option that starts the annual cap after the fifth year.
- Some one-year adjustables have a 1.0% annual adjustment cap, including ARMs offered by FHA. The added protection of a lower adjustment cap is normally accompanied by a higher starting rate on that particular adjustable, as opposed to one-year adjustables with 2.0% adjustment caps.

The FHA 3/1 adjustable has a 1.0% annual cap after year three. The FHA 5/1 adjustable can be offered with a 1.0% annual cap after year five or a 2% annual cap. It is important to note that adjustment period caps limit increases and decreases each adjustment term. A 2.0% annual cap on a one-year adjustable dictates that the adjustable cannot decrease more than 2.0% in any year as well as limiting the increase to 2.0%.

2. *Life caps* give rate protection over the term of the mortgage. If a one-year adjustable has a starting *rate of 5.0% and a life cap of 6.0%, then the interest rate can never exceed 11.0% at any time during the mortgage term. Six percent is the most common life cap among adjustables though there are once again some common exceptions, including FHA one-year adjustables, which have a 5.0% life cap. Some monthly adjustables have "absolute" life caps that are not tied to the start rate. For example, the life cap may be set at 10.99%. Also popular during the subprime era, this option has not been popular after the fiscal crisis.*

### *Determining adjustable rates—the floor*

*Many who opt for adjustable rate mortgages assume the* starting rate may go down from the initial *teaser rate* of the adjustable. This is typically not the case. The starting, or *teaser* rate of the adjustable may actually also be the *floor* of the adjustable. A *floor* is the lowest rate that an adjustable rate mortgage can achieve. Because the starting rates of most adjustables are below market, the concept of a floor is typically not very significant. Using the example in the margin, we can see there is a teaser rate on this loan because the starting rate is 2.25% below the Fully Indexed Accrual Rate, or FIAR. Since the *floor* is also the starting rate, or 4.5%, the question is--

*"How low would the index have to go for the adjustable to drop below that 4.50% starting rate?"*

#### *Adjustable Rate Floor Example*

At each rate change, the new rate is determined by the index plus the margin. For example:

| | | |
|---|---|---|
| | Index | = 4.00% |
| | Margin | = 2.75% |
| | FIAR | = 6.75% |
| | Start rate | = 4.50% |
| | Floor | = 4.50% |
| — | Margin | = 2.75% |
| | Index at floor | = 1.75% |

As shown in the example, the index would have to be less than *1.75%* for the floor to take effect, which is a very large move on the downside. Also, note that the index would have to drop to 1.75% in order for the rate not to adjust upward at the next adjustment period. This is why teaser rates virtually assure rate increases in future years for ARMs.

### Which is more important—the margin or the caps?

Many borrowers tend to think that adjustables will increase as fast as the caps will allow them to increase. The reasons for this happening are two-fold:

1. Teaser rates have made future increases much more likely. As our discussion of adjustable rate mortgage *floors* has illustrated, most ARMs start below market and therefore make increases in the early years very likely. When the mortgage rate is increasing, it is more likely that the caps will be a factor.

2. We tend to think of the *worst-case scenario* when we think of ARM products. The *worst-case scenario* simply means that the adjustable will increase as fast as it is allowed to increase—the only constraint being the caps. In this scenario, there is no involvement by the margin-plus-index rate setting mechanism.

In a *real-world* scenario, sometimes the caps will constrain future movements of the adjustable rate mortgage and at other times the index and the margin will determine the rate. We can think of the index and the margin as telling us where the rate ***should*** go, with the caps telling us how far we ***can*** go. Think of the caps as a fence around the playground constraining how far a child can wander. The adjustment period cap is an inner fence that moves with the child and the life cap is an outer fence that remains in place forever. For loans with deep teaser rates, the early years will usually test the involvement of caps. After a few adjustments, the margin and index will become more important.

Let's take an example: Index History:

| Type | One year ARM | Year | Rate |
|---|---|---|---|
| Index | One year TCM | *1* | *4.25* |
| Margin | *2.75* | *2* | *5.00* |
| Starting Rate | *4.25* | *3* | *5.50* |
| Index at Start | *4.00* | *4* | *9.00* |
| FIAR | *6.75* | *5* | *9.50* |
| Annual Cap | *2.00* | *6* | *7.00* |
| Life Cap | *6.00* | | |

***One year ARM***

| | |
|---|---|
| Starting Rate | 5.00% |
| Caps | |
| Annual | 2.00% |
| Life | 6.00% |

**Worst Case:**

| Year | Rate |
|---|---|
| 1 | 5.00% |
| 2 | 7.00% |
| 3 | 9.00% |
| 4 | 11.00% |
| 5-30 | 11.00% |

The graph at the right shows the resulting rates over the first years of the loan. Here is how the rates are determined during the first six years.

Year 1. The first year's rate is the start rate of *4.25%*. The index and margin do not directly affect this rate.

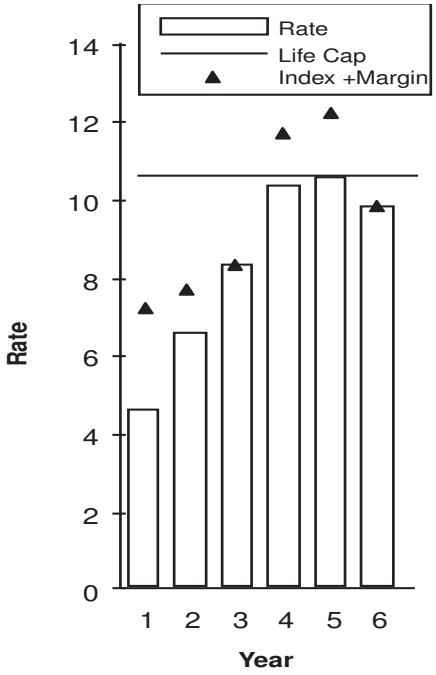
Year 2. The index plus the margin equals *7.75%*, which is more than *2.0%* above the starting rate of *4.25%*. The adjustment cap of *2.0%* is the limit. The new rate is *6.25%*.

Year 3. Index plus margin equals *8.25%*, which is the same as the *2.0%* allowable adjustment cap. The new rate is *8.25%*.

Year 4. Index plus margin equals *11.75%*, which is more than *2.0%* above the previous year's rate and the life cap. Therefore, the caps will rule. The new rate is *10.25%*.

Year 5. Index plus margin is *12.25%*. Last year's rate plus *2.0%* is *12.25%*. However, both of these rates are above the life cap. The rate stays at *10.25%*, the life cap.

Year 6. Index plus margin has dropped to *9.75%*. This is below the life caps and within the annual cap limits (which are up or down), so the ARM rate drops to *9.75%*.



During the period of the Great Recession and recovery, the Federal Reserve Board drove short-term rates down close to zero. Therefore, those who held adjustable rate mortgages during this period did not experience increases in rates as the index and margin were the primary determinants and not the caps. However, since many mortgages taken out during the subprime era were interest only, these homeowners were still subject to payment increases as the loans converted to fully-amortized.

**Three/One ARM**

| | |
|---|---|
| Starting Rate | 6.00% |
| Caps | |
| Annual | 2.00% |
| Life | 6.00% |

**Worst Case:**

| Year | Rate |
|---|---|
| 1-3 | 6.00% |
| 4 | 8.00% |
| 5 | 10.00% |
| 6-30 | 12.00% |

## The worst-case scenario

When a mortgage applicant opts for an adjustable rate mortgage the applicant often asks, *"What is the worst that can happen to me?"* This is a reasonable question to ask. If the adjustable rate mortgage goes up as fast as it can—yet is still palatable to the consumer—they are a good candidate for this type of mortgage. We call this the *worst-case scenario* for the adjustable. On the previous page, you will find illustrations of a few *worst-case scenarios* for particular ARM products.

It can be seen from these examples that the *worst-case scenario* is not affected by the margin or the index. The only factors are the starting rate and caps, as the ARM will increase as fast as the caps will allow. It does not matter if the index increases 2.0% each year or goes up to 50.0%.

Why would someone opt for an adjustable knowing that the worst case could happen? There are many reasons for this:

Perhaps the applicant will only own the home for a few years.
Perhaps the applicant's income will be increasing dramatically in the future.
Perhaps the applicant cannot qualify or afford the higher payments of a fixed rate mortgage. Note that "Qualified Mortgage" (QM) regulations implemented by the Consumer Finance Protection Bureau require qualification at the highest possible payment during the first five years.[25]

**Potential Negative Amortization**

| | |
|---|---|
| Type | Monthly ARM |
| Term | 30 year |
| Amount | $100,000 |
| Start Rate | 2.00% |
| (Fixed for 3 months) | |
| Caps | |
| Annual | None |
| Life | 10.99% |
| Payment[34] | 7.50% |
| First Three Months: | |
| Rate | 2.00% |
| Payment | $369.62 |
| Neg. Am. | $0.00 per mo. |
| Month 4: | |
| Payment (2.0%) | $369.62 |
| Fully Indexed | 5.0% |
| Payment at 5.0% | $536.82 |
| Neg. Am. | $167.20 For month 4 |
| Month 13: | |
| Payment (Up 7.5%) | $397.34 |
| Fully Indexed | 6.0% |
| Payment at 6.0% | $567.79 |
| Neg. Am. | $170.45 For Month 13 |

## Potential negative amortization

Thus far, all adjustables we have examined are examples of *positively amortized* mortgages. That is, every payment applied to the mortgage actually decreases the amount of principal that is outstanding until the mortgage is completely paid off at the end of the mortgage term. Most adjustable rate mortgages are either fully amortized 30-year mortgages but may be interest-only during a certain introductory period.

[25] Note that the payment cap is 7.5% of the payment, not the interest rate. For example, a $1,000 monthly payment with a 7.5% payment cap would have a cap of $75 for the next payment increase. This 7.5% figure is typical for ARMs with potential negative amortization and is roughly the amount of payment increase that would take place if the interest rate increases by 1% to 1.25%.

Earlier in our discussion of graduated payment mortgages, we introduced the concept of *scheduled negative amortization*. In the case of scheduled negative, the mortgage's principal balance actually increased during the early term of the mortgage and the increasing payments caused accelerated prepayments later in the mortgage term after the period of scheduled negative. The term *scheduled* refers to the fact that any increase in principal balance is known from the beginning of the mortgage term.

Adjustable rate mortgages can also allow for negative amortization. In the case of an adjustable, the future rate of the mortgage is not known and therefore the amount of negative amortization in the future is also not known at the mortgage's inception. This is why we say that the adjustable has the *potential for negative amortization*.

The feature of negative amortization in an adjustable rate mortgage is brought into play with the introduction of a *payment cap*. Quite simply, a payment cap will limit the amount that the payment can increase—usually each year. In a typical ARM, the payments are adjusted to fully amortize the mortgage each time there is a rate adjustment. In the case of an adjustable with potential negative amortization, one can limit payment increases, perhaps to less than is required by the new interest rate to fully amortize the mortgage. The example on the previous page illustrates the concept of a payment cap and negative amortization.

The first month's payment is the same as with any other adjustable rate mortgage—it is at the start rate and does not involve any negative amortization. In the fourth month, the required payment goes to the fully-indexed rate of 5.0%. With the payment still fixed at 2.0% for the first year, if the borrower elects to make the minimum payment, the negative will be $167.20 for the fourth month. Therefore, *$167.20* will be added to the loan balance, increasing the principal amount of the loan. At this rate (assuming the index does not change), the loan balance would be $101,504.80 at the end of year one. Assuming the balance does not go up for the sake of simplicity, if the full indexed rate goes up to 6.0% in the 13$^{th}$ month and the payment increases by the minimum allowable 7.5%, the negative will remain somewhat constant. We also need to take into consideration the following:

There is usually a limit by which the loan balance can increase over the life of the loan. This limit typically ranges from 110% to 125% of the loan balance. For example, if the original mortgage balance was $100,000 and the limit of increase was 110%, then the loan balance can never exceed $110,000. If this balance is reached, the required payment is adjusted accordingly.

Adjustable rate mortgages with potential negative amortization may require higher down payments than other adjustables because of the potential increase in mortgage balance. It should be noted that the payment cap is an option, not a requirement. Because there may be no prepayment penalties associated with this feature, one can always opt to make the full-required payment in any one year and the mortgage will not be subject to increase. Therefore, when one compares adjustable rate mortgages with negative features to others that do not have these features, one should simply remove the payment cap option before making the comparison of start rates, indices, margins and interest rate caps. Now how do the loans compare?

Loans with potential negative exploded in popularity during the period from 2002 to 2005 when the real estate boom peaked. Witnessing home prices rising rapidly, home buyers purchased as much home as possible, qualifying at a typical 1.99% payment rate. These "*Option ARMs*" not only required low payment rates but allowed interest-only payment options as well. Homes stopped appreciating in many areas during 2006 and the Federal Reserve had raised short-term rates over a two-year period

which resulted in increased fully-indexed rates. The result? Many who had obtained these "no-money" down mortgages wound up owing more than the homes were worth and also were squeezed by increases in required payments. The Federal Government has started requiring lenders to disclose the risks on these types of instruments and many lenders moved to start qualifying borrowers at fully indexed rates to make sure the borrowers not only understood the risks, but could withstand the results of potential rate increases. In the wake of the crisis and the implementation of Qualified Mortgage Rules, these mortgages have just about disappeared from the market.

## Conversion features

Some adjustable rate mortgages have *conversion features*, which is the ability to convert the mortgage from an adjustable to a fixed rate at some juncture during the loan term. Similar to negative amortization, a conversion feature is an option that does not have to be utilized. When shopping for a conversion feature on an adjustable rate mortgage, one should consider:

What is the front-end cost of the conversion feature? Unlike potential negative amortization, the major components of the mortgage are not likely to change because of this feature. The caps, margin, and index are all likely to stay the same, but many adjustables with conversion options may cost more than comparable instruments without these options, usually in terms of a higher starting rate and/or points. One must compare these costs to the potential benefit of the option to determine if the option of converting to a fixed rate makes sense in terms of the extra cost.

*What is the back-end cost of converting?* Though most conversions do not require the typical costs of refinancing, there is usually a flat fee at the time of conversion. This fee can range from $250 to $1,000 or more. Because you do not have to utilize the option to convert to a fixed rate, you will not incur this fee unless you actually utilize the conversion feature. Since incurring the back-end fee is not certain, it may not be as significant as a front-end cost that definitely will be incurred at the inception of the mortgage.

*What is the window of conversion?* Most convertible adjustable rate mortgages do not allow one to convert at any time. Most allow conversion at the time of rate adjustment (annually on a one- year adjustable) and may also limit the years in which conversion may be effected. For example, a typical conversion feature may allow conversion on the second through fifth *anniversary* dates. In this case, the term anniversary date is utilized to describe the first day of the month each full year after the mortgage inception.

*What is the fixed rate of conversion?* The mortgage will convert to the market for fixed rates at the time of conversion. This is likely to be higher than the adjustable's interest rate at that particular juncture. How is the rate of conversion figured? There is actually an index and margin within the conversion feature that will be specified in the initial program disclosure at loan application. Usually the index will be one that measures conventional fixed rates purchased by Fannie Mae or Freddie Mac. A fixed margin amount is added to the index value in order to set the rate. Typically, the margin is in the neighborhood of 0.625% on conforming loans and 0.875% to 1.125% on jumbo loans. There may be no cap on the rate of conversion. This means that if market fixed rates are 20%, then the loan will convert at that rate.

*Can the lender keep you from converting?* The answer is yes! If the mortgage payment history shows late payments or the loan is not current at the time of conversion, the note usually

provides for removal of the option to convert. There may be other restrictions, so it pays to read loan disclosures carefully.

- *Is converting better than refinancing?* Though refinancing may actually cost more than converting, one should check the market for available interest rates through refinancing before one converts. The minimal amount of costs for conversion and the associated interest rate should be compared to the heavier cost of refinancing and interest rates associated with refinancing. In addition, there may be many options available when refinancing that are not available when converting, for example, using equity to pay for debts or other purposes (cash out refinance).

## Reverse mortgages

Of the available reverse mortgage programs, the one offered through the Federal Housing Administration (FHA) is by far the most popular as Fannie Mae eliminated their option in the wake of the financial crisis. The formal name for FHA reverse mortgages is The Home Equity Conversion Mortgage, or HECM. A reverse mortgage lends on the basis of a homeowner's equity in a home. The homeowner does not need monthly income to qualify for the mortgage program nor do they make payments on the loan until the home is sold, the borrower becomes deceased, or permanently moves away. In 2013, FHA announced plans to implement a financial analysis for applicants (see Chapter 2). This use of this assessment was implemented in 2015 and if the homeowner does not show the income necessary to pay for the real estate taxes and insurance for the home, the lender must either set aside money to make the payments on these expenses or withhold money from the monthly payments or take proceeds from the HELOC to pay these expenses. Before this rule was implemented, lenders shied from offering this program because seniors defaulted on the taxes and insurance payments which put the lender in the unenviable position of foreclosing on seniors who may have no place to go.

If one were to borrow $50,000 under a traditional mortgage program, the homeowner would need an annual income of $30,000 or more. Many seniors own their home outright, but many do not have the income stream to support themselves. This presents a *catch 22:* sitting on equity that they need but cannot touch. A reverse mortgage makes this equity accessible without selling the home.

Reverse mortgages present three major opportunities for homeowners and under the FHA-sponsored program the homeowner may opt for a combination of alternatives—

- They can receive a lump sum of cash. This is identical to receiving cash from a first or second mortgage refinance—except that there are no monthly payments required.
- They can opt for an open line of credit. Home equity lines of credit (HELOCs) are very popular in America today. Once again, the major difference with regard to reverse mortgages is that a monthly payment is not required.
- They can opt for a monthly income. This monthly payment from the lender would continue until the borrower becomes deceased, the home is sold, or the homeowner permanently moves away.

More lenders are providing this option for their applicants in recent years. Resources for learning more about reverse mortgages include, The National Reverse Mortgage Lenders Association (NRMLA), *Your New Retirement Nest Egg: A Consumer Guide to the New Reverse Mortgages*

NCHEC Press) by Ken Sholen and *The Reverse Mortgage Handbook* by T.E. Ballman (Jawbone Publishing Corp.)

The costs associated with setting up a reverse mortgage can make the loan a very expensive option if a small amount of money is utilized and/or the homeowner uses the money for a very short period of time. The issue of disclosing costs has been debated for some time and is partially solved by a law that requires lenders to provide a Truth-in-Lending disclosure, or TALOC (Total Annual Loan Cost). Higher overall borrowing costs for small loan amounts or a shorter term is germane to all lending but is especially complex when dealing with the added complexity of a reverse mortgage. Because of this factor, a "forward" home equity line of credit may be a better alternative for many seniors.

There are strict limitations on the amount of the home's equity that can be utilized. Under regular guidelines FHA allows a cash-out refinance of up to 85% of the home's value but under HUD's reverse

program the homeowner may be able to tap only 40% or less of the value, depending upon factors that include the expected life of the homeowner. There is no free lunch—if no mortgage payments are being made the lender needs an extra margin of security.

With the graying of America already underway, reverse mortgages promise to continue growing in popularity. Once thought to be only for seniors who have no other financial options, reverse mortgages are now increasingly being used as financial planning tools such as funding long-term care policies or for reducing estate taxes. Because of this need, in 2008 Congress passed legislation allowing for a higher national loan limit of $417,000 and the limit was raised to $625,000 by the Economic Stimulus Act. In 2008, FHA also released rules allowing the use of the HECM for purchases. In 2021, this limit was raised to $822,375 to coincide with the increase in conforming mortgage limits. Additional conventional sources of reverse mortgages have become available more recently.

Another issue which was addressed by FHA in 2015 concerns surviving spouses. If the older spouse obtains a reverse mortgage without their younger spouse and the older spouse dies, the loan must be paid off. In essence, FHA would require foreclosure on the surviving spouse, which was untenable to lenders. Now, lenders have the ability to let the surviving spouse remain in the home, but they cannot access any available funds from the reverse mortgage. In addition, in 2018, FHA started requiring a second appraisal for certain reverse mortgage applications.

In recent years, conventional reverse mortgage alternatives have been introduced in the marketplace. Options have included loan amounts above the FHA loan limits (jumbo reverses) and reverse second mortgages. It remains to be seen if these new options will be widely utilized.

# 4

# Mortgage Qualification: Ratios, Residuals and Credit Scores

One of the most important functions for a loan officer is to qualify a client for a potential refinance or purchase transaction. In this case, the loan officer must be able to determine whether their company can finance the transaction, and also advise as to whether the transaction is viable and suitable for the client.

***Mortgage math***

| Residual | Ratios |
|---|---|
| • VA mortgages | • All conventional mortgages |
| • Some jumbo mortgages | • FHA mortgages |
| | • Partial standard for VA mortgages |

There are a multitude of variables that factor into the consideration of one's qualifications for a mortgage loan: credit, amount of down payment, cash reserves, job stability, the property, etc. Some of these factors can move into the realm of subjectivity. Overriding the whole process are mathematical calculations that actually dictate the major portion of the decision-making process: credit scores, ratios and residuals. Other factors are actually minimum standards: for example, minimum cash reserves. In other words, if the mathematics meet program standards, as long as the applicant meets other minimum standards the mortgage will be approved. It should be noted that increased reliance on automated underwriting systems (AUS) has decreased the industry's reliance upon ratio and residual calculations and increased the industry's reliance upon credit scoring—though the reliance upon ratios has made a comeback more recently, especially with the advent of the Qualified Mortgage Regulations.

If the ratios and/or credit scores do not meet standards, there must be other overriding considerations, for example, a very large down payment or excess cash reserves. These additional considerations are called *compensating factors*. A compensating factor is actually a positive attribute that outweighs the negative factors within the application.

In this chapter, we deal with the calculation and understanding of ratios, residuals and credit scores—the basis of qualification for almost all mortgages.

## The ratio method of qualification

The philosophy of the ratio method of qualification is simple: a certain percentage of income is allowed to be allotted to housing expense and other monthly liabilities, or debts. If you are renting an apartment, you may be informed by the leasing agent that you qualify for a rent payment of *one weekly paycheck out of the month.* The leasing agent would be generally describing a ratio of 25%: one quarter of the monthly income can be attributed to the housing expense.

In calculating mortgage ratios, we use the *gross monthly income*, or *GMI*, which represents the income before all taxes are taken out.

Simply put: *$48,000* annual salary equals *$4,000* gross monthly income ($48,000 divided by 12)

It is the gross monthly income that serves as the denominator for the calculation of all mortgage ratio calculations.

There are actually two ratios calculated with the gross monthly income as the denominator for most mortgage programs:

- Housing, first, front, or inside ratio
- Debt, second, back, or outside ratio

$$\frac{\text{XYZ}}{\text{Gross Monthly Income (GMI)}}$$

## The housing ratio

The numerator of the housing ratio will be the monthly mortgage payment and any association dues required if the property is located in a condominium or planned unit development project. Let us review the components of a monthly mortgage payment:

## The monthly mortgage payment (PITI + HOA)

- **PI**-Monthly principal and interest payment
- **T**-Monthly real estate property taxes
- **I**-Monthly insurance payments:
- Monthly homeowners (and flood) insurance for all properties except condominiums
- Monthly mortgage insurance for all FHA mortgages and conventional mortgages with less than a 20% down payment (unless there is a second mortgage or lender-paid insurance)
- **HOA**- Monthly condominium or homeowner's association dues (and any special assessments)

***The monthly mortgage payment***

| | | |
|---|---|---|
| $95,000 | | Conventional mortgage |
| $100,000 | | Sales price |
| 5.0% | | Interest rate |
| $1800 | | Annual real estate property taxes |
| $240 | | Annual homeowner's insurance |
| $30 | | Monthly homeowner's association dues |
| PI | = | $510.00 (rounded) |
| T | = | $150.00 |
| I | = | $20.00 (Homeowners Insurance) |
| | | $60.00 (Mortgage Insurance) |
| HOA | = | $30.00 |
| PITI | = | $770.00 (incl. HOA) |

Now that we have the ability to calculate the numerator and the denominator of the housing ratio, we can calculate the ratio.

$$\frac{\$770.00}{\$4,000} = 19.25\%$$

In the example to the right, we say that the applicant's housing ratio is *19.25%*. The next question is, is that ratio acceptable? Unless there is another very negative factor, in most cases the applicant would be considered very well qualified.

***Maximum acceptable housing ratios***

- 28% for conforming
- 31% for FHA
- 33% to 38% for low-to-moderate income programs
- 33% for some jumbo and conforming programs with minimum 10% down payment

It should be noted that the calculation of housing ratios may be adjusted at times in the case of the purchase or refinance of a property located within a condominium. The monthly condominium association fees commonly include part or all of the utilities of the unit. If one were purchasing a single-family home, we would not include utilities in the housing ratio. If we included the total condominium fee in the housing ratio, there would be utility expense included in the calculation. In the example on the following page we show an example of such a reduction.

## The debt ratio

***Reducing a condo fee***

| | |
|---|---|
| PITI | $1,000 |
| Monthly condo fee | $250 |
| PITI + condo fee | $1,250 |
| Monthly income | $3,000 |
| Housing ratio | 41.66 |
| Condo fee | $250 |
| Monthly association budget | $10,000 |
| Utilities portion of budget[26] | $5,000 |
| Percentage | 50% |
| Condo fee after reduction | $125 |
| PITI + reduced fee | $1,125 |
| New housing ratio | 37.50 |

The debt ratio is also known as the *back, outside, or second* ratio. This ratio calculation adds monthly liabilities with more than ten months remaining to the housing expense to calculate the total monthly indebtedness of the applicant. It should be noted that car leases and credit card payments would always be counted regardless of the length of time left on the debt. *In recent years, the "debt" or "back" ratio has taken on more importance in underwriting guidelines as compared with the housing ratio. As a matter of fact, many programs only publish the maximum debt ratio as a standard.*

- Monthly expenses for medical, life, and auto insurance are not considered liabilities included in the debt ratio;
- Installment loans and the monthly payments on credit cards are considered liabilities included in the debt ratio. In each of these cases, the applicant is *paying on a debt*.
- The one monthly expense that can sometimes fall into the *debt* column is child-care. Generally, child-care is not counted as a monthly debt for conventional mortgages. Child-care is more likely to be counted as a debt under under VA qualification calculations.

$$\frac{\text{PITI + HOA + Debts}}{\text{Gross Monthly Income}} = \text{Debt Ratio}$$

***Maximum acceptable debt ratios***

- 36% for conforming mortgage programs
- 38% to 40% for low to moderate income programs and many jumbo mortgages with minimum 10% down payment
- 41% for VA
- 43% for FHA
- 50% for some non-conforming/subprime programs

26The utilities portion of the budget might, as a loose interpretation, include garbage collection, water, electricity, gas or any other expense that a single-family homeowner would have to pay out of pocket but we would not normally include in the housing expense in our calculation of the housing ratio.

- Monthly child support, separate maintenance, or alimony pursuant to a legal separation agreement and/or divorce decree would be considered a monthly debt in qualification calculations.

- One type of monthly debt that can sometimes become part of the income calculation is a *rental negative* on a rental property owned by the applicant. To calculate the rental negative, one would take the income on the rental property from the rental lease and subtract the monthly mortgage payment including taxes, insurance and any homeowner's association fees. In most cases, the rental income would be reduced by 25%, which is referred to as a *vacancy and maintenance factor*. If the rent is positive, the income would be added to the gross monthly income. Most lenders will consider or require taking the rental negative (or income) directly from the Schedule E of the applicant's tax returns in lieu of using a 25% vacancy factor.

***Rental negative***

Monthly income: $1,000
Vacancy factor: (-) 25%
Net income: $750
Monthly PITI: (-) $800
Rental negative: ($50)
(to be included as a debt)

## The debt ratio calculation

$936.26 PITI
$30.00 HOA Fee

$300.00 Monthly Car Payment

$100.00 Monthly Credit Card Payments (typically we use 5.0% of the outstanding balance, or the minimum payments from the credit report)

$100 Personal Loan

Debt Ratio: $\dfrac{\text{PITI + HOA + Debt}}{\text{GMI}}$

$$\frac{\$938.26 + 30.00 + 500}{\$5{,}000} = 29.38\%$$

***Housing and debt ratios***

Together we express common housing and debt ratios as follows:

- 28/36 for conventional mortgage programs
- 33/38 for some jumbo programs
- 31/43 for FHA mortgages
- 41 debt ratio only for VA mortgages

Note that most programs would consider installment debts with ten or less months remaining to be short-term and would not count as a debt in the back ratios. However, if the debt is significant and there are not adequate cash reserves, the debt may still be counted.

## Pre-qualification using ratios

Thus far, we have simply been attempting to answer the question:

*Does the applicant qualify for the proposed mortgage payment?*

This question assumes that the house, mortgage amount and interest rate are known. Suppose these become unknown variables? Suppose someone wants to know how large a mortgage or home purchase for which they qualify—before the home or loan program is identified? This is typically the process one would follow in a visit to a real estate office—the process of pre-qualification.

Pre-qualification refers to the process of qualifying for a hypothetical purchase or refinance transaction before the transaction actually takes place. It is the answer to these questions:

*How large a mortgage will I qualify for? How expensive a house can I afford?*

The mathematical process of pre-qualification actually involves working through the ratio calculations backwards. We know the income level, but we want to determine the maximum mortgage payment and maximum mortgage amount for which the potential borrower qualifies.

Here are the ratios:

$$\text{Housing Ratio: } \frac{\text{PITI + HOA}}{\text{GMI}}$$

Now let's work backwards using hypothetical ratios:

Housing Ratio: GMI x 28% = PITI + HOA
Debt Ratio: GMI x 36% = PITI + HOA + Debts

Explanation: We are taking the gross monthly income of the applicant and multiplying by the maximum housing and debt ratios (in this case 28/36). This yields the maximum mortgage payment and the maximum mortgage payment with debts. Let us take an example:

Income: $5,000 Monthly

Debts: $500 Monthly

How large a mortgage payment will the above scenario support?

Housing Ratio: $5,000 x 28% = $1,400 = Maximum PITI + HOA

Debt Ratio: $5,000 x 36% = $1,800 - $500* = $1,300 = Maximum PITI + HOA

*Since the monthly debts are $500, we subtract $500 from $1,800 to arrive at the maximum mortgage payment as dictated by the second, or debt, ratio. The maximum mortgage payment is actually the lower of these two figures: in this case $1,300. If we used the $1,400 figure, the second ratio would be too high:

Debt Ratio: $1,400 + $500 divided by $5,000 = 38.0% (exceeds 36%).

## *Interest Rate Factors*

**Monthly P&I Payment per $1,000 of Loan Amount**

| | Mortgage Term | | |
|---|---|---|---|
| **Int. Rate** | **30 Year** | **20 Year** | **15 Year** |
| 3.0% | 4.22 | 5.55 | 6.91 |
| 3.5% | 4.49 | 5.80 | 7.15 |
| 4.0% | 4.77 | 6.06 | 7.40 |
| 4.5% | 5.07 | 6.33 | 7.65 |
| 5.0% | 5.37 | 6.60 | 7.91 |
| 5.5% | 5.68 | 6.88 | 8.17 |
| 6.0% | 6.00 | 7.16 | 8.44 |
| 6.5% | 6.32 | 7.46 | 8.71 |
| 7.0% | 6.65 | 7.75 | 8.99 |
| 7.5% | 6.99 | 8.06 | 9.27 |
| 8.0% | 7.34 | 8.36 | 9.56 |
| 8.5% | 7.69 | 8.68 | 9.85 |
| 9.0% | 8.05 | 9.00 | 10.14 |
| 9.5% | 8.41 | 9.32 | 10.44 |
| 10.0% | 8.78 | 9.65 | 10.75 |

Multiply the loan amount divided by $1,000 to obtain principal and interest payment.

**Table 4-1**

When using two ratios, the debt ratio will always be the controlling ratio if the debt exceeds the maximum allowed, which in this case is 8.0% (36.0% minus 28.0%). If the total debts are less than 8.0% of the income, then the housing ratio will be the lower of the two in this example. *In addition, keep in mind as we previously stated that recently most lenders are looking at one ratio ---the debt ratio – more closely and this leads us to a simpler approach—with one equation.*

Using the Qualified Residential Mortgage Standard of a 43% back ratio:

Income: $5,000 Monthly
Debts: $500 Monthly

$5,000 x .43 = $2,150 Max Mortgage Payment & Debt
$2,150 - $500 = $1,650 Max Mortgage Payment

The maximum mortgage payment by itself does not yield information that is very useful. What most potential home purchasers want to know is:

*How large a mortgage can I qualify for?*

We need to convert the maximum mortgage payment to a maximum mortgage amount. Of course, there are some very important variables:

- What is the interest rate of the mortgage?
- What is the term of the mortgage?
- What are the monthly taxes, insurance, and homeowner's association dues?

Here are the assumptions:

- A market rate of interest for a fixed rate, which is the most common mortgage (In this case we will use 5.0%).
- Thirty-year amortization because this is the most common mortgage choice.
- Taxes, insurance and HOA dues represent 20% of the total mortgage payment.

Calculation Example:

1. Maximum mortgage payment: $1,300.
2. Maximum mortgage payment minus taxes, insurance, and HOA dues: $1,040 ($1,300 x 80%).
3. Maximum mortgage at 5%: $193,669 ($1,040 divided by 5.37 multiplied by 1,000, (5.37 is the interest rate factor for a 5.00%, 30-year mortgage). *Keep in mind that this example does not include mortgage insurance which may be required.*

Our pre-qualification efforts should include an extra calculation designed to answer a second question: *If the maximum mortgage amount is not enough to qualify me to purchase the house I want, by how much does the interest rate have to be reduced in order to qualify?*

In the above case, we have pre-qualified someone for a mortgage amount of $193,669. Let's assume that the applicant needs a mortgage amount of $225,000 and does not have the *compensating factors* to exceed the ratios and still achieve loan approval. In this case:

Maximum Mortgage Payment: $1,040

Mortgage Amount Needed: $225,000 1,040 divided by 165 = 4.62

If we look on the payment factor chart located in Table 4-1, 4.62 is the payment factor on a 30-year mortgage at 3.75% (between 3.5% and 4.0%). Therefore, the interest rate would have to be reduced from 5% to approximately 3.5% (either through an adjustable rate mortgage or a temporary buydown) in order for the purchaser to qualify. *Keep in mind that these instruments may not qualify at the lower rate.*

If one finds these calculations cumbersome, the following tables simplify this process. First, Table 4-2 allows you to take a maximum mortgage payment and convert it to a mortgage amount at different interest rates. It assumes that taxes, insurance, and homeowner's association dues will be 20% of the total mortgage payment.

Table 4-3 which follows the section on Credit Scoring actually qualifies typical incomes. It starts with an income, multiplied by the standard housing ratio of 28% and gives maximum mortgage payments, maximum mortgage amounts and maximum monthly debts allowed at that payment (assumed to be 8% of income, or the difference between 28% and 36%). To use this table, find the column with your approximate income, and the row with your approximate interest rate, and find the cell where these two intersect. This cell contains three values. The top value in that cell is the

## *Mortgage Amounts for Given Payments*

Assuming 80% of total payment is for Principal and Interest (P&I)
and a 30-year fixed-rate loan

| | **Total Mortgage Payments (PITI)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Interest Rate** | **$500** | **$800** | **$1,000** | **$1,200** | **$1,500** | **$2,000** | **$2,500** | **$3,000** |
| 4.0% | 83,857 | 134,172 | 167,715 | 201,258 | 251,572 | 335,430 | 419,287 | 503,145 |
| 4.5% | 78,895 | 126,232 | 157,791 | 189,349 | 236,836 | 315,581 | 394,477 | 473,372 |
| 5.0% | 74,513 | 119,220 | 149,025 | 178,830 | 223,538 | 298,051 | 372,563 | 447,076 |
| 5.5% | 70,449 | 112,718 | 140,897 | 169,077 | 211,346 | 281,795 | 352,244 | 422,692 |
| 6.0% | 66,717 | 106,747 | 133,433 | 160,120 | 200,150 | 266,867 | 333,583 | 400,300 |
| 6.5% | 63,284 | 101,255 | 126,569 | 151,882 | 189,853 | 253,137 | 316,422 | 379,706 |
| 7.0% | 60,123 | 96,197 | 120,246 | 144,295 | 180,369 | 240,492 | 300,615 | 360,738 |
| 7.5% | 57,207 | 91,531 | 114,414 | 137,297 | 171,621 | 228,828 | 286,035 | 343,242 |
| 8.0% | 54,513 | 87,221 | 109,027 | 130,832 | 163,540 | 218,054 | 272,567 | 327,080 |
| 8.5% | 52,021 | 83,234 | 104,043 | 124,851 | 156,064 | 208,086 | 260,107 | 312,129 |
| 9.0% | 49,713 | 79,540 | 99,425 | 119,311 | 149,138 | 198,851 | 248,564 | 298,276 |
| 9.5% | 47,571 | 76,113 | 95,141 | 114,170 | 142,712 | 190,283 | 237,853 | 285,424 |
| 10.0% | 45,580 | 72,929 | 91,161 | 109,393 | 136,741 | 182,321 | 227,902 | 273,482 |

**Table 4-2**

maximum mortgage amount, the middle value is the maximum monthly mortgage payment amount, and the bottom value is the maximum monthly debts allowed at the given payment amount.

## Credit scores and automated underwriting systems

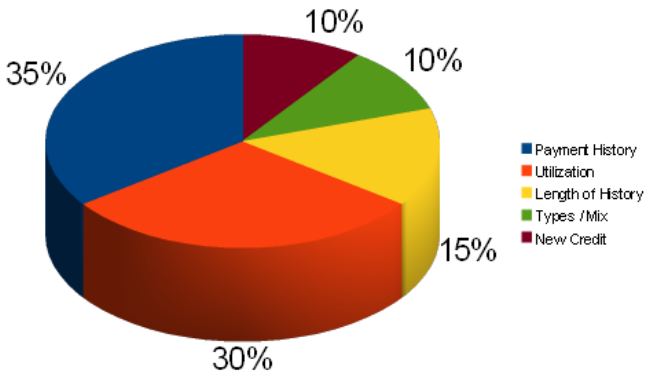
During the past decade, lenders have overwhelmingly used automated credit scores to determine whether a borrower's credit history meets loan approval. Though credit scores alone do not constitute the only decision-making factor, they can be an overriding factor within the overall approval process when minimum credit sores are set for a loan program. Basically, automated systems are able to look at the facets of a credit history from a standpoint of predicting whether a particular consumer represents an unreasonable risk of defaulting on the loan. The analysis of the performance of thousands of mortgage payment histories matched to their owner's credit histories enabled Fair Isaac and Co. (FICO scores) to develop what are called *credit scores*. The FICO scores can also be referred to as Equifax (Beacon), TransUnion (FICO Risk Score), and Experian (FICO Risk Score) depending on which national credit data repositories report these scores. And it should be noted that because all data is not the same at each repository, the scores from each will vary. Typically, lenders will use the "middle score" to qualify a borrower.

The good news is that evaluating a credit history is no longer as subjective a process. If a borrower has a low FICO score (below 680), they are considered a high credit risk. If they have a high FICO score (over 740), they are considered a below average risk. It should be noted that these standards changed as the credit crisis worsened.

What does this mean for the consumer? The information that determines credit scores is compiled by credit bureaus that have been scrutinized for not being accurate at all times. Therefore, it is incumbent upon all consumers to review their credit information and correct all inaccuracies. Remember the automated adage always applies: *garbage in, garbage out*. If on is buying a home, they should also realize that even if loan programs exist for those with lower scores, these may require higher rates or larger down payments. In an effort to "demystify" the process, in June of 2000, Fair Isaac and Company made public a list of the factors used in determining credit scores as well as introducing a web-based service to explain individual credit scores (www.myfico.com). This explanation indicates that the most important factors determining credit scores are payment histories and amounts owed on credit accounts.

It should be noted that there are a multitude of credit scores which exist in the world of financial services today:

- Scores for different types of industries such as automobiles and credit cards:
- Scores which are produced by different companies (see Vantage Score);
- Scores that are produced by previous versions. You may read about a new model introduced by Fair Isaac, but it may take several years for the new model to be integrated and used by lenders.




The Fair and Accurate Credit Transactions Act modified the Fair Credit Reporting Act in 2003 to require that credit reporting agencies respond to requests within 30 days if consumers challenge negative or inaccurate credit being reported on their report. This Act also entitled each consumer to a free credit report annually. Regulations implementing these provisions were published in late 2004.

In 2006, Equifax, Experian and TransUnion announced the introduction of "VantageScore" a new credit scoring system using the same measure of risk assessment. This new score is designed to reduce the "variation" between measures as reported by the three credit repositories. The score has not been widely used by mortgage lenders.

Fannie Mae and Freddie Mac have incorporated credit scoring into their credit evaluation process. They have set minimum credit scores for conventional conforming loans they will purchase, as well as setting up "risked-based" pricing or "loan level" pricing adjustments which charge higher for lower credit scores. FICO scores below the minimums set by the agencies often will fall within the categories of A- to D credit non-conforming lending. There is more information regarding non-conforming mortgages in Chapter 2. In the aftermath of the financial crisis, there have been fewer alternatives available for those with lower credit scores.

FHA does not set a minimum credit score; however, many lenders do set a minimum credit score for FHA loans they will approve based upon secondary market requirements which determine whether a loan can be sold. Late in 2010, FHA implemented a minimum credit score of 580 for loans with less than a 10% down payment. However, like conforming loans, government loans are likely to be underwritten by automated underwriting systems and this in effect brings credit scores into play for government loans.

It should be noted that the existence of inaccuracy of data, as well as systematic issues have created some inconsistencies within credit scoring findings. A big drawback in the system is caused by the fact that major determinants of credit capacity—income and assets—are not entered into the equation. This means that a higher income individual may show a lower credit score with perfect credit because his/her income level allows for a greater amount of open credit. Self-employed individuals may also be adversely affected because the system cannot distinguish between business expenses paid through personal accounts. An owner of a small business may run $10,000 or more monthly through his/her personal credit cards. In this case, a lender may allow removing these debts from the back ratio calculation with proof of payment from a business account. However, the cards cannot be removed

from the score calculation. This makes it imperative that homeowners make sure that the information on their reports is accurate as well as considerable manual review by underwriters.

We have already mentioned automated underwriting systems (AUS) several times. While credit scores are an important factor in the decisions that these systems produce, it should also be noted that these systems have made underwriting less reliant upon ratios as the prime determinant. Often these automated systems will favorably refer loans with ratios much higher than the maximums we have previously presented, assuming there are positive factors such as high credit scores and additional down payments and/or reserves. Though there are some loan programs that publish strict ratio guides, such as state bond programs.

The most popular systems are employed by the conforming agencies: Desktop Underwriter® for Fannie Mae and Loan Prospector® (now known as Loan Product Advisor®) for Freddie Mac. It should be noted that even though these systems are sometimes called "decisioning engines," they do not issue loan approvals, but provide findings that make it easier for lenders to issue an approval with less risk when selling the loan in the secondary markets. Of course, some findings make it more likely a lender will delve deeper into a file, or manually underwrite the file, before issuing an approval.

## *Mortgage Qualification by Income and Interest Rate*

Assuming 28% of income for house payment, 8% for debts, and a 30-year fixed-rate loan

| | Monthly Income | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Interest Rate** | **$1.500** | **$2,000** | **$2,500** | **$3,000** | **$4,000** | **$5,000** | **$7,500** | **$10,000** |
| 4.0% | 88,050[1] | 117,400 | 146,751 | 176,100 | 234,801 | 293,501 | 440,252 | 587,002 |
| | $420[2] | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120[3] | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 4.5% | 82,820[1] | 110,454 | 138,067 | 165,680 | 220,907 | 276,134 | 414,201 | 552,268 |
| | $420[2] | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120[3] | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 5.0% | 78,238[1] | 104,318 | 130,397 | 156,477 | 208,635 | 260,794 | 391,191 | 521,589 |
| | $420[2] | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120[3] | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 5.5% | 73,971 | 98,628 | 123,285 | 147,942 | 197,256 | 246,570 | 369,856 | 493,141 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 6.0% | 70,052 | 93,403 | 116,754 | 140,105 | 186,807 | 233,508 | 350,262 | 467,017 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 6.5% | 66,449 | 88,598 | 110,748 | 132,897 | 177,196 | 221,495 | 332,243 | 442,990 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 7.0% | 63,129 | 84,172 | 105,215 | 126,258 | 168,344 | 210,431 | 315,646 | 420,861 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 7.5% | 60,067 | 80,090 | 100,112 | 120,135 | 160,180 | 200,225 | 300,337 | 400,449 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 8.0% | 57,239 | 76,319 | 95,398 | 114,478 | 152,638 | 190,797 | 286,195 | 381,594 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 8.5% | 54,623 | 72,830 | 91,038 | 109,245 | 145,660 | 182,075 | 273,113 | 364,150 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 9.0% | 52,198 | 69,598 | 86,997 | 104,397 | 139,196 | 173,995 | 260,992 | 347,989 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 9.5% | 49,949 | 66,599 | 83,249 | 99,898 | 133,198 | 166,497 | 249,746 | 332,995 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |
| 10.0% | 47,859 | 63,812 | 79,766 | 95,719 | 127,625 | 159,531 | 239,297 | 319,062 |
| | $420 | $560 | $700 | $840 | $1,120 | $1,400 | $2,100 | $2,800 |
| | $120 | $160 | $200 | $240 | $320 | $400 | $600 | $800 |

1 = Maximum Mortgage Amount 2 = Maximum Monthly Mortgage Payment 3 = Maximum Monthly Debts

**Table 4-3**

## The residual method of qualification

While the ratio method of qualification calculates a percentage of income that can be applied to the housing and debt payments of an applicant, the residual method of qualification actually attempts to more directly calculate whether the applicant can afford the monthly mortgage payment. We can think of the residual method of qualification as the *family budget method*. That is, we take the income and subtract all expenses including the mortgage payment. If there is a positive *residual*, the applicant qualifies. If there is a negative *residual*, the applicant does not qualify.

***Residual method***

Gross monthly income

(-) Income and payroll taxes

(-) Monthly debts

(-) Family support

(-) Housing expense

= (+) or (-) Residual

Almost everyone can relate to the calculation of a family budget: income minus expenses. Yet, the calculation of the residual method is much more tedious than the ratio method because of the number of expenses that must be subtracted from the income:

- Federal and State income taxes
- Social Security
- Rental negative
- Child support
- Family Support
- Monthly debts
- Property taxes
- Utilities
- Housing maintenance
- Association fees
- Principal and interest

**VA Family Support Table of Residuals**

| Family Size | Northeast | Midwest/South | West |
|---|---|---|---|
| 1 | $390/$450 | $382/$441 | $425/$491 |
| 2 | $654/$755 | $641/$738 | $713/$823 |
| 3 | $788/$909 | $772/$889 | $859/$990 |
| 4 | $888/$1,025 | $868/$1,003 | $967/$1,117 |
| 5 | $921/$1,062 | $902/$1,039 | $1,004/$1,158 |

- First number is for loan amounts below $80,000.
- Add $75/$80 of each additional family member up to a family of 7.
- Northeast States: Connecticut, New Hampshire, Pennsylvania, Maine, New Jersey, Rhode Island, Massachusetts, New York, Vermont.
- West States: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.
- All other states are Midwest or Southern.
- Active duty servicemen or their families living close to a base and receiving benefits of such can reduce required residual by 5.0%.

**Table 4-4**

The cumbersome method of calculation may very well be a major reason why the majority of the industry has adopted the ratio method of qualification over the residual method. VA is the only major mortgage source continuing to rely on the residual method, though residual method continues to be an acceptable demonstration of affordability when a mortgage applicant needs to show compensating factors to exceed acceptable ratios on jumbo mortgages and to demonstrate affordability for first-time low-to-moderate income purchasers as well. FHA has specifically addressed the residual method of qualification as a compensating factor for higher ratios.

| | |
|---|---|
| Monthly income: | $10,000 |
| Monthly debts: | $2,000 (Alimony payment) |
| Monthly PITI: | $2,500 |
| Debt ratio: | 45% |

In the above case, the debt ratio of 45%, is higher than the acceptable 43% for conventional ratios. From a residual point of view, however, it can be seen that the applicant has plenty of disposable income, especially because the alimony payment is tax deductible:

| | | | |
|---|---|---|---|
| Monthly Income: | | $10,000 | |
| Taxes: | (-) | $ 2,000 | |
| Debts: | (-) | $ 2,000 | |
| PITI: | (-) | $ 2,500 | |
| Residual: | | $ 3,500 | For utilities, maintenance, family support |

## Qualified mortgages

The passage of the Dodd-Frank Act in the wake of the financial crisis of 2007-2009 had far-reaching influence within all financial services industries, including the mortgage industry. The Act created a new agency – the Consumer Financial Protection Bureau – which subsequently began issuing regulations implementing provisions of the Act. In January of 2014, the Qualified Mortgage Rules were put into effect. These rules were designed to ensure that mortgages were safer instruments so that consumers were protected and investors were more likely to purchase these mortgages in the secondary markets. One negative effect of the financial crisis was the fact that private capital left the mortgage markets and the government had to assume this responsibility. One goal of the law was to restore confidence of investors so that there was always an ample supply of mortgages available without the government permanently becoming the "financier" of housing.

Mandatory product feature requirements for all QM loans include:

- Points and fees are less than or equal to 3% of the loan amount (for loan amounts less than $100k, higher percentage thresholds are allowed);
- No risky features like negative amortization, interest-only, or balloon loans:
- Maximum loan term is less than or equal to 30 years.

The three main categories of QM loans are:

1. Any loan that meets the product feature requirements with a debt-to-income ratio of 43% or less is a QM.
2. "GSE-eligible" category of QMs. Any loan that meets the product feature requirements and is eligible for purchase, guarantee, or insurance by a GSE, FHA, VA, or USDA is QM regardless of the debt-to-income ratio (this QM category applies for GSE loans as long as the GSEs are in

FHFA conservatorship and for federal agency loans until an agency issues its own QM rules, or January 10, 2021, whichever occurs first).

3. Small creditor category of QMs. If a lender has less than $2B in assets and originates 500 or fewer first mortgages per year, loans you make and hold in portfolio are QMs as long as you have considered and verified a borrower's debt-to-income ratio, though no specific DTI limit applies.

Lenders were required to verify the consumer's "Ability to Repay" the mortgage. This required the verification of income, assets and debts. QM loans are assumed to meet the "Ability to Repay" standard.

Finally, lenders are free to offer "non-qualified mortgages" without the legal protections afforded through these guidelines. Many will keep these loans in their portfolio instead of selling them on the secondary markets. Though do not confuse non-qualified mortgages with the subprime market of yore—it is not expected that this practice will lead to the same class of loans.

We end this discussion of ratios and residuals with worksheets that combine the ratio and residual method and also present many notes to help you work out qualification solutions. The pre-qualification worksheets walk you through an extra calculation to determine the lower interest rate needed for a larger mortgage amount.

- Risky loan products were removed from the Qualified Mortgage legal protections. These products included mortgages such as interest only-loans and loans with higher fees. A 3.0% cap on total fees was implemented as part of the proposal.
- Lenders were required to verify the consumer's "Ability to Repay" the mortgage. This required the verification of income, assets and debts. For example, no income verification loans could not be part of the QM equation.

Purchaser Qualification Worksheet or go to https://drive.google.com/file/d/1p_XHGOllsdCXRhkQvaKx1bqcJ391JqKm/view?usp=sharing (Worksheet 4-1)

Conventional Pre-Qualification Worksheet or go to https://drive.google.com/file/d/15m0mjCPLHgVNsumFMMN9-KuC0DyTz7Eo/view?usp=sharing (Worksheet 4-2)

VA Pre-Qualification Worksheet or go to https://drive.google.com/file/d/1Mg_4AYEcMWLc8ne_WneV8x6qQ4I89UJY/view?usp=sharing (Worksheet 4-3)

# Residual method example

## Residual method example assumptions

**Assumptions:**

Husband and Wife

No Children

| | | |
|---|---|---|
| Property Taxes: | $200 | Monthly |
| Husband Income : | $2,250 | Taxable |
| Spouse Income: | $1,250 | Taxable |
| | $840 | Non-taxable[27] |
| Association Fees: | $50 | Monthly |
| Hazard Insurance: | $25 | Monthly |
| Interest Rate: | 5.0% | |
| Mortgage Amount: | $250,000 | |
| Debts: | $350 | Car Loan |
| | $150 | Personal Loan |
| | $250 | Monthly Credit Cards |

## *Monthly tax chart Example*

| If Wages Are | | Withholding Allowances | | |
|---|---|---|---|---|
| At Least | But Less Than | 0 | 1 | 2 |
| 960 | 1000 | 66 | 31 | 0 |
| 1960 | 2000 | 216 | 181 | 146 |

Notes:

- Actual tax tables are located in the Appendices. In this case we would use the married table with one exemption for each borrower.
- State taxes are estimated at five percent of gross monthly income. This figure will change slightly from state to state. In addition, some states exempt income of the military from taxation. In this example, there is no state tax liability.
- Social Security taxes are 7.65% of all taxable income in this case.
- Separate retirement may be paid by Federal, State and Local government employees. Military personnel do not contribute to their retirement plans.
- Rental negative would be in the case of another property owned by the applicants, and rented out to others. VA requires a veteran to have experience as a landlord in order to count rental income: as well as three months of mortgage payments as cash reserves after closing. On a multiple unit property purchase, the veteran is required to have six months cash reserves after closing.

[27]Spouse is active military and in addition to taxable base income she receives a Basic Allowance for Housing (BAH) and Basic Allowance for Subsistence (BAS), each of which is not taxable and may be "grossed up" in the calculation of ratios.

# Residual Method Example

| | Borrower | Co-Borrower |
|---|---|---|
| Monthly gross income | 2,250 | 1,250 |
| Federal Tax (-) | 120 | 20 |
| State Tax (-) | | 0 |
| Social Security (-) | 172 | 96 |
| Retirement (-) | | 0 |
| Child Care (-) | | 0 |
| Monthly Debts (-) | 750 | 0 |
| Rental Negative (-) | | 0 |
| Non-taxable Income (+) | | 840 |
| Subtotal | 1,208 | 1974 |
| | | |
| Total | | 3,182 |
| Taxes & Insurance (-) | | 225 |
| Utilities (-) | | 215 |
| Maintenance (-) | | 50 |
| Association Fee (-) | | 50 |
| Family Support (-) | | 823 |
| Balance available for | | |
| principal and interest (=) | | 1,819 |
| $250,000 at 5.0% (-) | | 1,343 |
| Positive Residual | | +476 |

- Monthly utilities are estimated at $1 per thousand plus $50 ($100,000 sales price would be $150 monthly). May vary by lender.
- Maintenance: Typically estimate $50 for maintenance except for condominiums because the condominium assessment would cover a certain amount of maintenance. In the case of condominiums we would use $25.
- Family support is from a table issued by the VA (Table 4-4). The number used would depend upon the region of the country and the family size. In addition:
  - VA allows a 5% reduction in the required family support if the house is located near a military base and the veteran enjoys benefits from that base.
  - VA requires a 20% increase in family support if the debt ratio of the applicant(s) exceeds the required 41%. A positive residual with the 20% increase in family support is not mandatory but is considered a significant compensating factor for anyone exceeding the 41% back ratio.
- Hazard insurance. Estimate is $2.50 for each $1,000 of sales price. Will vary by locality/type of property.

# Purchaser Qualification Sheet

_____ **Date**_____

**Purchaser** _____ **Down payment & closing costs** _____

**Property** _____ **Liquid assets available** _____

## RATIO

| | | |
|---|---|---|
| **A.** | **Monthly gross income** | _____ |
| **B.** | **Housing expense** | _____ |
| | Principal and Interest | _____ |
| | Taxes and Insurance | _____ |
| | MI | _____ |
| | Association Fee | _____ |
| | PI for second Trust | _____ |
| | **Total** | _____ |
| **C.** | **Debt service** | _____ |
| | Housing Expense **(B)** | _____ |
| | Monthly Debt Payments | _____ |
| | Rental Negatives | _____ |
| | **Total** | _____ |
| **Housing Ratio:** | | |
| | **(B)** divided by **(A)** | _____ % |
| **Debt Ratio:** | | |
| | **(C)** divided by **(A)** | _____ % |

## RESIDUAL

| | | (B) | (C) |
|---|---|---|---|
| **(A)** | **Monthly gross income** | _____ | _____ |
| | Federal Tax (-) | _____ | _____ |
| | State Tax (-) | _____ | _____ |
| | Social Security (-) | _____ | _____ |
| | Retirement (-) | _____ | _____ |
| | Child Care (-) | _____ | _____ |
| | Monthly Debts (-) | _____ | _____ |
| **(B)** | Rental Negative (-) | _____ | _____ |
| | Non-taxable Income (+) | _____ | _____ |
| | **Subtotal** | _____ | _____ |
| | Total | | _____ |
| | Taxes & Insurance (-) | | _____ |
| **(C)** | Utilities (-) | | _____ |
| | Maintenance (-) | | _____ |
| | Association Fee (-) | | _____ |
| | Family Support (-) | | _____ |
| | **Balance available for principal and interest** | | _____ |

NOTES:

1. *Income* must be averaged if variable (interest, commission, bonus, overtime, part-time). For self-employed use average of *Net* income for 2 years. Do not include expense accounts.
2. *Debts:* Monthly payments with more than 10 months remaining.

   Child support and/or alimony payments are monthly debts (child care only for VA).

   For credit cards use 5% of the outstanding balance or minimum of $10.
3. *Rental negative*: A vacancy factor of 25% may be used to lower monthly rental income before a negative is calculated ($1,000 income with 25% factor is $750).
4. *PI* for a second trust is in the first ratio only if secured on property being purchased.
5. *Association fee* is included in first ratio in full. Condo fees that include utilities are sometimes reduced 30-40%. Condo fee in VA qualifying will reduce estimates for maintenance, insurance, and sometimes utilities.
6. *Social security* for 2021 is 7.65% and 15.30% for self-employed on a maximum base of $142,800. Medicare portion only (1.45%) is collected above that amount.
7. *Federal retirement* is 0.8% to 3.5% (depending upon hire date) with no maximum.
8. *State income tax* is not paid by many active military.
9. *Utilities* is $1 per 1,000 of sales price + $50, however this may vary by lender.
10. *Maintenance:* $50 estimate; $25 for condominiums. This may vary by lender.
11. *Insurance:* Estimate $2.50 per 1,000 of sales price for annual premium. Will vary by locality/type of property.
12. Mortgage Insurance (MI) estimates: See Tables in Chapter Two.

**Worksheet 4-1**

# Conventional Pre-Qualification

**FIRST RATIO**

| | |
|---|---|
| Monthly Gross Income | _____ |
| | x .28 |
| Less Property Taxes | (-) _____ |
| Less Hazard Insurance | (-) _____ |
| Less Mortgage Insurance | (-) _____ |
| Less HOA or Condo Fee | (-) _____ |
| **Available for Principal & Interest (A)** | $_____ |

**SECOND RATIO**

| | |
|---|---|
| Monthly Gross Income | _____ |
| | x .36 |
| Less Monthly Debts | (-) _____ |
| Less Property Taxes | (-) _____ |
| Less Hazard Insurance | (-) _____ |
| Less Mortgage Insurance | (-) _____ |
| Less HOA or Condo Fee | (-) _____ |
| **Available for Principal & Interest (B)** | $_____ |

| | |
|---|---|
| Divide the lower of (A) or (B) above by interest rate factor per $1,000 which is prevailing for program desired at time of pre-qualification | ÷ _____ (factor)<br>= _____ |
| Multiply answer by 1,000 to arrive at maximum loan amount | x 1,000<br>=$_____ maximum loan |

**To figure interest rate needed to qualify borrower when loan amount needed is known:**

| | |
|---|---|
| Carry lower of (A) or (B) above down to right | $_____ |
| Divide by loan amount, dropping the last three numbers (ex: $70,000 = 70) | ÷_____ |
| Result is interest rate factor (Table on inside cover) | _____ |

**Worksheet 4-2**

# VA Pre-Qualification — Residual

| | | (B) | | (CB) |
|---|---|---|---|---|
| Monthly Gross Income | | _____ | | _____ |
| Less Federal Tax | (-) | _____ | (-) | _____ |
| Less State Tax | (-) | _____ | (-) | _____ |
| Less Social Security | (-) | _____ | (-) | _____ |
| Less Child Care | (-) | _____ | (-) | _____ |
| Less Monthly Debts | (-) | _____ | (-) | _____ |
| Less Rental Negative | (-) | _____ | (-) | _____ |
| Add Non-taxable Income | (+) | _____ | (+) | _____ |
| Sub-Total | | _____ | | _____ |
| Total | | | _____ | |
| Less Property Taxes | | (-) | _____ | |
| Less Hazard Insurance | | (-) | _____ | |
| Less Utilities | | (-) | _____ | |
| Less Maintenance | | (-) | _____ | |
| Less Association/Condo Fees | | (-) | _____ | |
| Less Family Support | | (-) | _____ | |
| **Available for Principal & Interest** | | | _____ | |
| Divide the principal & interest by interest rate factor per $1,000 which is prevailing for program desired at time of pre-qualification | | | divide by _____ (factor)<br>= _____ | |
| **Multiply answer by 1,000 to arrive at maximum loan amount** | | | x _____ | |
| | | | =$ _____ max loan | |

**To figure interest rate needed to qualify borrower when loan amount needed is known:**

| | |
|---|---|
| Carry principal and interest down to right | $ _____ |
| Divide by loan amount, dropping the last three numbers (ex: $70,000 = 70) | ÷ _____ |
| Result is interest rate factor (Table on inside cover) | _____ |

**Worksheet 4-3**

# 5

# Comparing Mortgages

Thus far, we have presented the characteristics of a multitude of mortgage types and sources. This information was imperative to arrive at the answer for the most significant question of this book:

*"Which is the best mortgage alternative for me?"*

Unfortunately, there may very well be no clear-cut answer to this question. Many mortgage applicants have very little choice when it comes to selecting a mortgage. This is because of limited cash assets and/or income necessary to qualify for the mortgage. Others have a choice but lack direction as to the proper way to compare mortgages. In the final analysis, even the most qualified and informed consumer still may not be able to make the best choice because there are always two undetermined variables at the time of mortgage selection:

- For how long will the mortgage be utilized?
- Where will interest rates move in the future?

If we could determine the answers to these questions, the selection of mortgage alternatives would be much simpler. Since it is unlikely that the prediction of the future will be within our reach, we will make any decision with a good measure of uncertainty. What we are forced to do is make assumptions about the future and then compare our alternatives under these assumptions. We then try to select from the scenario with which we are the most comfortable.

## Comparing mortgage payments over the life of the mortgage

The cost of the mortgage over the life of the mortgage is obviously the consumer's main concern after home and/or mortgage acquisition has taken place. It is here that we must factor in the unknown variables of expected mortgage life and the future direction of interest rates. Let us take a simple example:

The choice is: $100,000 mortgage

a. 5.00% 30-year fixed rate
b. 3.00% one year adjustable
   2.00% annual cap
   6.00% life cap
   2.75% margin over one year *T* index

In the first year, it is easy to see that the payments will be lower for the adjustable. If the mortgage has a five-year life, what will happen? Will the adjustable rate mortgage increase two percent every year?

If the adjustable increases by the maximum allowed under the adjustment caps, we are describing the *worst-case scenario*. The *worst-case scenario* for our one-year adjustable over a five-year period is shown in the example.

***Worst case scenario example***

Year 1: 3.0%
Year 2: 5.0%
Year 3: 7.0%
Year 4 9.0% (life cap)
Year 5: 9.0%
33.00% divided by 5 = 6.60% average

How do we compare this scenario to the fixed rate? The easiest way is to average the interest rate over the five-year period: 6.60%. Comparing payments over the period:

| | | | |
|---|---|---|---|
| One year ARM: | 6.60% | $38,320 | total payments |
| 30 year fixed: | 5.00% | $32,220 | total payments |
| Savings on fixed rate: | | $ 6,100 | |

We should bring forward the following notations on this comparison:

1. The risk of the ARM averaging a higher rate than the fixed rate rises over time in the worst-case scenario. The average rate over three years for the ARM is actually identical to that of the fixed rate.
2. This analysis does not take into account the cost of money over time. The cost of money paid out in the future is worth less due to the existence of inflation.
3. The analysis also does not take into account the effect of a tax deduction. Because interest is typically deductible, the effect of a higher payment over time is lessened by the tax rate. For example, if a payment is $1,000 more over time, but the tax rate is 25%, the after-tax difference is $750.

***5-year "historical-case" comparison***

Date of Mortgage: January 1, 2007
Interest rate year 1: 3.00% Start rate
Interest rate year 2: 5.00% Index value January 1, 2008: 2.71 + 2.75 = 5.46%, which is higher than 2% annual cap)
Interest rate year 3: 3.25% Index value January 1, 2009: 0.44 + 2.75 = 3.19%
Interest rate year 4: 3.125% Index value January 1, 2010: 0.35 + 2.75 = 3.10%
Interest rate year 5: 3.125% Index value January 1, 2011: 0.27 + 2.75 = 3.02%
Average rate 3.5%, less than 30-year fixed
Rate is Index + Margin rounded up to the nearest .125%

***FIAR example***

3% One-year arm
2/6 Caps
2.75 Margin
Index value at the time of settlement: 4.00
Interest rate year 1: 3.00%
Interest rate year 2: 5.00% (4.00 + 2.75 = 6.75%, which is higher than 2% annual cap)
Interest rate year 3: 6.75% (4.00 + 2.75 = 6.75%) ARM has reached its FIAR
Interest rate year 4: 6.75% (4.00 + 2.75 = 6.75%)
Interest rate year 5: 6.75% (this rate will hold for the term of The mortgage as we assume the index is stable)
Average rate for 5 years: 5.65%, higher than the fixed rate
In this example, the index value is hypothetical

The worst-case scenario actually presents adjustables in a negative light and this scenario is not the only valid method of comparison. For example, suppose we assumed that the mortgage was procured five years ago, and we compare the average payments that would have occurred over the past five years as a model of prediction for the next five years? We call this the "historical case" scenario.

The example shows an average rate of 3.50% over five years, which is 3.1% less than the average rate under the worst-case scenario and less than the 5.00% fixed rate.

Another option for developing a scenario for predicting the behavior of an adjustable rate mortgage is to assume that the index value stays constant at the time of settlement for the life of the mortgage. This means that the adjustable rate mortgage will rise to the *Fully Indexed Accrual Rate*, or *FIAR*. The FIAR is used as the assumption for calculation of the required *Truth-in-Lending* disclosure (now part of the Loan Estimate and Closing Disclosure).

**Worst Case Scenario Comparison for Different Mortgage Types**

Mortgage amount: $100,000
*30-year fixed rate of 5.00%
*2-1 buydown of 30-year fixed rate of 5.25%
*Three-One adjustable at 3.50%
2% cap after the third year
6% life cap
*One year adjustable at 2.00%
2% annual cap
6% life cap

| Year | 30 Year Fixed | 2-1 Buydown | 3/1 ARM | 1-Yr. ARM |
|---|---|---|---|---|
| 1 | 5.0% | 3.25% | 3.5% | 2.0% |
| 2 | 5.0% | 4.25% | 3.5% | 4.0% |
| 3 | 5.0% | 5.25% | 3.5% | 6.0% |
| 4 | 5.0% | 5.25% | 5.5% | 8.0% |
| 5 | 5.0% | 5.25% | 7.5% | 8.0% |
| 6 | 5.0% | 5.25% | 9.5% | 8.0% |
| Average Rate: | 5.0% | 4.75% | 5.50% | 6.0% |
| Avg. Payment: | $536.82 | $527.65 | $567.79 | $599.55 |
| Total Payments: | $38,651 | $37,991 | $40,881 | $43,168 |

Which computation method is more accurate: the worst case, past track record, or FIAR scenario for ARMs? There is no way of knowing. Each has some element of merit:

- The worst-case scenario enables the consumer to determine the worst that can happen during the loan term. It is also to become more likely if the ARM was originated below market (with a *teaser rate*) or market rates are much lower than historical standards.
- The past track record enables the consumer to look back and determine how the ARM would have performed under market conditions that were in effect for the period directly before the settlement takes place. This would become more likely if the period used for comparison was not one that varied significantly from historical standards.
- The FIAR method assumes that today's market will be the standard for the future. This is to be more likely if today's market is typical of historical standards.

The borrower actually should look at the performance of an ARM product under several conditions: the worst case, declining rates, stable rates and volatile rates. In this way, the borrower will have an idea of all performances that are possible.

Because these calculations would be quite tedious for the average homebuyer, we have developed tables that should help in the determination of the performance level of different adjustable rate products under different scenarios.

Table 5-1 gives the average rates for each product type described under a worst-case scenario for a certain time period. For example, the one-year ARM with 2/6 caps will average 1% over the start rate or a two-year period. One can now use this table to compare any products with identical characteristics

# Interest Rate Increases for Variable Mortgage

## Average Interest rate increase as of given year

## Assuming 0% start rate and worst-case rate increase (5% increase for balloons)

| Year | Fixed | 2-1 Buydown | 6 mo. ARM with 1/6 Caps | 1 year ARM with 2/6 Caps | 1 year ARM with 1/4 Caps | 3 year ARM with 2/6 Caps | 3/1 ARM with 2/6 Caps | 5 year ARM with 2/6 Caps | 5/1 ARM with 2/6 Caps | 5/25 Balloon | 7/23 Balloon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0% | 0.0% | 0.5% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 2 | 0.0% | 0.5% | 1.5% | 1.0% | 0.5% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 3 | 0.0% | 1.0% | 2.5% | 2.0% | 1.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 4 | 0.0% | 1.3% | 3.4% | 3.0% | 1.5% | 0.5% | 0.5% | 0.0% | 0.0% | 0.0% | 0.0% |
| 5 | 0.0% | 1.4% | 3.9% | 3.6% | 2.0% | 0.8% | 1.2% | 0.0% | 0.0% | 0.0% | 0.0% |
| 6 | 0.0% | 1.5% | 4.3% | 4.0% | 2.3% | 1.0% | 2.0% | 0.3% | 0.3% | 0.8% | 0.0% |
| 7 | 0.0% | 1.6% | 4.5% | 4.3% | 2.6% | 1.4% | 2.6% | 0.6% | 0.9% | 1.4% | 0.0% |
| 8 | 0.0% | 1.6% | 4.7% | 4.5% | 2.8% | 1.8% | 3.0% | 0.8% | 1.5% | 1.9% | 0.6% |
| 9 | 0.0% | 1.7% | 4.8% | 4.7% | 2.9% | 2.0% | 3.3% | 0.9% | 2.0% | 2.2% | 1.1% |
| 10 | 0.0% | 1.7% | 5.0% | 4.8% | 3.0% | 2.4% | 3.6% | 1.0% | 2.4% | 2.5% | 1.5% |
| 11 | 0.0% | 1.7% | 5.0% | 4.9% | 3.1% | 2.7% | 3.8% | 1.3% | 2.7% | 2.7% | 1.8% |
| 12 | 0.0% | 1.8% | 5.1% | 5.0% | 3.2% | 3.0% | 4.0% | 1.5% | 3.0% | 2.9% | 2.1% |
| 13 | 0.0% | 1.8% | 5.2% | 5.1% | 3.2% | 3.2% | 4.2% | 1.7% | 3.2% | 3.1% | 2.3% |
| 14 | 0.0% | 1.8% | 5.3% | 5.1% | 3.3% | 3.4% | 4.3% | 1.9% | 3.4% | 3.2% | 2.5% |
| 15 | 0.0% | 1.8% | 5.3% | 5.2% | 3.3% | 3.6% | 4.4% | 2.0% | 3.6% | 3.3% | 2.7% |
| 16 | 0.0% | 1.8% | 5.3% | 5.3% | 3.4% | 3.8% | 4.5% | 2.3% | 3.8% | 3.4% | 2.8% |
| 17 | 0.0% | 1.8% | 5.4% | 5.3% | 3.4% | 3.9% | 4.6% | 2.5% | 3.9% | 3.5% | 2.9% |
| 18 | 0.0% | 1.8% | 5.4% | 5.3% | 3.4% | 4.0% | 4.7% | 2.7% | 4.0% | 3.6% | 3.1% |
| 19 | 0.0% | 1.8% | 5.4% | 5.4% | 3.5% | 4.1% | 4.7% | 2.8% | 4.1% | 3.7% | 3.2% |
| 20 | 0.0% | 1.9% | 5.5% | 5.4% | 3.5% | 4.2% | 4.8% | 3.0% | 4.2% | 3.8% | 3.3% |
| 21 | 0.0% | 1.9% | 5.5% | 5.4% | 3.5% | 4.3% | 4.9% | 3.1% | 4.3% | 3.8% | 3.3% |
| 22 | 0.0% | 1.9% | 5.5% | 5.5% | 3.5% | 4.4% | 4.9% | 3.3% | 4.4% | 3.9% | 3.4% |
| 23 | 0.0% | 1.9% | 5.5% | 5.5% | 3.6% | 4.4% | 5.0% | 3.4% | 4.4% | 3.9% | 3.5% |
| 24 | 0.0% | 1.9% | 5.6% | 5.5% | 3.6% | 4.5% | 5.0% | 3.5% | 4.5% | 4.0% | 3.5% |
| 25 | 0.0% | 1.9% | 5.6% | 5.5% | 3.6% | 4.6% | 5.0% | 3.6% | 4.6% | 4.0% | 3.6% |
| 26 | 0.0% | 1.9% | 5.6% | 5.5% | 3.6% | 4.6% | 5.1% | 3.7% | 4.6% | 4.0% | 3.7% |
| 27 | 0.0% | 1.9% | 5.6% | 5.6% | 3.6% | 4.7% | 5.1% | 3.8% | 4.7% | 4.1% | 3.7% |
| 28 | 0.0% | 1.9% | 5.6% | 5.6% | 3.6% | 4.7% | 5.1% | 3.9% | 4.7% | 4.1% | 3.8% |
| 29 | 0.0% | 1.9% | 5.6% | 5.6% | 3.7% | 4.8% | 5.2% | 3.9% | 4.8% | 4.1% | 3.8% |
| 30 | 0.0% | 1.9% | 5.7% | 5.6% | 3.7% | 4.8% | 5.2% | 4.0% | 4.8% | 4.2% | 3.8% |

**Table 5-1**

by just knowing the start rates. It is simply a matter of adding the average interest rate increase to the start rate for the desired time period. Then you would convert the answer to average and total payments.

Example: One year ARM
Start rate of 5%
Average rate for two years: 6% (5% + 1%)

Example: True three year ARM
Start rate of 7%
Average rate for five years: 7.8% (7% + 0.8%)

In order to give a more "balanced" perspective of the comparison of mortgage rates over time for different alternatives, Table 5-2 also gives an historical perspective for a one-year adjustable. This table is based upon actual interest rates for the past 30 years and a hypothetical margin of 2.75%. There are no caps or protections—just actual rates based upon the simple formula of *index plus margin.* It is here that we can see the influence of the margin as opposed to the caps. While the typical applicant will be concerned about safety, in the past 30 years, the imposition of a cap would have protected them from a significant rate increase only once. But the alteration of the margin actually changes the rate every year.

Despite this fact, how many applicants shop for starting rates and caps with a focus upon the worst-case scenario (represented by Table 5-1) vs. a focus upon margins that are more likely to affect the rates and payments from year-to-year (represented by Table 5-2).

## 37-Year ARM Performance — Historical Method –

| Term (Years) | Index Value | ARM Rate | Cumulative Average | Five Year Average |
|---|---|---|---|---|
| 1983 | 8.62 | 11.37 | 11.37 | |
| 1984 | 9.90 | 12.65 | 12.01 | |
| 1985 | 9.02 | 11.77 | 11.93 | |
| 1986 | 7.73 | 10.48 | 11.57 | |
| 1987 | 5.78 | 8.53 | 10.96 | 10.96 |
| 1988 | 6.99 | 9.74 | 10.76 | |
| 1989 | 9.05 | 11.80 | 10.91 | |
| 1990 | 7.92 | 10.67 | 10.88 | |
| 1991 | 6.64 | 9.39 | 10.71 | |
| 1992 | 4.15 | 6.90 | 10.33 | 9.70 |
| 1993 | 3.50 | 6.25 | 9.96 | |
| 1994 | 3.54 | 6.29 | 9.65 | |
| 1995 | 7.05 | 9.80 | 9.66 | |
| 1996 | 5.09 | 7.84 | 9.53 | |
| 1997 | 5.61 | 8.36 | 9.56 | 7.71 |
| 1998 | 5.24 | 7.99 | 9.36 | |
| 1999 | 4.51 | 7.26 | 8.24 | |
| 2000 | 6.21 | 8.87 | 9.22 | |
| 2001 | 4.81 | 7.56 | 9.13 | |
| 2002 | 2.16 | 4.91 | 8.92 | 7.32 |
| 2003 | 1.36 | 4.11 | 8.69 | |
| 2004 | 1.24 | 3.99 | 8.48 | |
| 2005 | 2.86 | 5.61 | 8.36 | |
| 2006 | 4.45 | 7.20 | 8.31 | |
| 2007 | 5.06 | 7.81 | 8.29 | 5.63 |
| 2008 | 2.71 | 5.46 | 8.18 | |
| 2009 | 0.44 | 3.19 | 8.00 | |
| 2010 | 0.35 | 3.10 | 7.83 | |
| 2011 | 0.27 | 3.02 | 7.66 | |
| 2012 | 0.12 | 2.87 | 7.50 | 3.53 |
| 2013 | 0.15 | 2.90 | 7.35 | |
| 2014 | 0.12 | 2.87 | 7.21 | |
| 2015 | 0.20 | 2.95 | 7.01 | |
| 2016 | 0.54 | 3.29 | 6.90 | |
| 2017 | 0.83 | 3.58 | 6.81 | 3.12 |
| 2018 | 1.80 | 4.55 | 6.75 | |
| 2019 | **2.58** | **5.33** | 6.71 | |
| 2020 | 1.53 | 4.28 | 6.65 | |

- The Index is the 1 Year "T" in January of each year and the margin used is 2.75%.
- There are no caps. The ARM is fully indexed every year.
- The cumulative average is the average for the number of years since 1983.
- The 5-year average would have the average for the preceding five years only.

**Table 5-2**

## Comparing mortgage payments for different mortgage terms

The consumer may actually desire higher mortgage payments if the result will be a shorter mortgage term. In this case, the consumer's goal will be to build up equity as quickly as possible, or reduce the interest owed over the life of the mortgage. Table 5-3 actually compares the total mortgage payments over the mortgage term and total interest paid for varied interest rates on a $100,000 mortgage. The consumer can actually use these tables for any mortgage amount by a process of extrapolation:

- A mortgage amount of $150,000 would be 1.5 times any value in the tables.
- A mortgage amount of $150,000 would be 1.5 times any value in the tables.

We should note that if we merely compared the mortgage payments and interest paid over the term, we would not be able to realize the opportunity cost of not being able to invest certain money during the life of the mortgage. For example, if a 15-year mortgage requires an extra payment of $400 each month as compared to a 30-year instrument, the homeowner could invest this $400 each month in a bank account or mutual fund. The investment income will partially offset the interest savings on the 15-year mortgage.

Another factor that is even harder to measure is the effect of deducting the taxes on the interest payments. Any interest savings will actually reduce the tax-deductible portion of the mortgage, thereby increasing the consumer's tax base. Of course, the investment interest gained will also be taxable.

Do not make the assumption that the consumer will automatically save the extra money if they opt for a 30-year mortgage. As discussed in Segment One, we do not have a great record of savings in this country. A 15-year mortgage enhances the “forced savings plan” of a mortgage.

Also, one should not make the assumption that the homeowner can easily convert a 30-year mortgage into a shorter term. Most consumers who do prepay their mortgage, put off prepayment until future years. Because of the "compounding" effect of interest, a dollar paid toward principal the first month of a mortgage is actually worth many times more than a dollar paid two years in the future.

What does this table show us? Like interest-only mortgages, the payment savings of a 40-year mortgage goes down as the rate goes up. The savings will also be diminished because most 40-year terms will also carry a higher interest rate than 30-year mortgages. Likewise, the savings on a 15-year mortgage will be increased because of lower rates as compared with a 30-year mortgage. The table does not take into account the spread between products.

## Mortgage Term/Prepayment Comparison
### Assuming $100,000 loan amount

| Rate | Term (Years) | Monthly Payment | Additional Monthly Pmt vs. 30-Year | Total Interest Paid | Total of Payments | Lifetime Savings vs. 30-Year Term |
|---|---|---|---|---|---|---|
| 4% | 10 | $1,012.45 | $535.03 | $21,494 | $121,494 | $50,377 |
| | 15 | $739.69 | $262.27 | $33,144 | $133,144 | $38,727 |
| | 20 | $605.98 | $128.56 | $45,435 | $145,435 | $26,436 |
| | 25 | $524.84 | $47.42 | $57,452 | $157,452 | $14,419 |
| | 30 | $477.42 | $0. | $71,871 | $171,871 | $0 |
| | 40 | $417.94 | -$59.48 | $100,611 | $200,611 | -$28,740 |
| 5% | 10 | $1,060.66 | $523.84 | $27,278 | $127,278 | $65,978 |
| | 15 | $790.79 | $253.97 | $42,343 | $142,343 | $50,913 |
| | 20 | $659.96 | $123.14 | $58,389 | $158,389 | $34,867 |
| | 25 | $584.59 | $47.77 | $75,377 | $175,377 | $17,879 |
| | 30 | $536.82 | $0. | $93,256 | $193,256 | $0 |
| | 40 | $482.20 | -$54.62 | $131,456 | $231,456 | -$38,200 |
| 6% | 10 | $1,110.21 | $510.66 | $33,224 | $133,224 | $82,614 |
| | 15 | $843.86 | $244.31 | $51,894 | $151,894 | $63,944 |
| | 20 | $716.43 | $116.88 | $71,944 | $171,944 | $43,895 |
| | 25 | $644.30 | $44.75 | $93,291 | $193,291 | $22,548 |
| | 30 | $599.55 | $0 | $115,838 | $215,838 | $0 |
| | 40 | $550.21 | -$49.34 | $164,101 | $264,101 | -$48,263 |
| 7% | 10 | $1,161.08 | $495.78 | $39,330 | $139,330 | $100,179 |
| | 15 | $898.83 | $233.53 | $61,789 | $161,789 | $77,720 |
| | 20 | $775.30 | $110.00 | $86,072 | $186,072 | $53,437 |
| | 25 | $706.78 | $41.48 | $112,034 | $212,034 | $27,475 |
| | 30 | $665.30 | $0 | $139,509 | $239,509 | $0 |
| | 40 | $621.43 | -$43.87 | $198,286 | $298,286 | -$58,777 |
| 8% | 10 | $1,213.28 | $479.51 | $45,593 | $145,593 | $118,562 |
| | 15 | $955.65 | $221.89 | $72,017 | $172,017 | $92,138 |
| | 20 | $836.44 | $102.68 | $100,746 | $200,746 | $63,410 |
| | 25 | $771.82 | $38.05 | $131,545 | $231,545 | $32,610 |
| | 30 | $733.76 | $0 | $164,155 | $264,155 | $0 |
| | 40 | $695.31 | -$38.45 | $233,749 | $333,749 | -$65,594 |
| 9% | 10 | $1,266.76 | $462.14 | $52,011 | $152,011 | $137,653 |
| | 15 | $1,014.27 | $209.64 | $82,568 | $182,568 | $107,096 |
| | 20 | $899.73 | $95.10 | $115,934 | $215,934 | $73,730 |
| | 25 | $839.20 | $34.57 | $151,759 | $251,759 | $37,905 |
| | 30 | $804.62 | $0 | $189,664 | $289,664 | $0 |
| | 40 | $771.36 | -$33.26 | $270,253 | $370,253 | -$80,609 |

**Table 5-3**

Let's look at two "simpler" tables which focus upon the comparison between 30, 20 and a 15-year mortgage. One has no interest rate spread and another has a hypothetical spread between products. The first table shows the savings over the life of the mortgage. In the case of a 15-year mortgage, a savings of over $50,000 represents a savings of over 50% of the total interest paid ($50,900 vs $93,200). This sounds pretty attractive.

**Comparison of Fixed Rate Mortgages**

$100,000 Loan Amount
5% Fixed Rate Loan

| | Mortgage Term in Years | | |
|---|---|---|---|
| | 30 | 20 | 15 |
| Monthly Payment | $536.82 | $659.96 | $790.79 |
| Extra Payment | $0 | $123 | $254 |
| Total Payment | $193,256 | $158,389 | $142,343 |
| Interest Savings | $0 | $34,867 | $50,913 |

*Note: This table does not take into account variances in interest rates between the three choices as 15-year mortgages can be obtained for as much as 1.0% less than 30 year mortgages. This interest rate "spread" will vary.*

However, when we look at the second table, we see that the monthly cost of achieving this benefit can be difficult on a monthly basis. To achieve a 15-year payoff, you need to increase your payment by 40%. On a $400,000 mortgage, that would be an increase of $860 per month.

Thus, the 15-year mortgage comes with great benefit but at a great cost. But if you look at the table, there is another alternative which actually presents an opportunity for payoff efficiency. The 20-year alternative achieves two-thirds of the payoff of a 15-year, or 10 out of 15 years. However, the payment increase, even with the lower rate of a 15-year, raises the payment by 22% instead of 40%. Thus, you can say that the 20-year mortgage gives you two-thirds of the benefit of a 15-year mortgage, but only 55% of the additional payment – 22 divided by 40. And when the spread between the 15-year and 20-year mortgage is closer, this number is closer to 50%. Two-thirds of the benefit for approximately 50% of the additional cost.

**Comparison of Fixed Rate Mortgages**

$100,000 Loan Amount
Hypothetical Interest Rate Spread

| | 30-year | 20-year | 15-year |
|---|---|---|---|
| Interest Rate | 5.0% | 4.875% | 4.25% |
| Payment (rounded) | $537.00 | $653.00 | $752.00 |
| Additional Payment | 0 | +$116 | +$215 |
| Percent increase of payment | 0 | +22%<br>**55% of 40%** | +40% |
| Benefit | 0 Years | 10 Years | 15 Years |
| Percent of total benefit | 0% | **67%**<br>10/15 years | 100%<br>15 years |

Quite simply-it is because every dollar of prepayment that you add will give less prepayment effect. Thus, if we compared a 25-year mortgage to a 20-year mortgage, the 25-year mortgage would be more efficient. A 15-year mortgage would be more efficient than a 10-year mortgage.

Additionally, both 15 and 20 year mortgages also provide mortgage insurance savings for those putting less than 20% down on a conventional loan. Plus, there will be the additional benefit of being able to terminate mortgage insurance more quickly.

## Comparing points on mortgage programs

It is one thing to compare the performance of different mortgage instruments using the starting rates and potential rate increases in the future. What if the initial points charged are different? How does this affect the comparison?

1. When comparing different products with different point options, we can adjust easily for each point by adding one percent to the starting rate for each extra point charged.

For example:

Fixed rate of 5.00% with 0 points

One year ARM of 3.00% with 1 point

(2% annual cap/6% life cap)

When we provide the worst-case scenario comparison, we add one percent to the starting rate of the adjustable (for the first year only):

| **Fixed Rate** | **Adjustable** | |
|---|---|---|
| Year 1: | 5.00% | 4.00% (instead of 3.00%) |
| Year 2: | 5.00% | 500% |
| Year 3: | 5.00% | 700% |
| Average rate: | 5.00% | 5.33% |
| Average rate without extra point: | | 5.00% |

2. When comparing the same product with different point options, we are now trying to decide the answer to this question:

*"Should I choose a lower rate with more points or a higher rate with lower points?"*

Assuming you have the income necessary to qualify for any interest rate available, and possess the cash assets necessary to pay any point options available, there remains only one factor important for the determination of the answer:

*How long will you have the mortgage?*

Each extra point will be paid back over a period of time (from three to seven years typically) through a lower payment. Note that the exercise could also be shown comparing differences in interest paid rather than total payment as well as the difference in the rate of principal reduction.

| | | |
|---|---|---|
| Example: | $100,000 mortgage–30-year fixed rate | |
| | Option 1: | 5.50% with 0 points |
| | Option 2: | 5.00% with 2 points |
| | Monthly payment at 5.50%: | $567.79 |

| | |
|---|---|
| Monthly payment at 5.00%: | $536.82 |
| Monthly savings at 5.00%: | $ 30.97 |
| Extra cost of points at 5.00%: | $ 2,000 |
| Months to recover cost of points: | $ 2,000 |
| | $ 30.97 = 64.58 or *5.38 Years* |

Our conclusion here is that the applicant will be better off paying the extra points if he/she stays with the mortgage for over 65 months. Generally, the longer he/she has the loan, the more likely that extra points will pay off. We should note that this analysis is not entirely accurate because it compares costs in today's dollars to future dollars with regard to monthly payments. Obviously, a dollar paid today is worth more than a dollar paid years from now because of the effects of inflation. We also don't compare the tax-deductibility of the points versus the extra monthly payment. Of course, we do know that many times the consumer does not have a choice as to whether they pay more points or not, for example, they may not be able to afford the points or have enough equity in their home to finance the points into the value of a refinanced loan.

It should be noted that the volatility of rates may have much to do with the prediction of the overall mortgage term. When rates are at a historic high, it is much more likely the homeowner will refinance out of the mortgage more quickly. When rates are historically low, it is more likely the mortgage will last longer. We are likely to advise clients to take actions that are contrary to these probabilities. For example, when rates are low, we tend to recommend no-cost refinances when they would be better served obtaining the lowest rate possible. It is quite typical for a consumer to select a 15-year mortgage with no points. But if they are thinking of using the mortgage for 15 years, should they not be paying points?

Conversely, when rates are high, consumers are more likely to pay points to buy the rate down. Even sellers and builders are more likely to offer points as concessions in a high rate environment. Yet, these consumers are more likely to refinance more quickly and therefore are less likely to see the full value of the points.

It should also be noted that when rates move up, more consumers are likely to choose adjustable rate mortgages. From a "law of averages" perspective, this is a good strategy, because they can benefit from the low starting rates in the short-run and then refinance when rates move back down. Of course, these are all averages, and there is no guarantee where rates will move in the future.

Once again, we have developed tables to help you in the determination of the value of closing costs. Through the *Truth-In-Lending Disclosure* (*TIL*), the Federal Government tries to standardize the cost of mortgages by combining closing costs with the interest rate. The figure that is compiled and disclosed is called the *Annual Percentage Rate*, or *APR*. In reality, this is a very inaccurate figure because the average mortgage does not last 30 years even though the disclosure spreads the costs over that period of time. We are utilizing a standard $100,000 mortgage and a base rate of 5.00%. Table 5-4 varies the closing costs paid and the life of the mortgage over which the loan is utilized.

## Comparing mortgage combinations

Often times the important comparison is not between two distinctly different programs. Instead we compare two mortgage combinations versus another for a particular consumer. Here are a few of the options that might require us to make such a comparison—

## Annual Percentage Rates
### At varying terms and closing costs
### 5% interest rate

| | Closing Costs | | | | | |
|---|---|---|---|---|---|---|
| Term (Years) | 0 | 1.00% | 2.00% | 3.00% | 4.00% | 5.00% |
| 6 mo. | 5.000% | 8.447% | 11.877% | 15.292% | 18.692% | 22.076% |
| 1 | 5.000% | 6.863% | 8.716% | 10.558% | 12.391% | 14.214% |
| 2 | 5.000% | 5.977% | 6.948% | 7.913% | 8.875% | 9.827% |
| 3 | 5.000% | 5.665% | 6.327% | 6.984% | 7.638% | 8.228% |
| 4 | 5.000% | 5.507% | 6.011% | 6.511% | 7.009% | 7.504% |
| 5 | 5.000% | 5.411% | 5.819% | 6.224% | 6.628% | 7.029% |
| 6 | 5.000% | 5.346% | 5.690% | 6.032% | 6.372% | 6.710% |
| 7 | 5.000% | 5.230% | 5.560% | 5.894% | 6.189% | 6.482% |
| 8 | 5.000% | 5.265% | 5.529% | 5.791% | 6.051% | 6.310% |
| 9 | 5.000% | 5.238% | 5.475% | 5.710% | 5.944% | 6.176% |
| 10 | 5.000% | 5.216% | 5.431% | 5.645% | 5.858% | 6.069% |
| 15 | 5.000% | 5.151% | 5.302% | 5.452% | 5.600% | 5.749% |
| 20 | 5.000% | 5.119% | 5.238% | 5.356% | 5.473% | 5.589% |
| 25 | 5.000% | 5.100% | 5.120% | 5.299% | 5.397% | 5.495% |
| 30 | 5.000% | 5.088% | 5.175% | 5.262% | 5.348% | 5.434% |

**Table 5-4**

**This table varies the amount of closing costs and the term of the actual mortgage in order to produce an APR that is more reflective of the use of the money.**

- Refinancing into a new mortgage versus adding a second onto an existing mortgage.
- Doing a combination of a first and second mortgage versus one mortgage (perhaps avoiding a jumbo rate and/or mortgage insurance).

To facilitate these comparisons, one would have to compute what is called a “blended” rate for a particular mortgage combination. For example, if there were a total mortgage amount of $100,000 and this total indebtedness consisted of—

$80,000 First at 5.0% interest

$20,000 Second at 7.0% interest, the calculation would be as follows—

$80,000 x 5.0% = $4,000 annual interest

$20,000 x 7.0% = $1,400 annual interest

Total annual interest = $5,400, or a 5.4% blended interest rate (for a loan amount other than $100,000, divide the annual interest by the loan amount in thousands).

This calculation will enable us to make a comparison versus a new mortgage, perhaps at 5.00% plus mortgage insurance. Are they better off refinancing the whole mortgage or better off just adding a second mortgage? Of course, the points and other closing costs must be taken into account for this comparison.

The same calculation will help us determine whether they are better off obtaining a jumbo mortgage with a 5.50% interest rate or a conforming mortgage with a 5.25% interest rate and a second mortgage with an 8.0% interest rate. The larger the second is in this case, the higher the blended rate.

In Chapter 2, we discussed the option of avoidance of mortgage insurance by utilizing a second mortgage. At this juncture, we are better prepared to assess the comparisons between—

- A first mortgage of $80,000 and a second mortgage of $20,000;
  (Blended rate from previous example at 5.4%, all of which is tax deductible).
- One mortgage of $100,000 with borrower-paid mortgage insurance;
  (Rate 5.0% plus .55 monthly mortgage insurance. Mortgage insurance may or may not be deductible).
- One mortgage of $100,000 with lender-paid mortgage insurance.
  (Rate 5.375% all deductible, with no chance of cancellation).

The comparison will take into account the blended rate of the first and second (as well as the resulting payment), the tax deductibility of the options, as well as the length of time that the option will be utilized. Remember, that conventional mortgage insurance can be cancelled under certain conditions as quickly as two years—if it is borrower paid. If the insurance is lender paid, it is more likely to be tax deductible, but the extra cost can never be cancelled. The option of a first and second mortgage might be put into place to avoid mortgage insurance and obtain a conforming rate as well.

Because of this important variable associated with the cancellation of mortgage insurance, when advising a client, it is important to find out facts such as—

- Is the home being purchased for well below the market price?
- Is the new homeowner planning substantial renovations?
- Is the new homeowner planning to accelerate prepayment of the present mortgage?

If any of these conditions are present, it might very well change the advice that we convey because of the increased probability that mortgage insurance can be cancelled in as little as two years. This is as opposed to the higher rate of a second mortgage that will exist for the term of the mortgage.

On the other hand, what if the client expects to sell an asset such as a second home in one year and will then pay off the second mortgage? This may change the equation significantly. The point is that it is important to look at the client's financial picture and all aspects of the transaction in order to arrive at the best alternative. Just running numbers will not be enough.

## Comparing cash requirements for each mortgage

Sometimes the interest rate, payments, or points are not the overriding factors present within the mortgage selection process. Sometimes the one most important factor is:

*"Which mortgage will enable me to get into the house with the least amount of cash invested?"*

As we have presented different mortgage sources, we have attempted to focus on all differences between these mortgage options. Table 5-5 attempts to summarize one characteristic: the cash necessary for home purchase for major mortgage alternatives.

**Cash Necessary for Home Purchase**

| Cash Requirement | FHA | VA | Conforming |
|---|---|---|---|
| Down Payment | 3.5% | 0 | 3.0 to 5.0% |
| Mortgage Insurance | 0 | 0 (Funding Fee) | 0 |
| Seller Contributions | 6.0%* | All normal costs | 3.0% with minimum down |
| Total Investment | 3.5% | 0 | 3.0% to 5.0% |
| Gift | 100% | 100% | 5.0% of own funds |

Notes:
- Mortgage insurance not counted if it is monthly or financed (escrow amount to be included under prepaids).
- Maximum seller contributions assumed for determining total cash requirements (gifts are not subtracted).
- 100% gift means that the borrower can use a gift for all necessary funds. There are conforming options which allow 100% gifts.
- Fannie Mae's 3% down HomeReady® and Freddie Mac's Home Possible® Programs allow all the money to come from a gift, grant or community second, however, unless the purchase is in a low-income area, maximum income limits apply.

**Table 5-5**

## Comparing qualification requirements for each mortgage source

Qualification requirements comprise another factor that can be the determining variable in selecting a mortgage. The term and mortgage payment may not be relevant if the purchaser cannot purchase the home because their income is insufficient to qualify for a mortgage. Table 5-6 summarizes the income requirements for major mortgage sources. These requirements are expressed in terms of mortgage ratios.

**Qualification Requirements for Mortgage Sources**

| | FHA | VA | Conventional |
|---|---|---|---|
| Housing | 31% | N/A | 28% |
| Debt Ratio | 43% | 41% | 36% (Maximum 43% per QM) |
| ARM Standard | Second year maximum rate | Second year maximum rate | Second year maximum rate or fully-indexed rate |

Notes:
- VA has second standard of a positive residual.
- ARM standards are the rates at which the borrower will be qualified if these instruments are utilized to increase qualification (assumes maximum LTV).
- The ratios for mortgages will vary widely as to what is acceptable by automated systems and Fannie Mae, Freddie Mac, FHA and VA can exceed QM limits until January 2021.This deadline was extended in 2020 and QM ratio limits are being replaced by a price-based criteria.
- In addition, there are "non-conforming" alternatives in the conventional sector.

**Table 5-6**

Keep in mind that the maximum ratios for each mortgage source shown on the table can be exceeded with compensating factors. This is true whether the loan is manually underwritten, or an automated underwriting system is utilized, though FHA does have different maximum ratios for manually underwritten loans. In general, especially at lower credit scores, FHA underwriting tends to be more flexible than conforming underwriting.

## The practice of mortgage planning

In the past several years, more and more mortgage loan officers are representing themselves as mortgage planners. There is no industry standardization for this term. However, we can see the merit in helping an applicant understand that a home and the mortgage that finances this home is a major investment for any person. Therefore, the decision to purchase and finance a home should not be made without understanding all the choices available and by integrating this decision into one's total financial plan. Most homeowners today do not have a financial plan and they purchase the most expensive home they can afford.

At this point in the book, we have now gone over the majority of the concepts that would be involved in mortgage planning—

- The concepts of leverage, tax equivalency and inflation hedging;
- The types of mortgages available and how to understand the components of each type;
- How to compare mortgages based upon the payments over the term, the varying terms of each alternative, combinations, varying the points as well as overall costs and different qualification standards.
- Chapter 8 contains a more detailed discussion of the tax implications of ownership, including capital gains and the ownership of investment properties.

What are the issues that must be considered when taking into account the concept of mortgage planning? As you can see, there are many aspects to the mortgage choice. These must be paired with the overall objectives of the home owner. These objectives include, but are not limited to—

- Everyday budgeting. *Can we afford our monthly payments including the mortgage and other obligations? How comfortable are we with adding additional debt obligations?*
- Retirement planning. *When do we want to retire? How much money do we need for retirement? Where are we going to live? Is our retirement plan fully funded?*
- Tax planning. *How can we lower our monthly obligations after taxes? What about expected estate taxes?*

These are very complex issues. This book should not be considered a substitution for the necessary consultation with a financial planner or other financial representatives such as a tax accountant. It is quite clear that the best mortgage decision will be made in conjunction with such financial advice.

What we can do at this juncture is help you understand some of the issues that you may be faced with when making such decisions. Here are some examples—

- Many homeowners have equity in their homes but have under-funded retirement plans. This means that the homeowner is taking advantage of an important tax strategy by owning a home. But another important tax strategy available is the tax-deductibility of retirement plans. If the equity in the home is used to fund one's retirement plan, the homeowner is moving closer to their goals while taking advantage of an important tax consideration.
- Many homeowners have equity in their homes but are burdened with large levels of non-deductible consumer debt. Discussed in more detail in the next Chapter, a debt consolidation mortgage can do more than lower a homeowner's monthly payments after taxes. It can free up money to invest in retirement plans or even to pay the mortgage off more quickly.
- Many homeowners purchase the largest and most expensive home they can afford. After all, a large home is the fulfillment of the *American Dream*! On the other hand, if one stretches themselves to the limit with the purchase of their residence, their quality of life can suffer. For example, during the real estate boom which began just after the turn of the century, many homeowners were forced to purchase homes many miles from major metropolitan areas in order to afford the home they desired. But what is the result of a longer commute on their quality of life? Instead of purchasing a $600,000 home, what if they purchased two $300,000 homes? They can live in one and the other a tenant can make the payment for them. They still get the advantage of appreciation from $600,000 in assets as well as the tax advantages. Of course, becoming a landlord is not for everyone.
- Many homeowners put the largest down payment possible when purchasing a home, especially if they are selling another home before they close on this new home. But what if they took some of that equity and put it to work for them in another way? Yes, the new home's payment will now be larger. However, money made by investment of this new money could fund the higher payment and perhaps even shorten the term of the new mortgage. In effect, what may be considered a conservative decision may actually end with a less than conservative result.

We can see from these examples why it is important to get the best advice possible. It is important to note that many times decisions can be made that are contrary to the long-term goals of the individuals. Behind these decisions are important concepts that we have brought forward and discussed in this Chapter and other Chapters within this book. It is important to understand these concepts—no matter what is happening around you right now. For example, even if real estate is booming, look at the history of the conforming limits. There have been decades in which homes have not appreciated much at all. The late 1980's until the late 1990's represent such a period. After that appreciation exploded, followed by a period of contraction.

The lesson? Unless you are a professional investor, you should not purchase a home for a short-term gain. And if you are loaded in debt like many consumers are, maximum leverage can be very dangerous. Though we speak in terms of qualifying for a mortgage, more and more the term we also must keep in mind is suitability. Is the mortgage and home purchase suitable for the homebuyer in the short and long-term?

# 6

# Refinancing a Mortgage

## What is a refinance?

A refinance is the replacement of an existing mortgage with a new loan equal to, larger, or smaller in size than the original mortgage. If there was never a mortgage placed on the property (we say that it is owned *free and clear*), placing a mortgage on the property for the first time is considered a refinance as long as the owner remains the same. The placement of a second mortgage behind a first mortgage on a property after it is purchased is called a *refinance* or *home equity second*, as opposed to a *purchase-money second*.

There are two basic types of refinance mortgages:

- *A rate reduction refinance* replaces only the existing balance. The new mortgage balance can be increased to finance, or *roll in*, closing costs associated with procuring the new mortgage. It should be noted that not all rate reduction refinances carry a lower interest rate than the original mortgage. The important point is the primary purpose of the refinance, which will be to pay off the original mortgage and finance associated closing costs. Many loan programs allow a small amount of cash to be obtained without the transaction being considered a "cash-out." For example, conforming agencies will allow up to 2% of the loan balance, or $2,000, whichever is less.

***Rate reduction refinance***

(With closing costs financed)

| | |
|---|---|
| Existing mortgage balance: | $95,000 |
| Closing costs on new mortgage: | $ 3,000 |
| Refinance mortgage balance: | $98,000 |

- *A cash-out refinance* replaces more than the existing balance and associated closing costs. The new mortgage balance is large enough to pay off the existing balance and associated closing costs *and* the homeowner will walk away with cash from the transaction. A second mortgage placed on the property for the purposes of *pulling cash or equity out* would be termed a *home equity* second. Second mortgages that have open *lines of credit* for future cash withdrawals are called *home equity lines of credit (HELOCs)*. It is not unusual for cash-out mortgages to carry a rate premium as compared to rate and term refinances and the allowable LTV will typically be lower as well.

### Cash out refinance

| | |
|---|---|
| Existing mortgage balance: | $95,000 |
| Closing costs on new mortgage: | $3,000 |
| Refinance mortgage balance: | $110,000 |
| Cash out to home owner: | $12,000 |

### Rate and payment reduction refinance

| | |
|---|---|
| Original mortgage balance: | $100,000 |
| Original interest rate: | 7.5% |
| Principal and interest payment: | $699.21 |
| Present mortgage balance: | $98,500 |
| Closing costs: | $1,800 |
| Points: | $1,200 |
| New mortgage balance: | $101,500 |
| New interest rate: | 5.5% |
| New principal and interest payment: | $576.31 |
| Monthly savings: | $122.90 |
| Total costs: | $ 3,000 |
| Months to recover costs: ($3,000 ÷ $122.90) | 24.41 |

### Costs paid out-of-pocket

| | |
|---|---|
| New mortgage balance | $98,500 |
| New principal and interest payment: | $559.27 |
| Monthly savings: | $139.94 |
| Total costs: | $3,000 |
| Months to recover costs: ($3,000 ÷ $139,94) | 21.44 |

## Why would someone want to refinance a home?

1. *Lower the interest rate and payment.* The most obvious reason someone would want to refinance a mortgage would be to lower the interest rate and payment on that mortgage.

   In the first example, *we rolled the costs into*, or *financed the costs of*, the refinance. This is the most common way to accomplish a refinance. Another example would be for the homeowner to pay the costs of the refinance from his/her own cash funds, or "out-of-pocket." In this case, the costs would remain the same, but the new mortgage balance would be the same as the present balance.

   One method is not more advantageous than the other. For comparison purposes, one would have to balance the cost associated with increasing the present mortgage balance and higher payment against the cost of paying the closing costs out-of-pocket, thereby reducing cash reserves.

   Another effect of a refinance that should be considered is the increased term of the loan:

   - Original balance and term: $100,000—30 years
   - Present balance and remaining term: $98,500-28.5 years
   - New balance and term: $101,500—30 years

   The new mortgage will actually cause the term to increase by one and one-half years. If the homeowner will own the home for this length of time without refinancing again, the extra cost at the end of the mortgage should be taken into consideration. Or, the terms should be made equivalent in the comparison as opposed to the examples presented that do not make such an adjustment:

   - Present mortgage payment: $699.21
   - New mortgage payment: $588.36 at $101,500 balance
   - 5.5% interest rate
   - 28.5-year term
   - Recalculated monthly savings: $110.85
   - Recalculated recovery time: 27.06 months

At first glance, figuring the monthly savings and recovery time from reducing the interest rate is very simple: divide the costs of the refinance by the monthly savings to arrive at the recovery period. In reality, the actual monthly savings is not as easy to calculate as we figure in the factors of changing the loan term and financing the costs of the refinance. Since the length of time the home-owner will have the loan cannot be answered, the precise effect cannot be measured. Table 6-1 assumes that the costs are paid out-of-pocket and does not consider any change in mortgage term. It predicts monthly savings and gives the number of months until those savings equal the cost of the refinance. Although it assumes a 6.0% interest rate on the existing mortgage, the savings differentials will not vary significantly for slightly higher or lower rates.

## Months to Break Even After Refinance

Assuming 6% interest rate on existing mortgage
and no change in 30-year term

| | | Cost of Refinance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Interest Rate Reduction | Payment Reduction Factor | 0.5% | 1.0% | 1.5% | 2.0% | 2.5% | 3.0% | 3.5% | 4.0% |
| 0.25% | 0.16 | 31.3 | 62.5 | 93.8 | 125.0 | 156.3 | 187.5 | 218.8 | 250 |
| 0.50% | 0.32 | 15.6 | 31.3 | 46.9 | 62.5 | 78.1 | 93.8 | 109.4 | 125 |
| 0.75% | 0.48 | 10.4 | 20.8 | 31.3 | 41.7 | 45.5 | 52.1 | 72.9 | 83.3 |
| 1.00% | 0.64 | 7.8 | 15.5 | 23.4 | 31.3 | 39.1 | 46.9 | 54.7 | 62.5 |
| 1.25% | 0.78 | 6.4 | 12.8 | 19.2 | 25.6 | 32.0 | 38.5 | 44.9 | 51.3 |
| 1.50% | 0.93 | 5.4 | 10.8 | 16.1 | 21.5 | 26.9 | 32.3 | 37.6 | 43.0 |
| 1.75% | 1.08 | 4.6 | 9.3 | 13.9 | 18.5 | 23.1 | 27.8 | 32.4 | 37.1 |
| 2.00% | 1.23 | 4.1 | 8.1 | 12.2 | 16.3 | 20.3 | 24.4 | 28.5 | 32.5 |
| 2.50% | 1.59 | 3.1 | 6.3 | 9.4 | 12.6 | 15.7 | 18.9 | 22.0 | 25.2 |
| 3.00% | 1.78 | 2.8 | 5.6 | 8.5 | 11.2 | 14.1 | 16.9 | 19.7 | 22.5 |
| 3.50% | 2.05 | 2.4 | 4.8 | 7.3 | 9.6 | 12.2 | 14.6 | 17.1 | 19.5 |

Note: to calculate monthly payment reduction, multiply the principal amount, in thousands, by the Payment Reduction Factor in the second column.

**Table 6-1**

In the example, the interest rate on a mortgage with $100,000 remaining principal was reduced from 6% to 4.0%. Using the table, the 2.0% reduction in the interest rate translates to a $123 reduction in monthly payment. If the refinance closing costs are $3,000, it will take 24.4 months for the monthly payment savings to total more than the closing costs.

### *Refinance Example*

| | |
|---|---|
| Old interest rate | 6.0% |
| New interest rate | - 3.5% |
| Rate reduction | 2.5% |
| Principal amount | $100,000 |
| Payment Reduction Factor ($/1,000) | x 1.784 |
| Payment reduction | $178.40 |
| Closing costs | 3.0% |
| Months to break even | 16.8 |

One decision that will always have to be made when considering a rate reduction refinance is how many points to pay. Each point is equal to one percent of the new mortgage amount. Table 6-2 illustrates such a choice.

The conclusion? In the short term, higher points and a lower interest rate will cost more. In the long term, the higher the points and the lower the rate, the greater the savings. In other words, if you are going to have the loan for a long time, finance as many points as is possible. Note we arrived at the same conclusion in Chapter 5 *Comparing Mortgages*.

**Points and Refinance Savings**

| Interest Rate | Points | Closing Costs Including Points | New Balance | New Payment | Savings | Months to Recover | Total Savings Over 30 Years |
|---|---|---|---|---|---|---|---|
| 4.25% | 3 | $4,800 | $103,300 | $508.17 | $191.83 | 25.02 | $69,059 |
| 4.5% | 2 | $3,800 | $102,300 | $518.34 | $181.66 | 20.92 | $63,398 |
| 4.75% | 1 | $2,800 | $101,300 | $528.43 | $171.57 | 16.32 | $59,565 |
| 5.0% | 0 | $1,800 | $100,300 | $538.43 | $161.57 | 11.14 | $56,135 |

Present Mortgage Balance: $ 98,500 Present Payment: $ 700.00 Closing Costs: Without Points: $ 1,800

Note: Total savings represents the monthly savings over a 30-year period, without taking into account the cost of the refinance. The refinance cost is not relevant over the term of the mortgage because after 30 years, the mortgage balance will be zero regardless of the alternative selected. It also does not take into account the increased term of the new mortgage as we are comparing these refinance alternatives to each other, not to the cost of keeping the original mortgage.

**Table 6-2**

2. *Reduce the term of the mortgage.* While a straight rate and term refinance usually will increase the term of the mortgage, the homeowner may refinance for the purpose of reducing the term of his/her present mortgage to save on interest payments over the life of the mortgage. A term reduction refinance will not make economic sense unless the new interest rate is lower than the interest rate on the existing mortgage. If the existing mortgage has a rate lower than market rates, the homeowner could simply increase the amount of existing monthly payments to reduce the term of the mortgage, as described by Table 6-3.

**Effect of Monthly Payment on Typical $100,000 Loan at 7%, 30-Year Amortization**

| Extra Payment | Principal & Interest | Months to Payoff | Years to Payoff | Total of Payments | Interest Savings |
|---|---|---|---|---|---|
| $0 | $665 | 360 | 30.00 | $239,511 | $0 |
| $20 | $685 | 328 | 27.33 | $224,477 | $15,034 |
| $50 | $715 | 291 | 24.25 | $207,856 | $31,655 |
| $75 | $740 | 267 | 22.25 | $197,412 | $42,099 |
| $100 | $765 | 247 | 20.58 | $189,003 | $50,508 |
| $150 | $815 | 217 | 18.08 | $176,192 | $63,319 |
| $200 | $865 | 193 | 16.08 | $166,814 | $72,697 |

**Table 6-3**

Note: Calculations do not take into account investing the payment savings over the term for the remainder of the term of the mortgage (from 15 to 30 years or from 20 to 30 years)—nor the gains on investments realized by keeping the lower payments and investing the excess money.

Let us take an example of the benefits of a term reduction refinance:

- Original mortgage balance: $100,000
- Original interest rate: 8.5%
- Present mortgage balance: $98,500
- Remaining mortgage term: 336 months
- Present mortgage payment: $768.91
- New interest rate: 5.0%
- New term: 15 years (180 months)
- Closing costs: $1,800
- Points: $1,200
- New mortgage balance: $101,500

– New mortgage payment: $802.66
– Remaining payments on present mortgage: $768.91 x 336 = $258,353.76
– Payments on new mortgage: $802.66 x 180 = $144,478.80
– Savings through term refinancing:

| | |
|---|---|
| $258,354 | *The home owner saves over $113,875 in interest over* |
| (-)$144,479 | *the term of the mortgage!* |
| $113,875 | |

In this case, the homeowner is using the monthly savings from the lower interest rate towards a reduction in term. If the interest rate reduction is great enough, the applicant can reduce the term by 10 to 15 years without increasing the monthly payments on the mortgage.

3. *Change loan type.* It is very common for a homeowner to refinance in order to change the loan type from an adjustable rate mortgage or a balloon program to a fixed rate mortgage. Typically, the home owner originally opted for these mortgage instruments to:

   * Qualify at the lower starting rate; or
   * Lower the payments during the first few years of the mortgage.

   A move may be made to refinance at a time when fixed rates have moved down to an acceptable level and/or the homeowner can qualify for a fixed rate. In the case of a balloon mortgage that has reached full term, the need may be more urgent. For example, in the sixth year of a seven-year balloon mortgage, the homeowner may be 12 months or less from facing a balloon payment, though "balloons" usually contain a conditional right of refinance.

   There are other examples of refinances that change the type of loan programs:

- The homeowner may refinance from an adjustable rate mortgage to another adjustable rate mortgage—taking advantage of the low initial rates in each case:

  - Original mortgage: 2005
  - One year adjustable: 2% annual cap
  - Initial rate: 5%
  - 2008 rate: 7%
  - 2009 rate: 9% (worst case scenario assumption)

  Instead of risking another rate increase in 2010, the borrower refinances into another one year adjustable:

  - 2009 (initial rate): 6% for five years
  - 2014 rate: 8% (worst case scenario assumption, if 5% adjustment not allowed in the sixth year)

Assuming the closing costs are reasonable, the costs of the refinance will be paid off in less than one year because of the drop in interest rates from 9.0% to 6.0%.

- The homeowner may move from a fixed rate mortgage to an adjustable or balloon instrument if the drop in interest rates is not enough to warrant refinancing into another fixed rate. The lower rate on the shorter term instruments may make a refinance worthwhile:
  - Present mortgage fixed rate: 5.50%
  - Present market fixed rate: 5.25% with $3,000 in closing costs
  - Savings may not be attractive to refinance (except if the loan amount is very large)
  - Present 5/1 adjustable rate: 3.5% (maximum adjustment cap of 2%)
- The move from 5.5% to 3.5% will yield a quick pay back, depending upon the loan amount. If the payback period is one year, the homeowner now enjoys four more years at 3.5% and one more year at a maximum of 5.5%. This makes sense for a homeowner who will have the mortgage from two to six years.
- Sometimes the move to an adjustable rate mortgage makes sense because of long-term safety as well. For example:
  - One year adjustable: caps 1% every adjustment and 5% over the life
  - Initial starting rate: 2.5%
  - Life cap: 5.0% (7.5%)
  - Present interest rate on the mortgage: 7.5%

  In this case, the life cap of the adjustable is identical to the present rate of the mortgage. The homeowner receives the benefit of the low starting rate and rate changes based upon a short-term treasury security instrument (one year "T"). There is no long-term risk of paying a higher rate than presently because of the low life cap.
- Another variation of a refinance to change mortgage programs is a refinance with a primary purpose to consolidate a present first and second mortgage on the property. It is quite common for second mortgages to have terms that are not quite as attractive as first mortgages:
  - The rate may be higher
  - The term may be shorter
  - The mortgage may have rate adjustments with little or no cap protection.

4. *Take cash out to consolidate debts*. A debt consolidation refinance can benefit a homeowner by converting existing debt payments to:

- Lower payments because of the longer loan term; and
- Tax deductible payments because only the mortgage interest is presently deductible.
- Somewhat related to a change in loan program would be a refinance of a mortgage to eliminate mortgage insurance payments. This type of refinance would be particularly popular when a homeowner has an FHA mortgage which does not allow for the cancellation of mortgage insurance. Even if the mortgage is grandfathered under the "old rule" allowing cancellation after five years and reaching 78% of the original value, it should be noted that FHA will not update the value of the home. Therefore, if there is an increase in value because of market conditions or because of home

improvements, the homeowner may still have to wait well beyond five years to achieve the required 78% standard.

Refinancing from FHA loans to conventional loans after the home appreciates is fairly commonplace in a low-interest rate environment in which homes are increasing in value. However, one should keep in mind that the base rate on FHA loans is typically below that of conventional.

Refinancing out of conventional loans to eliminate mortgage insurance is a little less common. Conventional loans allow mortgage insurance to be cancelled in as little as two years if market conditions warrant.

A debt consolidation refinance can benefit a homeowner by converting existing debt payments:

- The new loan may have lower payments because of the longer loan term; and
- The new loan's payments may be tax deductible because only the mortgage interest is presently deductible.

The following is an example of how a debt consolidation refinance can help the monthly cash flow of a homeowner:

- Original mortgage balance: $100,000
- Present mortgage balance: $98,500
- Present interest rate: 7.5%
- Present monthly principal and interest: $699.21
- Present total monthly mortgage payment: $900
- Present value of the home: $185,000
- Present debt structure:

| Loan | Monthly Payment | Balance |
|---|---|---|
| Credit cards | $250 | $ 5,000 |
| Auto loan | $500 | $15,000 |
| Personal loan | $250 | $10,000 |
| Personal loan | $300 | $ 5,000 |
| Totals: | $1,300 | $35,000 |

- Present total monthly payments:

| | |
|---|---|
| $ 900 | Mortgage payment |
| $1,300 | Monthly debts |
| $2,200 | Total |

- Debt consolidation refinance:

| | | |
|---|---|---|
| Present mortgage balance | | $ 98,500 |
| Closing costs | + | $ 1,800 |
| Points | + | $ 2,200 |
| Debt pay off | + | $ 35,000 |
| Total new mortgage balance | | $137,500 |
| New interest rate | | 5.5% |
| New principal and interest payment | | $780 |
| New mortgage payment | | $980 |

| | |
|---|---|
| After taxes: $785 | |
| Present total payments | $2,200 |
| After taxes : $2,025 | |
| Monthly savings | $1,220 |
| After taxes : $1,240 | |

The following notations should be made upon analyzing this example:

- The home must have sufficient equity to allow this amount of cash-out. In this case, the loan-to-value is 74.32% ($137,500 divided by $185,000).
- Not all mortgage interest is automatically tax deductible. It depends upon the use of the money and the cash basis of the home. Thus, we did not take this benefit into account.
- Though the monthly payments are reduced over $1,200 after taxes, it should be noted that a real drawback of this solution is the *spreading out of debt*. If the homeowner stayed with the original payments, the non-mortgage liabilities would be paid off in three to five years. Our solution causes the liabilities to be part of the mortgage that will be paid off in 30 years. If the homeowner stays in the home for 30 years, the savings may be erased over time. If the homeowner tries to sell the home two years later, a huge portion of the equity in the home will be gone. Of course, for homeowners who are having a rough time managing their finances, the benefits of lower monthly payments may outweigh the cost of home equity loss. In other words, if they are in pain, it must be fixed immediately. As an option, the homeowner may allocate a certain portion of the monthly savings to shorten the term of the mortgage. In this way, they will actually save additional money by ending the mortgage early. This is an important point with regard to refinances--that refinances can achieve more than one objective. In this case, the consolidation of debts and shortening of the loan term can provide an excellent solution to solve a short-term problem and put the homeowner in a better position in the long run.
- There is a second alternative. The homeowner can obtain a second mortgage on the present home instead of refinancing the entire mortgage debt. Generally, second mortgages carry a higher interest rate than first mortgages (one to four percentage points higher) and/or the term of second mortgages may be shorter (15 years). If present market rates are higher than the rate on the existing mortgage, then the second mortgage alternative bears looking into. If the homeowner can lower the rate on the first mortgage at the same time as accomplishing the debt consolidation, then the first example may make more sense.

### *Opportunity costs of refinancing*

| | |
|---|---|
| Present mortgage balance: | $200,000 |
| Present interest rate: | 7.0% |
| Costs of refinance: (including points) | $ 4,000 |
| New balance: | $214,000 |
| New interest rate: | 7.0% |
| Cash back to home owner: | $10,000 |

***Too high: $4,000 cost to borrow $10,000***

- Obtaining a second mortgage also may make more sense when the cash needed is very small compared to the overall size of the first mortgage. For example, if the first mortgage is $200,000 and the cash needed for debt consolidation is only $10,000, the borrowing costs would be too high for the procurement of the $10,000 cash unless the new mortgage rate is substantially below the present mortgage rate. In other words, there is a secondary

benefit of rate reduction for the refinancing. In the example, we say that the *opportunity costs* of borrowing are too high.

In the example on the previous page the homeowner only receives the benefit of $10,000 cash because the rate has not been lowered. The cost for borrowing this $10,000 is $4,000, a full 40% of the cash received!

5. *Obtain cash for other purposes*. Though debt consolidation remains a leading reason why homeowners remove equity from their home, obviously the homeowner may take cash out for many other reasons:

- Purchase a vacation property or other type of second home;
- College education;
- Investment—including starting a retirement plan or purchasing an investment property;
- Major purchases such as a car or home improvements;
- Increase tax deductions by having a larger mortgage payment while using the equity taken out in another way;
- Buy a spouse or other person "out" of the home, if owned jointly.

The loan-to-value limitations, tax considerations and additional considerations between taking a home-equity second versus a new first mortgage would mirror those discussed in the previous section's discussion of debt consolidation refinances.

## Mortgage sources and refinancing

When considering a refinance, one of the first decisions a homeowner must make is what mortgage source to pursue for the refinance. The decision may be based upon:

- The qualifications of the homeowner;
- The source of the present mortgage;
- The loan-to-value of the proposed mortgage;
- The purpose of the refinance.

This section focuses on the industry guidelines for refinances so that the decision process will be ultimately clearer for someone considering a refinance of a home for any reason. Note that individual lenders may have requirements which are more stringent than these sources require.

*1. FHA refinances*

- *Eligibility*. Anyone who presently holds an FHA mortgage can refinance through the FHA *Streamline* program—if six payments have been made on the present mortgage. If the present mortgage is not FHA, the homeowner can refinance only if the home is owner-occupied and the homeowner holds no other FHA mortgages.
- *The streamline program*. The FHA streamline refinance program is for refinancing existing FHA mortgages. As long as the new payment is less than the old payment and cash back to the borrower is no more than $500, the documentation required is limited to the following:

The refinances must meet FHA net tangible benefits standards and cash back to the borrower may be no more than $500. In 2015, FHA amended the net tangible benefits standard to include the reduction of mortgage insurance levels as a benefit. The documentation required is limited to the following:

- Loan application;
- Previous 12-month mortgage payment history.
- No appraisal[28] of the property is required; however, some lenders will require a full appraisal or lesser standard of valuation such as an "AVM" or automated valuation model.
- Mortgage payment history, though many lenders will require a full credit report.
- No re-qualification of the applicant is required, though FHA does require verification of income and assets.
- The applicant can keep and re-subordinate secondary financing without a new appraisal to a maximum of 125% CLTV.
- The homeowner cannot finance closing costs into the loan amount. The closing costs can be financed using a lender credit, or higher interest rate.
- If the property is no longer occupied by the applicant, FHA will allow a streamline refinance: however, many lenders do not offer this alternative
- If the mortgage payment history shows delinquencies during the previous 12 months, the refinance may have to be approved under full documentation processing.

FHA also allows the financing of energy-efficiency improvements when refinancing.

- The present mortgage must be seasoned for six months before it is eligible for an FHA streamline refinance.
- In 2019 FHA added a six-month seasoning requirement.

***FHA Streamline MIP***

| | |
|---|---|
| $90,000 | Mortgage |
| $3,000 | Closing costs to be financed |
| $1,575 | New MIP (1.75% of base mortgage amount) |
| ($1,000) | MIP refund from old mortgage |
| $93,000 | Base mortgage amount |
| $93,575 | Mortgage amount including new MIP ($1,575 - $1,000) |

[28]Some lenders might require an appraisal even though FHA does not require such. FHA no longer allows the financing of closing costs using a streamline refinance. The borrower can finance closing costs through a higher interest rate, including accrued interest.

The Table shows the net tangible benefit standards of FHA which are required for qualification of an FHA Streamline Refinance.

**Table 6-4**

## Net Tangible Benefit Chart

| | To | | |
|---|---|---|---|
| **From** | **Fixed Rate New Combined Rate** | **One-Year ARM New Combined Rate** | **Hybrid ARM New Combined Rate** |
| **Fixed Rate** | At least 0.5 percentage points below the prior Combined Rate. | At least 2 percentage points below the prior Combined Rate. | At least 2 percentage points below the prior Combined Rate. |
| **Any ARM With Less Than 15 Months to Next Payment Change Date** | No more than 2 percentage points above the prior Combined Rate. | At least 1 percentage point below the prior Combined Rate. | At least 1 percentage point below the prior Combined Rate. |
| **Any ARM With Greater Than or Equal to 15 Months to Next Payment Change Date** | No more than 2 percentage points above the prior Combined Rate. | At least 2 percentage points below the prior Combined Rate. | At least 1 percentage point below the prior Combined Rate. |

The FHA ARM program may not be used for a streamline refinance of an investor property, including FHA hybrid adjustables. If refinancing from a fixed rate on an owner-occupied property to an FHA 1-year ARM, the new interest rate must be at least 2% lower than the rate on the existing mortgage. If refinancing from an FHA ARM to a fixed rate, the new rate can increase by 2% over the current rate.

The monthly mortgage insurance charged for an FHA streamline refinance will be identical to that which is charged on a purchase and the up-front mortgage insurance is 1.75%. A portion of the previous up-front charges may be refundable and subtracted from the new premium if the present mortgage is less than three years old. In addition, if the loan being refinanced was originated on or before May 31, 2009, the up-front cost is nominal at 0.01% and the annual premium is 0.55%. This change was implemented in June of 2012.

The applicant should be aware of the fact that the present lender may collect interest until the end of the month when an FHA mortgage is paid off. Therefore, if the new FHA mortgage causes the old mortgage to be paid off at the beginning of the month, the applicant will be charged duplicate interest. *FHA has changed this requirement for loans closed on or after January 25, 2015, effective for newly originated mortgages only.*

- *Full documentation refinances*. As long as the home is occupied by an applicant who holds no other FHA mortgages, any existing mortgage may be refinanced under FHA mortgage programs with the following restrictions:

– An appraisal, credit report, asset documentation, and income documentation must be obtained as required on an FHA purchase.
– The maximum mortgage amount cannot exceed FHA maximum mortgage limits published in the local area.
– The loan-to-value cannot exceed FHA 97.75%. Existing second mortgages can be re-subordinated behind the new mortgage to a maximum combined loan-to-value of 97.75%.
– No temporary buydowns are allowed.
– FHA allows *cash-out* refinances up to 80% of the value of the property.[29]
– If allowable under the maximum mortgage amount and loan-to-value calculations, all closing costs may be included in the new mortgage amount.
– Mortgage insurance charged will be identical to the schedule contained for purchase mortgages.

### *FHA payoff*

New mortgage funding date ..... July 7th
Present mortgage is paid off ..... July 9th
Interest on new mortgage
is collected for ..... July 7th through July 31st
Interest on present mortgage
is collected for ..... July 1st through July 31st
**Note: FHA has changed this requirement for newly originated loans**

### *VA full documentation refinance*

Present mortgage amount:……..$110,000
Appraised value of the property: ……$120,000
Closing costs:……$2,000
Unused entitlement:……$25,000

Calculation 1:
$120,000 x 75% + $25,000 = $115,000
Calculation 2:
$120,000 x 100% = $120,000
The maximum mortgage amount is the lower of the two.

2. *VA Refinances*

- *Eligibility*. All eligibility requirements for VA purchases apply: the program is limited to eligible active military, veterans, reservists and those in the National Guard. Any veteran holding an existing VA mortgage can refinance through the VA Interest Rate Reduction Refinance Loan (IRRL) program. A full documentation VA refinance requires unused entitlement as would be needed for a VA purchase.

- *VA IRRL refinance*. A VA *IRRL* refinance is similar to the FHA *streamline* refinance, including the six-month seasoning requirement. The payment and the rate must be reduced and unless the term is being shortened, an ARM is being refinanced or energy improvements are being financed. The documentation required:

– Loan application.
– Previous 12-month mortgage payment history.
– An appraisal is not required, regardless of whether the veteran still occupies the property. However, individual lenders may require an appraisal.
– Closing costs, including prepaids, can be financed regardless of the lack of an appraisal, excepting that discount points are limited to 2.0%.
– The borrower cannot pay miscellaneous lender charges such as a tax service fee._
– In 2019, VA added a six-month seasoning requirement.

[29]This limit was lowered from 95% LTV beginning in April of 2009, however, high-cost areas over the base conforming limits were never allowed over 85% LTV. Cash-out refinances are not allowed with a history of recent late mortgage payments.

The funding fee for rate reduction refinances is 0.5%. This funding fee can always be financed and waived if the veteran is on VA disability. The veteran does not have to qualify for the new mortgage unless the payment is increasing by 20% or more. If the current loan is more than 30 days past due, the loan must be submitted to VA for preapproval, though approval by a lender is not likely in that situation. No more than $500 in cash may be received from the transaction, with certain exceptions. The new term of the mortgage can be no more than ten years more than the existing term, which precludes the changing of the term from a 15-year to a 30-year. In late 2018 published additional rules to be effective in early 2019, including a net benefit requirement. This net benefit includes a requirement for a 0.5% reduction in rate when refinancing from a fixed-rate VA and a three-year recover of costs requirement.

3. *Conventional refinances*

- *Eligibility*. There are no restrictions on who is eligible for conventional refinances. Fannie Mae and Freddie Mac allow refinances on second homes and investment properties; although the products available will be restricted and loan-to-values allowed may be lower than for owner-occupied refinance transactions.

- *Streamline refinances*. Both Fannie Mae and Freddie Mac have had reduced documentation programs for the refinance of existing mortgages. The parameters may vary based on the results of automated underwriting systems. In 2009, these programs were usurped by the President's *Home Affordable Refinance Solution – HARP* - which presented new alternatives for refinancing conforming mortgages. Included in the guidelines is the ability to refinance at 125% of the value of the home while subordinating existing seconds. This program is in effect until September 30, 2017, extended from the original date of June 10, 2010. Along with the extension, the requirement for a 125% LTV cap was removed from eligible mortgages—though many lenders have retained the 125% cap and some restrict the LTV to lower levels. Loans above 105% LTV are limited to fixed rate mortgages.

- The HARP program expired at the end of 2018. the Housing Finance Agency released guidelines for a new "high LTV" Refinance Program that Fannie and Freddie started offering in late 2018/early 2019. There is no minimum credit score, LTV, debt-to-income ratios or appraisal required -- though lenders and the agencies may invoke such requirements. Eligibility requirements for this program include:

– No missed mortgage payments in the past six months

– Maximum of one missed mortgage payment in past 12 months

– Income must be verified

– Benefit such as lower monthly payment must be realized.

There is a misconception that if a loan was underwritten through the automated underwriting systems DU or LP and the loan closed, Fannie Mae or Freddie Mac owns it. However, many loans underwritten through agency automated systems ultimately are not delivered to the agencies as non-conforming lenders may use these systems for their guidelines. Also, if a loan is under a "repurchase" agreement, it would not be eligible. Finally, make sure that everything is inputted as it is in the note. You may get a loan that does not show up because of "St." vs. "Street" or a different spelling of their name. You should even cross check with the extra four-digit zip code.

- *Full documentation conventional refinances*. Since there is a multitude of mortgage sources for conventional mortgages, the possibilities for refinance are actually quite numerous. Here are some general guidelines that will be found to be true for the majority of conventional refinance programs.

– Owner-occupied no cash-out refinances may be typically limited to 90% to 97% of the value of the appraisal, depending upon the loan size, mortgage type and property type. Note that Fannie Mae's HomeReady™ Program released in December of 2015 includes the ability of those who qualify to refinance at no-cash out up to 97% of the value of the home up to the base conforming limit and 95% for high balance loans. This program has maximum income restrictions if the home is not located in a low-income area.

– Cash-out refinances are usually restricted to owner-occupied refinance transactions, with a maximum loan-to-value of 75% to 90%, depending upon the source. The home must be owned for six months, though Fannie Mae has a "delayed financing" exception which allows homeowners to take cash-out more quickly if they paid cash for the home. Fannie Mae will restrict cash-out to 70% if the home has been listed for sale for the previous six months and no temporary buydowns are allowed.

– Refinances on second homes are typically underwritten under the same guidelines as owner-occupied residences.

– Refinances on investor properties may be limited to 80% to 90% of the value of the property, with lower loan-to-values for cash-out refinances. Under conforming guidelines, the applicant may not possess more than four to ten other properties that are mortgaged, depending upon the amount of reserves verified.

– For rate and term refinances, if there is presently a second mortgage on the property and this second mortgage is to be included in the refinance, there may be a *seasoning* requirement of one to two years or the loan will be considered a cash-out refinance. Previously, Fannie Mae and Freddie Mac changed their definition of cash-out to include the payoff of any second mortgage not used to finance the purchase of a property.

  However, as previously mentioned, one can see how a seasoning requirement might be very important for investor refinance programs that do not allow cash to be taken out of the property. For example, if the homeowner has a mortgage of $50,000 and would like to remove $30,000 cash from his/her investor property, the homeowner might place a second trust on the property of $30,000. The homeowner then applies to the lender for a *no cash-out* mortgage of $80,000 a year later—however, under most present guidelines may be considered "cash-out."

  With the growth of the non-conforming market, many refinance choices were expanded with higher market rates. However, the fiscal crisis caused lenders to eliminate many of these more liberal alternatives. For example, in the past there were second mortgages available up to 125% of the value of the home.

5. *State and local bond issues*. State and local bond issues exist for the sole purpose of assisting people with low to moderate income with purchasing their first home. Refinances are typically not available under these programs. However, with homeowner aid under the Economic Stimulus Act and other similar legislation, local programs may be available for those having trouble making their mortgage payments. More recently, special refinance programs have been more common under these programs, but their guidelines and restrictions vary widely.

## Other considerations for refinances

Before embarking upon a refinance transaction, there are some other facts to note.

*Right of Rescission*

The Federal Truth in Lending Law requires a lender to allow a three-day *right of rescission* for an owner-occupied refinance transaction. A *right of rescission* can be considered a cooling off period during which the consumer may have a right to cancel the transaction and recover the costs incurred during the process. Though this law is designed to protect the consumer, one should be aware of the following drawbacks.

The three day right of rescission dictates that the lender does not fund the transaction until the rescission period expires. Therefore, if the mortgage closes on Monday, June 1st:

| | |
|---|---|
| Monday, June 1st: | Closing date |
| Tuesday, June 2nd: | First rescission day |
| Wednesday, June 3rd: | Second rescission day |
| Thursday, June 4th: | Third rescission day |
| Friday, June 5th: | Funding date |

This means that the consumer will not receive the money from a cash-out refinance and/or the present mortgage will not be retired before the funding date. When the present mortgage being paid off is an FHA loan, one should remember the fact that the present lender is entitled to collect interest until the end of the month in which the present mortgage is paid off. If the rescission period causes the funding date to move into the next month, the applicant may end up paying duplicate interest for almost an entire month. Note again that newer FHA loans being paid off no longer allow the lender to collect this duplicative interest.

The mortgage will typically have to fund before the lock period expires. Normally, a mortgage applicant is given a lock-in, for a rate and points, that is good for a specified period of days:

30 day lock  Lock-in date: August 1st  Lock-in expiration date: August 30th

In the above example, a mortgage purchase transaction must close on or before August 30th in order to preserve the locked-in rate. For a refinance transaction, the mortgage must fund by August 30th, so it must close five or seven days before August 30th. Sundays and holidays are not counted as *rescission days* and the loan cannot fund on a weekend or bank holiday because financial institutions are not open for business. Basically, the lender has fewer days to process the mortgage application for a refinance transaction.

In addition, with the closing disclosure required to be provided to the consumer three business days before closing, the period available for processing is compressed even further. The combination of these two requirements might force the lender to quote a longer-term lock period, such as 45 days, for a refinance, which in essence, increases the cost to the homeowner.

The law also provides that the right of rescission may be waived due to an emergency that creates a financial hardship. Unfortunately, the law does not specify what constitutes an emergency and lenders are extremely reticent to allow the right to be waived under this provision without

such guidance. Because the lender would be in a position to allow the period to be waived, the lender would actually be rendering in opinion that an emergency exists.

One exception to the rescission period is in the case where the law recognizes *no new financing* to be in place. If a refinance is affected through the original lender, which is the present servicer and all closing costs are paid out-of-pocket, a rescission period is not required. It should be noted that, if the consumer actually exercises their right of rescission, they are entitled to the refund of all up-front costs paid to the lender, including the costs of an appraisal and credit report.

*Getting to settlement.*

When a typical homebuyer goes to settlement on a purchase transaction, the homebuyer has plenty of guidance from a real estate professional. The real estate agent guides the homebuyer by recommending a settlement agent, insurance company, procuring a pest inspection on the property and taking care of a host of other settlement requirements. On a refinance transaction, there is no real estate agent involved. The applicant is literally on his/her own with respect to bringing the transaction to a settlement conclusion. The guidance of an experienced and diligent loan officer is essential.

*Re-Subordination.*

The homeowner may refinance a first mortgage and may desire to keep their second mortgage. In this case, the second mortgage would claim primary position at the point of payoff of the old first—unless there is a re-subordination agreement. This agreement binds the second mortgage to stay in secondary position (or subordinate) while the new first is put into place. Lenders require approval of subordination agreements and the second mortgage company may take up to two weeks or more to prepare such an agreement as well as charging a fee for this service.

*Cash-out surcharge.*

Most lenders charge a higher price for cash-out transactions—especially for higher loan-to-values. Others may restrict the amount of cash that may be received under the program. As mentioned previously, the conforming agency's definition of cash-out encompasses any second being paid off that was not acquired to purchase the property. Non-conforming lenders may vary in their definition. For example, some may use another "seasoning" requirement. This requirement might state that the second would have to have been in place for a certain period of time and that there were no recent draws on any home equity lines of credit.

*Home for sale.*

Many lenders will not refinance a property if the intention is to sell the property. Therefore, if the home is presently or recently was listed for sale, this may present a problem if you are trying to refinance. Some lenders may restrict refinances to properties not listed up to the past 12 months. In addition, for owner-occupied transactions, lenders require a written statement concerning intent to occupy after closing. These restrictions may vary from lender-to-lender and during certain economic environments.

*Closing costs.*

One of the most prominent questions facing an applicant when going through a refinance transaction is: *How much is it going to cost?*

Here are highlights of how some of the costs can be different for a refinancing a mortgage as opposed to a purchase:

- *Down payment*. Though refinance transactions do not typically require a down payment, the applicant must ensure the home appraises for a high enough value to allow the payoff of the present mortgage balance under the selected mortgage program. Additionally, if the applicant intends to finance closing costs, the value of the home must be even higher. Keep in mind that "streamline" refinance transactions do not require an appraisal to establish the value -- though some lenders may require an appraisal at their discretion.
- *Lender charges paid at loan application*. The appraisal and credit report charges for a refinance transaction will typically be no different than those incurred for a purchase. Some streamline refinance programs require no appraisal and/or credit reports. In rare cases, a lender may require a lock-in or application fee for a refinance mortgage application as opposed to a purchase because of the fall-out risk associated with refinances.
- *Why is there more risk*? On a purchase transaction, the applicant must go tom settlement within a certain time frame as usually specified in the contract. If rates go down after the mortgage rate is *locked-in*, what is to keep the applicant from making application and relocking with another lender on a refinance transaction? In this case, the applicant is just forfeiting the fee for an appraisal and credit report. If the applicant "walks," the lending institution has processed a mortgage without any income generated.
- *Lender charges paid at settlement*. Origination fees and discount points charged by a lender on a refinance transaction are typically not any different than purchase mortgages. In the past, lenders charged higher discount points for refinances, especially during periods of high refinancing activity; however, this practice has become much less common recently. When rates go down, many home owners try to refinance at once, causing log jams with lenders that may react by trying to slow activity down by raising rates and/or points on these transactions versus purchases.

  Other lender fees are also going to be identical for purchase and refinance applications. The one exception will be miscellaneous lender fees on VA refinances. These fees are typically paid by the seller on VA purchase transactions. VA does not allow the lender to charge such fees at all on refinances, unless the fee is charged directly to a third party for such services.

  One time FHA mortgage insurance and the VA funding fee can be financed on all refinance transactions. VA charges a reduced funding fee of .50% on all IRRL refinances. Up-front mortgage insurance will reflect a reduction by the amount of any refund of present FHA mortgage insurance if the present mortgage being refinanced is an FHA mortgage that was subject to one-time mortgage insurance originated within the previous three years. Note that Streamline Refinances of present FHA loans will have reduced mortgage insurance if the loan was originated before May 31, 2009.

  If the original mortgage had conventional mortgage insurance and the new loan is still above 80% LTV, the lender may achieve a discount on mortgage insurance by procuring such insurance from the original mortgage insurance company. This is termed a *reissue rate*.
- *Settlement agent charges*. Settlement agents will perform the same services on a purchase or refinance transaction and therefore the charges will be similar. On a purchase transaction, the charges may be split between the buyer and the seller. On a refinance, the applicant must bear all settlement charges, including any fee for transmitting a pay-off amount to the present lender.

If the homeowner already has an owner's title insurance policy on the present home, the settlement agent can typically achieve a *reissue rate* on the new policy, which may mean a reduction of 25 to 50 percent on the cost of the insurance. If the home owner possesses a recent survey of the property (typically within five years) and no changes have been made within the boundary of the property since the date of that survey, the lender may accept a *survey affidavit* from the applicant, eliminating the cost of a new survey. A *survey affidavit* is merely a sworn statement attesting to the fact that there have been no changes. In other cases, some lenders may accept a *recertification* of the original survey by the original surveying company which may lessen the cost.

- *Taxes*. Jurisdictions will differ by their policy concerning taxation of refinance transactions. Some areas tax refinances as they would a purchase, but the majority have reduced fees or no taxes at all except for recordation fees. Even the recordation fees will typically be less because a new deed is not being recorded on the property. Governments may charge less for owner-occupied as opposed to investor refinances. Others may charge more if the amount of the present mortgage is being increased.

- *Miscellaneous fees to complete the appraisal*. Most ancillary appraisal fees will not be applicable on a refinance. For example, a final inspection of a new home is a purchase transaction cost. On the other hand, if the appraisal dictates that repairs must be completed on the property, the refinance may incur final inspection charges. Some lenders do not require pest, well and septic inspection reports for refinance transactions.

- *Prepaids*. Prepaids are payable on a refinance transaction in the same manner as they are on a purchase. Some mortgage programs may not allow the financing of prepaid charges. The portion of prepaids placed into escrow with the new lender may very well be offset by an escrow refund from the present lender. If the applicant is refinancing with the present lender, that lender may give a credit for this escrow refund, alleviating the need for money changing hands. This is called an *assignment of escrows*. If the home has increased in value, the property taxes may have increased and therefore the homeowner may be behind on their escrow payments. In this situation, the escrow refund may not match the new escrow requirement. In addition, the new payment may not be as low as the consumer is expecting because their old payment was about to be increased because tax rates have risen and the old payment was not adjusted for this factor.

- *Prepaid Interest.* Though prepaid interest is paid at settlement on a refinance transaction, the homeowner should be made aware of the fact that accrued interest may still be due on the present mortgage since interest is paid *in-arrears*. This may seem as though the applicant is paying on both mortgages at the same time, but a new mortgage payment will not be due for some time after closing, which will cancel out this extra cost at closing. In effect, a mortgage payment must be made at closing, but the next payment is skipped. It should be noted that because interest is paid *in-arrears* for a mortgage payment as opposed to in advance for rental payments, the payoff amount on the credit report will be lower than the actual payoff because the balance reported does not reflect interest accrued, but not due yet. Originators must take into account this discrepancy while calculating the amount of the new loan.

  The originator may be tempted to get an accurate payoff amount quickly from the present lender, but there is a risk in doing that. If the present lender is then tipped off that their customer is refinancing, they may have an in-house team which will contact the customer and offer to affect the refinance with the present lender instead.

In the case of FHA mortgages, the present lender has the right to collect interest to the end of the month in which the mortgage is paid off if the loan being paid off was closed before January 25, 2015; therefore, the home owner may very well pay duplicate interest during the month of the refinance if the settlement date is timed incorrectly.

# 7

# Applying and Packaging Your Loan for Approval

There is one secret to the loan application and approval process: preparation. Nothing will delay a mortgage approval process more than the lack of preparation. Even more significantly, nothing will reduce an applicant's chances for loan approval more greatly than the lack of preparation. A common complaint from loan applicants and Realtors is speed of the mortgage approval process and last minute problems that arise. Yet, it is the unprepared applicant who succeeds in causing many of these delays:

1. Don't push for a quick loan application. Go over the documentation requirements with the loan officer before the loan application and take the necessary time to procure this documentation so that the loan officer can review it at the loan application instead of afterwards.
2. Bring the loan officer everything necessary. Do not hold back on any documentation. Last minute surprises are often caused by information that surfaced later in the process, information that could have been gleaned from documentation provided at loan application.
3. Make loan application before offering a sales contract. It makes no sense that the homebuyer will spend weeks looking for a home with or without a Realtor, sign a sales contract, then ask a lender to process the mortgage in two weeks in order to affect a quick settlement. If the home buyer made loan application when the home buying process started, there would be many more weeks to iron out problems. Approval may even be obtained before the home is selected, giving the purchaser more leverage with the seller.

## Preparing the documentation

The next obvious question is:

*"If I do need to prepare, then what do I need to bring to loan application?"*

This section will provide a detailed analysis of most every situation that will warrant the provision of application documentation. Many lenders will provide *pre-application* packages that will help the applicant prepare by organizing the necessary information. Note that these requirements may vary widely by lender and program alternative—though "limited and no-documentation" programs of the past decade are much less common.

1. *The applicant's personal history*: The applicant should bring the following personal information to loan application:

- Living address for the past two years.

- Employment address and phone number for the past two years.
- Social security card.
- Driver's license or other official photo identification.
- Address for any rental properties owned by the applicant.
- If the applicant is not a citizen, the "*green"* or *"resident alien"* card or Visa.

2. *Information on the home being purchased or present home (for a refinance):*

- Ratified sales contract for purchase.
- Any ratified addenda for purchase.
- Copy of listing data sheet if home was listed by a Realtor.
- If no listing exists, information on yearly property taxes and monthly homeowner's association dues.
- Copy of the deed and existing note for a refinance (including for existing 2nd mortgage). The lender must have information regarding any prepayment penalties on your present mortgage(s).
- If there are any *contingencies*, or conditions in the contract, the lender will want to see any future addenda removing these contingencies.
- If the contract is amended in any way in the future, the lender must be provided with a copy of all addenda. New homes will often have increased sales prices with options added after the initial contract ratification.
- If the home is a condominium, a pre-sale (condo cert) may need to be obtained from the Homeowner's Association. This document verifies the percentage of owner occupants in the project, in addition to other information.
- If an investment property, a copy of the lease if currently rented.

3. *Information on the applicant's income.*

- For those who are employed:
  - Pay stubs covering the most recent 30-day period.
  - W-2s for the past two years.
- For those who are self-employed.
  - Year-to-date profit and loss from the business (if the tax returns end more than 90 days from the date of application).
  - Previous two years' complete Federal individual tax returns (signed).
  - Previous two years complete Federal corporate or partnership tax returns (signed) if there is a corporation or partnership.
- Two years' individual tax returns are also needed for those who earn more than 25% of their income from commission, bonus, or overtime. Any interest or dividend income used to qualify must also be shown on individual tax returns. Starting in 2018, employee business expenses are not deductible under the new tax law.
- For those who are using a variable income such as overtime, part-time, commission or

bonus— any information breaking down the types of income for the past two years. This may be the last pay stub for each year, or a letter from the employer.

- For rental properties, a current one-year lease and/or two years' Federal tax returns may be required.
- For note receivable income, a copy of the ratified note and two years' tax returns.
- For alimony, child support and/or separate maintenance income, a copy of the separation agreement and divorce decree or other evidence of support payments and proof of receipt of regular payments for the previous 12 months – if income is being used to qualify.
- For social security, retirement, or disability, a copy of the award letter, the letter issued with the past payment change, and proof of receipt of payments (usually using a 1099, which is the equivalent of a W-2 for miscellaneous income)
- If there is a raise due soon and the increased income is necessary for qualification, the employer must provide a letter specifying the amount and effective date. The lender may ask to see a pay stub at the new salary level, either before or after settlement takes place.

4. *Information on the applicant's assets.*

- For all liquid assets (savings, checking, mutual funds, money market, stocks, etc.) held with a financial institution, the prior two months' statements. The most recent statement will do if these are issued quarterly instead of monthly.
- For a retirement plan, 401K, or IRAs, the latest statement. Statements covering the previous quarter are necessary if these assets are to be liquidated in order to purchase the home.
- For the sale of an asset that is going to produce the necessary cash to fund the transaction, a copy of the agreement and proof of receipt of funds. In the case of the sale of the present home, the ratified sales contract will be needed at loan application or when received. The settlement statement (HUD-1) on the previous home may be brought to settlement on the new home if both settlements are occurring on the same day, or *back-to-back*.
- If the cash needed is coming from a loan, proof of loan approval must be provided, as well as the terms of the loan. Later in the process, proof of receipt of funds must be provided.
- If the cash needed is coming from a gift, the lender will provide an acceptable gift letter that must be filled out by the person giving the funds. Most lenders will accept a copy of the donor's bank statement as evidence of ability to give the gift. The lender also will typically want to see proof of receipt of funds later in the process.
- If the applicant's employer is paying closing costs before settlement, a copy of the benefits package or relocation letter must be provided. The lender may want to see receipt of funds later in the process if these funds are necessary to complete the transaction.
- If the applicant's employer or a relocation company is providing an equity advance on the applicant's present home and the home's sale is guaranteed, provide the terms of the equity advance, proof of guarantee with minimum sales price, and proof of receipt of funds.
- If the seller is paying closing costs, the terms of such must be specified in the sales contract.

- Always provide a copy of the deposit or escrow check that was used as a deposit on the home purchased. If not a bank or cashier's check, the lender will typically want a copy of the canceled check (copy front and back) after it clears the bank account. This ensures the funds in the applicant's bank account are in addition to the amount placed upon deposit under the terms of the sales contract.

5. *Information on the applicant's liabilities.*

- The balance, monthly payment, account number, and lender address should be provided for all outstanding liabilities. A copy of the latest statement and/or a page from the payment coupon book will suffice. If you review a copy of your credit report—you could provide these only for loans that are incorrect on the report.
- If the applicant owes child support, alimony or separate maintenance, a copy of the complete ratified separation agreement and divorce decree or similar evidence.
- For those presently paying rent, the name and address of the landlord.
- If the present mortgage is held by a private individual rather than a financial institution or the present landlord is an individual rather than a management company, it may be helpful to provide copies of canceled checks of payments (front and back) for the prior 12 months.
- If a home is owned free of liens (is *free and clear*), the applicant must provide proof that there is no mortgage on the property. This may include the original settlement sheet, a deed of satisfaction or tax returns showing no interest deduction. In addition, proof of the amount of real estate tax, insurance, and homeowner's association payments must be provided.
- If a car is less than four years old and there is no car loan or lease outstanding, the applicant may be asked to provide a copy of the car title showing no lien.
- If any liabilities are being paid off in order to qualify for this mortgage (unless being paid at settlement from the funds of a "cash out" refinance or sale of present home), the lender will want to see proof of payoff and verify the funds utilized.
- If the transaction is a relocation in which the applicant's employer is guaranteeing the sale of the present home, proof that the employer will make the present mortgage payments during any time period in which the applicant owns two homes.

6. *Explanations to provide at loan application*. The applicant must provide written explanations for any of the following situations:

    - A gap in employment of more than one month during the previous two years.
    - A decrease in income from year-to-year.
    - A complex job history (for example, a switch from employed to self-employed and back to employed again).
    - Any bank accounts opened in the previous 90 days, including proof of source of funds.
    - Any significant increase in funds or large deposits in existing accounts during the prior 90 days, including proof of source of funds.
    - Explanation of use of cash being taken from the property if a cash out refinance transaction.

- Explanation for significant late payments of which the applicant is aware. If significant credit blemishes such as bankruptcies, judgments, etc. have occurred, the applicant should provide documentation to back up the explanation.

## Application

***What does the loan officer do with the documents?***

So, you have brought two tons of information to the lender. Now what happens? Good loan officers review the information while taking the loan application. They will be looking for such things as:

1. Pay stubs.

- Does the year-to-date income amount shown match the monthly salary? For example, if the applicant reports earning $50,000 annually, does the pay stub on June 30th show $25,000 of income earned for the year? If not, what is the explanation? One such explanation would be a recent raise to $50,000 salary.
- Are there any regular withdrawals from the pay stub that could be construed as debt payments? An applicant may have taken a loan from the employer's credit union year.
- Does the entire personal information match on the pay stub, for example the name and social security number? Is the pay stub dated within the past 30 days of loan application?
- If there is overtime, bonus, or commission income, is it broken out on the pay stub? Many times, the applicant will report his/her income as salary but a second look at the pay stub will reveal overtime that will affect the final income calculation.

2. W-2s.

- Are there W-2s for the prior two years? Is the social security number and name correct for each year? What about the employer's name? Quite often the employer's name or ownership of the company will change. The employee could have transferred to a different subsidiary from the same company.
- Does the income match the salary level reported? Minor increases each year would be expected, but what if the income shown decreased from year-to-year? Can we get a breakout of overtime or bonus directly from the employer?

3. Tax Returns.

- Once again, we would match the personal information: names, social security numbers and dates. Are the returns signed and are all schedules included? If there is a separate corporation and/or partnership, are these returns included as well? Watch out for returns that are not current because of extensions filed. In this case, you will need copies of the extensions and proof of taxes paid. Some corporations are on a fiscal year that will not match up directly to the calendar years contained in the individual returns. This may affect the final income calculation, or the data needed in order to calculate the final income.

- Does the income on the returns match what is disclosed? For example, if the applicant is a sole proprietorship (Schedule C), does the bottom line of the Schedule C averaged for two years match the monthly income disclosed?
- If the applicant is self-employed, is there a profit and loss statement on the business covering the period from the end of the tax returns to the time of the loan application (or within the most recent quarter)?

4. Bank statements.

- Is each bank statement complete (all pages) and do you have bank statements current for the past 90 days (there must be three consecutive months)? Is the personal information correct? Watch for another name on the bank statements that could mean that the account is held jointly with another person not involved in the transaction. Does the applicant have permission to use the money, or a portion of the money?
- The last balance on the most current bank statement is the amount that would be utilized for calculation of the asset figure. Is this enough to support the transaction, or are they counting on a deposit recently made (or to be made)? If so, where did the funds come from?
  Are there regular withdrawals of the same amount each month that might indicate debts not disclosed? Large withdrawals and deposits (outside of which the regular pay would support) must be explained. Returned checks also must be explained as an item of derogatory credit.

5. Sales contract.

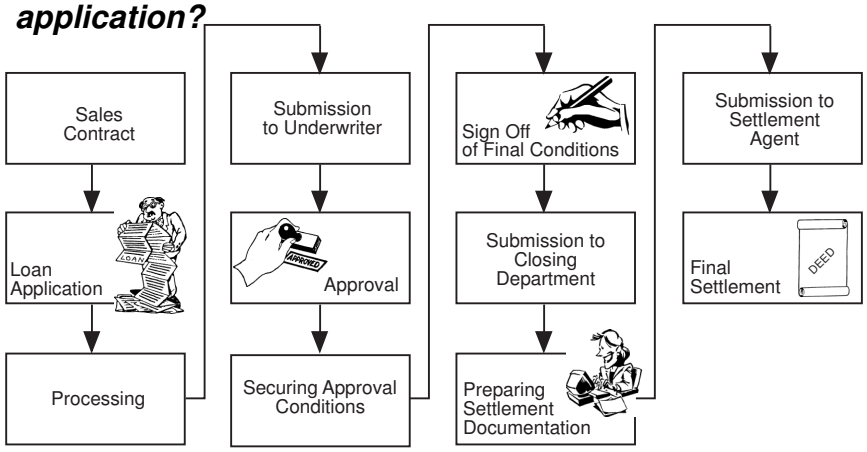
- Is the contract fully ratified (signed) and are all addenda included? Are all purchasers making loan application? Is the information contained in the sales contract accurate?
- If the seller is paying closing costs, are contributions within the program's guidelines? A common mistake is to specify that the seller will pay prepaid expenses when the program does not allow this. Is the contract clear on who will pay what points and loan fees?
- Is there personal property conveying that cannot be financed? Perhaps the purchaser is also buying the furniture in the home.
- Are their contingencies such as a home inspection that will have to be removed later in the process?
- Does the listing attached to the sales contract indicate that the home is a condominium? If so, is the project approved for the loan program? Does the listing indicate large acreage that might make the land-to-value ratio too high to support a residential home mortgage?

It is important for the loan officer to obtain the answers to any questions concerning loan approval up-front in the process. For example, if the applicant has been self-employed for only 18 months, is this acceptable and how is the income to be calculated? With the right information present at loan application and a proper review of the information by the mortgage representative, the loan officer will be able to pose the question within a few days of loan application.

## Processing

### Loan set-up

***What does the mortgage company do with the loan application?***




You have given the mortgage company a bundle of information that has been reviewed by a loan officer for any questions that may hold up your loan approval. What happens now?

The loan application is then turned over to the *processing* department of the mortgage lender. The processing department is responsible for getting the loan ready for submission to the underwriting department for final approval. This procedure is called *processing the mortgage*. Today, it is more likely that portions of the processing and underwriting process may be automated—with credit reports, and other documentation ordered directly via a laptop by the loan officer. In this case, we will describe the process as if completed by a separate individual.

The first thing a processor does *is set-up the loan*. The set-up process consists of the following:

1. *Registering the application*. Every mortgage lender has a way of keeping track of all mortgage applications that are brought in by loan officers.
2. *Sending the disclosures*. The processor must send the Loan Estimate within three business days application. This Loan Estimate replaces the Good Faith Estimate of Closing Costs and Truth-in-Lending Disclosures previous utilized. Usually most other required disclosures are signed at loan application. The following are typical disclosures for all mortgages of loan application for all purchase transactions, though some loan officers provide this at loan:

- *The Program Disclosure*, that describes the mortgage program if it is not a fixed rate;
- The *Transfer of Servicing Disclosure*, which describes the mortgage lender's policies and track record concerning selling the servicing rights of the mortgages the lender originates;
- The *Settlement Cost Booklet*, a Consumer Finance Protection Bureau guide called "*Shopping for Your Loan*" that describes each settlement charge, laws and the entire process;
- *Consumer Handbook on Adjustable Rate Mortgages* is published by the Consumer Finance Protection Bureau and is required for adjustable rate mortgage applications;
- The *Certification and Authorization*, which certifies the information supplied is true and authorizes lenders to investigate your credit history and re-verify any information provided;
- The *Lock-in or Mortgage Agreement*, which will give the loan's rate, terms and conditions.

- The *Marketing "Opt-out" Disclosure* which discloses the lender's practice of using information collected (including sharing it with partners) from loan documents, credit reports, etc. The applicant is given the ability to "opt out" of marketing by third parties.
- The *Patriot Act Disclosure,* which proves that the lender has identified the applicant.
- The *Credit Score Disclosure,* which proves that the lender has disclosed the applicant's credit score and the effect of this score in the decision-making process.
- The *Right to Receive a Copy of the Appraisal* under the Equal Credit Opportunity Act. \

Additional required disclosures for FHA mortgage may include:

- *Addendum to the Uniform Residential Loan Application*. This addendum includes a variety of certifications by the lender and the applicant. It also incorporates the *Privacy Act Notice* and *Assumption Disclosure*. Also used for VA mortgages.
- *Important Notice to Homebuyer*. Informs the applicant that FHA does not warrant the condition or the value of the property, warns of the penalties for commission of loan fraud, and states that FHA does not set the rate and discount points and that these are negotiable with the lender. It also explains the mortgage insurance costs and the refund process.
- The *Lead Paint Disclosure* warns about the dangers of lead based paint in homes constructed before 1978. Also used for VA mortgages.
- The *Assumption Disclosure* describes FHA policies concerning future assumptions of FHA mortgages. FHA mortgages need credit approval for assumption and cannot be assumed by investors. Informs the applicant that he/she must receive a release of liability from FHA in order not to be responsible for payments after an assumption takes place.
- *For Your Protection: Get a Home Inspection*. Inform buyers that an FHA appraisal is not a home inspection and advise them that an inspection is recommended.
- *Informed Consumer Choice Disclosure Notice*. Compares the cost of an FHA Mortgage to Conventional alternatives, including the costs of Mortgage Insurance.
- *Amendatory Clause*. Right of borrower to abrogate contract if home does not appraise for the sales price (typically included in the contract).
- *RESPA Homeownership Counseling Disclosure.* Makes consumer aware of HUD approved counseling agencies.
- *Real Estate Certification*. Certifies that the terms of the sales contract are true and correct, and all terms are disclosed. It is signed by the seller and purchaser. Typically incorporated into most sales contracts.
- *Closing Disclosure Addendum*. The addendum is signed by the borrower, seller and settlement agent and certifies that all the assets required come from the buyer unless otherwise disclosed.

Required disclosures for VA mortgages may include:

- The Interest Rate and Discount Disclosure Statement. Requirement for this form was eliminated in 2010.

- The *Verification of VA Benefit Related Indebtedness (VA Indebtedness Letter)* enables the lender to verify from VA that the applicant/veteran does not have any unpaid or unscheduled indebtedness to the agency. Also gives VA an opportunity to indicate that the applicant/veteran is exempt from the funding fee due to receipt of VA disability—though this information now is included on the *Certificate of Eligibility*.
- The *Federal Collection Policy Notice* informs the applicant/veteran of actions the government can take if scheduled payments are not made.
- *Rights of VA Borrowers/Assumption of VA Guaranteed Mortgages* discloses VA's policy about assumption of mortgages made after March 1, 1988. This includes credit approval, payment of 1/2 point VA funding fee, a lender processing charge, and assumption of liability by the person assuming the mortgage.
- The *VA Debt Questionnaire* asks the veteran about past foreclosure or judgment problems. Also asks the veteran about present delinquencies or defaults on Federal obligations.
- *Counseling Checklist for Military Homeowners*. Active duty borrowers must sign to certify that they have received homeownership and loan obligation counseling as well as other notices regarding the condition of the home and assumption policy.
- Other notices that may be required include a *childcare statement, statement of nearest living relative and active military deployment certification.*
- For Rate Reduction Loans *a VA Rate Reduction Certification.*

*Note that some of these FHA/VA forms are outdated but may be in use by some lenders.*

3. *The credit report and appraisal*. The credit report will typically be obtained by the loan officer as part of the application process. The processor orders the appraisal typically through an Appraisal Management Company which selects the actual appraiser. When ordering the appraisal, it is important to indicate:

- *The type of transaction*. For example, if the application is for an investor transaction an *operating income statement* and *comparable rental schedule* will have to be ordered with the appraisal.
- *The type of property*. For newer condominiums, special forms may have to be ordered that describe the complex and ownership. For 2-4 unit properties, *operating income statements* will have to be ordered.
- *The approval status of condominium*. Is the complex on the agency approval lists?

*Ordering verification forms*. Most mortgage programs will now accept the documentation brought to the lender by the applicant as the final income and asset documentation needed for loan approval. Use of W-2s, pay subs, and bank statements is called *alternative documentation*. A full documentation loan would consist of *verification forms* sent to the employers and banks:

***What happens after the processor "sets-up" the loan application?***

- A *Verification of Employment*, is sent to current and former employers for the past 2 years;
- A *Verification of Deposit*, is sent to all banks where liquid assets are held;
- A *Verification of Mortgage or Rent* is sent to the present landlord or mortgage holder.

Although almost all lenders now accept alternative documentation in lieu of sending out these verification forms, the processor will be required to verify the employment of the applicant via the telephone with the employer for a measure of independent verification of the information contained in alternative documentation.

### *Processor review*

The processor then waits for the credit report, appraisal, and verifications to arrive. Also, to be arriving from the applicant will be a list of information missing at loan application. What does the processor review these documents for?

1. *Credit report review*. The credit report and all updates are reviewed for the following:

- Verification that all personal information such as the social security number is correct. The wrong social security number could cause some or all the data to be incorrect.
- Verify that all disclosed debts are present, and the payment and balances are accurate. If payments are higher than what was disclosed at loan application, the applicant may be re-qualified.
- Verify that any undisclosed debts are not present. If there are any undisclosed debts, the applicant might be asked to write an explanation and will be re-quaified.
- Look for any late payments, judgments, tax liens, bankruptcies, or collections. Any significant late payments will require a letter from the applicant. Significant credit blemishes such as a tax lien may also require back up documentation to accompany the explanation. Any outstanding bad debts may have to be satisfied.
- If the credit score does not meet minimum program guidelines, there may have to be actions taken to raise the score, including correcting inaccurate information, paying off debts, etc.

2. *Appraisal review*. An appraisal is reviewed for the following:

- Verification that property information is correct—address, legal description, etc.
- Verification that the property has appraised for at least the sales price or minimum value necessary to affect the refinance transaction.
- Verification that the appraiser did not specify any conditions, for example repairs to be completed before settlement.
- Verification that there is no negative information contained in the appraisal. Negative information might include poor condition of the property, declining property values, above the value range for the area, exceedingly high land-to-value, etc.
- Make sure the comparables selected are adequate: recent, closed and that the adjustments made for size, condition, location options and rooms are reasonable.
- Make sure that additional forms required, such as an *operating income statement* and *comparable rental schedule* for investor transactions, are included.

3. *Verification review*. If full documentation, the verifications of employment, deposit, mortgage and rent are reviewed for:

- Are the forms signed and dated by the proper authority? *"Cross-outs" must be initialed.*
- Does the information on the verification match the information on the loan application, including:
  - Employment dates and salary information;
  - Bank account value;
  - Monthly payments and balance.
- Is there any information that will have to be explained such as:
  - Increases in the balance of bank accounts.
  - Undisclosed debts such as open credit lines on these accounts.
  - Recently opened debts or bank accounts.
  - Late payments.
  - Poor probability of continued employment.
  - Gaps in employment dates.
  - Decrease in salary.

*What does an underwriter do with a loan application submission?*

## After the information is all received and reviewed

After all information has been received and reviewed by the processor or loan officer and any discrepancies have been explained, the loan application is then *worked-up* to be submitted to the underwriter for final approval. *Work-up* consists of producing the final loan application (which typically is signed at settlement), preparing a *transmittal form*, and putting all documents in final submission order. As we will cover on the following page, with today's automated systems many times the approval can be obtain through an automated system on-line. Yet, there still will be documentation such as an appraisal that has to be reviewed by a live underwriter.

## Underwriting

If one has ever communicated with a mortgage company after a mortgage application was submitted to the underwriting department or the investor, one would think that there is some closed room where no one dared to enter until a magical process was completed. The truth is there is no magic or mystery to the underwriting process. If the loan is packaged the way we described in this Chapter and any questions concerning discrepancies such as the acceptability of high ratios were asked up front, then the underwriting process should be quite rote. If the loan package is packaged poorly with no explanations and missing documentation, then we will hear the dreaded words:

*"There are some last minute conditions the underwriter wants to see before making a decision. I don't think that we will close as scheduled this Thursday"*

What last minute conditions? Here are a few of the typical conditions:

- Explain the source of funds for the down payment, focusing on the large deposit in the borrower's account last month.
- Back up documentation is needed to support borrower's explanation of a car accident and hospital bills that caused the late payments.

- The separation agreement shows a joint property owned by the applicant and his ex-spouse. Show proof of disposition of the property, proof that the spouse is making payments since that time or verify and add the mortgage to the debt ratio.
- The appraisal's value is higher than the predominant value range for the neighborhood. Have the appraiser explain why the home is not an over improvement.
- The tax returns show a limited partnership with losses of $5,000 each year. Provide K-1's to show that the applicant does not own over 25% of the partnership and does not contribute significant capital each year.

  This is all documentation that should have been provided to the underwriter before underwriting. If the underwriter has a complete package, then the process is simply a check to make sure that the loan does not exceed limits for the program:

  - Is the loan-to-value correct for the property type and transaction?
  - Are there any excess seller contributions?
  - Are the ratios within acceptable guidelines, or are there compensating factors present to allow higher ratios (supported by a cover letter from the originator)?

If the underwriter sees a complete package that is well documented and explained, the loan will be approved, and the conditions assigned will be standard settlement conditions such as:

- Pest inspection report and survey (if required);
- Final truth-in-lending disclosure;
- Title commitment, or binder, from settlement agent;
- Homeowners insurance policy;
- Rate lock-in, if floating;
- Seller contributions to match those in contract;
- Three day right of rescission for refinances.

Either the processing or closing department will procure these final conditions for settlement to occur. Most mortgage lenders require that the final settlement conditions be received at least 48 to 72 hours before settlement is to occur. The key to the whole process is the provision of documents up front. A mortgage application can take a few minutes to achieve approval, or three months. The greatest variable is the way documentation is provided, examined and explained.

## Automated underwriting

Automated underwriting has significantly altered the way the loan application process takes place. With complete information, a loan officer can enter the data on a laptop, order a credit report and have the loan decision within minutes. This is especially helpful if the applicant has not purchased a home yet and wants a "pre-approval" before making an offer on a house. If the credit score is low, it is likely the loan may come back as requiring a closer review by an underwriter—and the process will more than likely resemble the description of the previous pages. These systems allow the underwriters to spend their time with the files that need the closest review because of the risk of the borrowers, the transactions and/or loan products. For those with good credit histories, income and assets— some of the documentation required by the automated systems can be eliminated or at least lessened. For example, why request a copy of a deposit check when there are more than enough liquid assets to close the loan?

## You are not done

So, your loan was approved and the conditions procured. That does not mean you can relax. The lender will recheck data before settlement. You must make sure you do not move money around between accounts or take on additional debt before the settlement takes place. In other words, don't buy a car before you close on your home!

### Items Needed for Loan Application—

1. Fully ratified sales contract and addenda or copy of Deed and Note(s) for refinances.
2. Most recent original pay stubs covering a 30-day period.
3. W-2s for past two years.
4. For self-employed, commissioned or variable incomes--two most recent years complete, signed federal individual and corporate tax returns. Year-to-date profit and loss dated within 90 days.
5. One year lease and tax returns for all investment properties.
6. Proof of any additional income needed to qualify.
7. Gift letter and proof of donor's ability to give.
8. Bank statements (all pages) covering most recent two-month period.
9. Childcare statement (VA loans), divorce decree, separation agreement.
10. List of all debts owed. Copy of payment books or statements for these loans if not on credit report.
11. Name, address and phone number of current landlord (if renting). Copy of listing, lease and/or sales contract for present home (if own)
12. Copy of car title if auto is owned free and clear and less than four years old.
13. Social security card and picture ID.
14. DD-214 and Certificate of Eligibility (VA Loans).
15. Check for application, credit report and/or appraisal fee—if not paid by credit card.

**Table 7-1**

# 8

# Mortgages, Home Ownership and Taxes

We began this book by indicating one of the main economic motivations behind the ownership of real estate is the tax advantages. We end the book by summarizing the implications of real estate holdings upon one's obligation to pay taxes. This Chapter should by no means serve as a replacement for qualified advice from a tax professional. Tax laws and interpretations thereof change on a periodic basis and the information we present is reasonably accurate to our knowledge as of the date of printing. We recommend consulting a tax professional before any real estate transaction is consummated. For further study on these issues the IRS has released several publications for consumers. These include Publication 936 *Home Mortgage Interest*, Publication 530 *Tax Information for First Time Homebuyers* and Publication 523 *Selling Your Home.* Though we are limited to presenting general concepts, we cannot imagine someone learning about real estate without wanting an overview of the topic's implication regarding taxation.

## Purchasing a home

When one purchases a home, will any or all of the costs paid at settlement affect tax obligations? This has long been a gray area of tax law, especially with regard to the deductibility of points paid by the purchaser. IRS has indicated that:

- Points computed as a percentage of the loan are tax deductible by the borrower in full for the tax year in which the points were paid. This is true for owner-occupied (primary residences) purchase transactions only. For refinances, the points must be deducted over the life of the mortgage except the portion of the proceeds utilized for home improvements.[30]
- The purchaser does not have to write a separate check at settlement for the points for them to be deductible.
- Any points paid by the seller can be deducted by the purchaser but will reduce the cost basis of the home. This will affect the calculation of a gain when the home is sold.
- The amount of points must conform to established business practice of charging points for loans in the area in which the property is located.
- The points cannot be paid by the lender (lender closing cost credit).

[30]The U.S. Court of Appeals for the Eighth Circuit has allowed the full deduction in the year paid for points on a long-term home mortgage loan refinancing a short-term balloon loan used to acquire a home.

Of the additional costs paid at home purchase, the following are deductible:

- *Prepaid Interest*. Any interest paid to the lender at settlement would be deductible. This will be expanded upon later in this Chapter.
- *Real Estate Property Taxes*. Any real estate property taxes paid by the borrower during the purchase of the home will be deductible, but only after money is actually paid to the taxing authority:

| | | |
|---|---|---|
| Example: | Settlement Date: | November 30, 2002 |
| | Tax Escrow: | Six Months @ $150 ($900) |
| | Tax Payment Due: | July 1, 2003 (12 months) |

The above tax escrow would not be paid out by the lender until 2003, and therefore is not deductible in 2002.

The following costs paid at home purchase are not deductible:

- *Insurance*. Hazard, homeowners, flood, title and mortgage insurance are not deductible, except for new loans originated after 2006 mortgage insurance is deductible for certain individuals through 2020 (see notation later in this Chapter);
- *Taxes*. Recordation taxes, recording fees, and transfer taxes are not deductible;
- *Services*. Fees for services such as attorney fees, miscellaneous mortgage lender/broker fees, survey preparation, pest inspection report, appraisal and underwriting fees are not deductible.

Does this suggest that a borrower paying the lender a $300 underwriting fee should actually ask the lender to charge a proportional higher amount of points rather than the underwriting fee? Sounds like this would be a winning tax reduction strategy—as long as it can be argued that it is within established business practices.

Just because a particular cost is not deductible at settlement does not mean it will not factor into the tax equation at a later date. It is important to keep copious records of the purchase transaction and we will explain why in the section covering the home sale.

## Deduction of regular mortgage payments

A typical mortgage payment consists of the following components:

- Principal;
- Interest;
- Real Estate Taxes;
- Homeowners Insurance;
- Mortgage Insurance;
- Homeowners Association Fees.

| *Deductible Portion* | *Non-Deductible Portion* |
|---|---|
| Mortgage Interest | Homeowners Insurance |
| Real Estate Taxes | Homeowners or Condominium Association Fees |
| Mortgage Insurance[31] | (except portion that goes to pay real estate taxes) |

*Mortgage Interest Deductions*. As Congress has lowered the tax rates, many tax deductions have been eliminated. Mortgage interest has stood the test of time as a deduction, but it has not remained unscathed. Interest on mortgages made before October 13, 1987 is fully deductible as an itemized deduction. For mortgages made after that date, there are two classifications of mortgages:

- *Acquisition Debt*: A mortgage secured by a primary residence or second home that is incurred when you buy, build or substantially improve your home. This is deductible to a limit of $750,000. The previous limit before 2018 was $1,000,000 and loans acquired before 2018 would be grandfathered in at the higher level. The acquisition of the home must be made within 90 days before or after incurring the mortgage. Note that this tax law is quite new, and the interpretation of the provisions are based upon media accounts of the law. As of early 2018, the IRS had not issued guidance to implement the law. In addition, it is expected that there may be clarifying amendments to the law as different issues arise, as mandated significant changes to complex policies.
- *Home-Equity Debt*. A mortgage secured by a primary residence or second home that is incurred after home purchase is known as home equity debt. Before the most recent tax law changes, the maximum amount of deductible home equity debt was $100,000. However, the latest tax law eliminated the provision which allowed the deduction of home equity debt and present mortgage changes were not grandfathered. The IRS has subsequently ruled that if a second is taken out to purchase and/or improve a property, it is still deductible.

  In the case of the acquisition of a second mortgage, the calculation of home equity debt is straight-forward and not deductible. In the case of a refinance:

  $300,000 Sales Price
  $250,000 Original Mortgage
  $245,000 Principal Balance at Time of Refinance
  $500,000 Value at Refinance
  $300,000 Mortgage at Refinance

  The new first mortgage would have $245,000 of acquisition debt and $55,000 of home equity debt, and only $245,000 would be deductible.
- *Home Construction Loans* are fully deductible as acquisition debt from the time construction begins to a period of up to 24 months or 90 days after the construction is completed, whichever comes first.
- *Home Improvement Loans* secured by the property can be added to the original acquisition debt (up to $750,000) because they add to the value of the home. This does not include loans made for the purpose of funding maintenance repairs.

[31]In late 2006, Congress enacted a law that allowed monthly mortgage insurance to be deducted for the first time. This deduction applied only to new loans originating in 2007 and the extent of the deduction was for only one year. Subsequently the law was extended until December 31, 2020. The deduction phases out if the income of the borrower exceeds $100,000 and is eliminated over the $110,000 income level. As of this printing, the law was not extended for 2017, however, it is possible that Congress will extend the provision retroactively.

- *Second Home Residences* qualify if used for personal (non-rental) purposes for the greater of 14 days or 10% of the rental days per year. In this case, the total deductible mortgage debt would still be $750,000, including the primary mortgage.
- *Cooperatives* qualify for the home mortgage interest deduction even though the shareholders do not own their apartments. The IRS considers indebtedness secured by stock in the cooperative deductible as long as it is occupied as the primary or secondary residence.

*Real Estate Property Tax Deductions*. Real estate property taxes are deductible on the date paid by the homeowner or the lender on behalf of the applicant in the case of a lender-held escrow account. This is important to note because the date the homeowner pays into the escrow account for property taxes is not relevant. The date the lender pays the governmental authority is relevant. Note that the new tax law limits the deduction of state and local income and property taxes to $10,000 each year.

In the case of a condominium association, the portion of the condominium association fee that is allocated for real estate property taxes on the common areas is also deductible. In the same manner, tenant-stockholders of cooperative apartments may deduct a proportion of the taxes paid by the cooperative.

Example: $100 Monthly Condominium Association Fee
$100,000 Annual Condominium Association Budget
$5,000 Annual Condominium Association Property Taxes
(Equals 5% of budget for property taxes)
$100 x 5% x 12 = $60 of annual fees are tax deductible

## Tax deductions and refinances

We have already touched on the deduction of mortgage interest after a refinance takes place. What about the costs of a refinance — are they deductible? Basically, the costs outside of interest and taxes paid are not deductible unless the house is a rental property. Points paid in conjunction with a refinancing can be deducted but must be deducted over the life of the mortgage unless the purpose of the refinance was to pay off a short-term or bridge loan on the property. Likewise, costs outside of interest must be deducted over the life of the mortgage for rental properties. If you sell the home before the points are fully written off, the residual value may be written off when calculating the final gain on the sale.

There has been much controversy with regard to the IRS position with regard to the deductibility of points paid on refinance transactions. Some have taken the position that refinances for the purpose of home improvements can be treated as purchases with regard to this issue. Others have taken the position that points that are financed by rolling in the costs into the new mortgage are never deductible. In other words, the borrower must pay refinance loan points "*out of pocket*."

## Rental property deductions

The cash flow loss on a rental property is fully deductible on an individual's tax returns as long as the individual is actively involved in the management of that property, the losses do not exceed $25,000 each year, and the adjusted gross income of the individual does not exceed $100,000. The allowable deduction is phased out between $100,000 and $150,000 annual adjusted gross income.

Example of Schedule E Rental Loss:

| | | | |
|---|---|---|---|
| $12,000 | *Annual Rental Income* | $ 2,500 | Repairs |
| $ 5,000 | Mortgage Interest | *$17,600* | *Total Expenses* |
| $ 2,000 | Real Estate Taxes | | |
| $ 500 | Advertising | | |
| $1,000 | Insurance | $ 3,000 | Depreciation |
| $1,800 | Homeowners Association Fees | *($ 5,600)* | *Rental Loss* |
| $1,800 | Maintenance & Travel | | |

Depreciation for real estate placed into service after December 31, 1986 is typically 27.5 years for residential rental property. The method of depreciation is the "*straight-line method*," which means an equal amount of depreciation is taken each year. It should be noted that any depreciation will have to be *recaptured* upon sale of the property—and the gain is taxable. That is, the calculation of gain would increase by the amount of any real property depreciation previously taken on the property.

## Taxation upon sale of residential real estate

The sale of real estate can result in a capital gain just as the sale of any assets such as stocks and bonds. Unlike other assets, the sale of your primary residence receives significant preferential tax treatment:

The *Taxpayer Relief Act of 1997* eliminated the rule that required homeowners to *rollover* home sale gains until they were able to take a one-time exclusion over the age of 55. In its place, the profits of the sale of a principal residence are excluded from income up to a maximum of $500,000 for joint filers, including married couples, and $250,000 for individuals. This rule applies to home sales after May 7, 1997 and you must have owned the home at least two years and used it as your primary residence at least two out of the past five years. Even those who have already taken the one-time exclusion before this date can participate as long as they meet the principal residence test. The only exception to the "two-years-out-of-five" standard is if a sale was necessitated by a change in place of employment, health or unforeseen circumstance. In this case, the IRS will allow a percentage of the exclusion based upon how long the property was owned and used. In 2004, The IRS issued final regulations more specifically defining the term *unforeseen circumstance* as well the practice of prorating the period of use as primary residence.[32] Depreciation taken on principal residences for home offices would be taxed regardless of the exclusion. If the residence contains a separate apartment such as a duplex—this would be accounted-for separately because it produced income.

Gains above the $250,000 or $500,000 exclusionary amounts are taxed at a long-term capital gains rate of 15% (maximum tax bracket). For 2014, there are no capital gains taxes paid for those in either a 10% or 15% tax bracket.[33] Sales of homes utilized for investment purposes would also be subject to long-term capital gain rates. There is no provision that allows one to take a capital loss if the sale of a personal residence results in a loss. A loss can be taken on income-producing properties.

How is the gain of a home calculated? The following is the formula and a sample calculation:

| | |
|---|---|
| Selling Price: | $100,000 |
| Less: Selling Expenses: | $ 8,000 |
| Cost of Home: | $40,000 |
| Cost of Purchase: | $ 5,000 |

[32]If you convert a second home into a principal residence after 2008, you may not be able to exclude all of your gain.
[33]Those in higher tax brackets would pay a rate of 15% to 20%.

| | | |
|---|---|---|
| Cost of Improvements: | $20,000 | |
| Total Deductions: | $73,000 | *Total Gain: $27,000* |

Let's take a brief definition of each of these deductions:

- *Selling Expenses* are the costs a seller incurs upon sale, for example the sales commission to a real estate agent, transfer taxes and closing costs paid on behalf of the purchaser.
- *The Cost of the Home* is the purchase price that should be supported by a HUD-1 and the original sales contract.
- *The Costs of Purchase* includes the closing costs that were not deductible as itemized deductions in previous years. These may include transfer taxes, attorney fees, appraisal fees, survey, etc. They do not include regular expenses such as homeowner's association fees and homeowner's insurance.
- *The Costs of Improvements* are the capital improvements made to the home after purchase and before the sale. The types of improvements are those that would increase the value of the home but are not for repair of items already located in the home. For example, replacement of a water heater would be a repair. The installation of a deck in a home that did not previously have a deck would be considered an improvement. Replacement of an old deck with a newer, bigger deck would be considered both a repair and an improvement. The IRS publishes a list that delineates acceptable improvements on the outside and inside the home, including:

| | | | |
|---|---|---|---|
| Shrubs | Driveway | Built-in Furniture | Air Conditioning |
| Dishwasher | Additional Acreage | Intercom | |
| Bathtub | Sprinkler System | Finish Basement | |

- *Fix-Up Expenses* are defined as the costs incurred to prepare the house for home sale are no longer a subtraction against the selling price. These were defined as expenses that were incurred within the period 90 days before and 30 days after the sales contract is ratified (for owner-occupied properties).

A few notes on two types of real estate transactions that will differ from the IRS taxation treatment described above:

- *Sale of Rental Property*. The sale of rental property is not eligible for the same income tax breaks as the sale of a primary residence. There is no possibility of rolling over the gain and no exclusion. In addition, any depreciation of the rental property must be *recaptured* upon the sale of the home. *Recapturing* refers to subtracting all real property depreciation from the original purchase price when figuring the gain on the sale. In other words, the gain will be increased by the amount of depreciation taken. The tax rate on the portion of the gain resulting from recapture of depreciation is 25%.
- There is one way to avoid tax on the sale of a rental property. A *tax-free*, *like kind*, *Starker* or "1031" exchange involves the exchange of a property used for income producing purposes for another rental property of equal value at the same time. In this way, the gain is not realized for tax purposes until the second property is sold. In 2000, the IRS issued rules allowing the purchase of the new property before the present property is sold (*Reverse Starker Exchange*) as long as it was

held in a "qualified exchange accommodation arrangement," or QEAA. These rules as well as other rules governing rules governing *Starker* exchanges are revised and interpreted quite frequently and as in other areas of tax law. For example, in 2008 the IRS issued a ruling as to what conditions the 1031 exchange can be used for second homes.

- *State Bond Issues*. The sale of property purchased under a state or local bond issue program may be subject to a *recapture tax*. Purchasers may be subject to this tax if the home is disposed of in less than ten years from purchase and the income of the purchaser at the time of sale exceeds the maximum gross income limits for the program in effect at the time of purchase. The maximum gross income is adjusted upward to include tax-exempt interest and downward to include the gain on the sale.

  Each program publishes a formula that calculates the maximum amount of tax. As an example, original loan amount multiplied by 6.25%, reduced by a percentage that is determined by the holding period. In this hypothetical example, the homeowner would pay 100% of this tax if the adjusted gross income is exceeded by $5,000 or more. If the adjusted gross income were exceeded by $1,000, then 20% of the tax would be paid.

  Example: Original Mortgage Amount: $100,000
  Times 6.25%: $ 6,250

  Held for 6 years (60% of tax): $ 3,750
  Exceeds the income limits by $3,000 (60% of above): $ 2,250

## Special IRA provision

The Taxpayer Relief Act of 1997 contained a special provision with regard to the purchase of a first home using a withdrawal from a qualified retirement plan. Withdrawals can be made penalty-free up to $10,000 for the purpose of purchasing a home. A *first-time homebuyer* is defined to include someone who has not owned a home within the past two years. Though the homebuyer would be exempt from the 10% penalty, they would not be exempt from paying regular income taxes on the money withdrawn—unless the money came from a *Roth IRA* and was taxed in the year the contributions were made.

## Special tax credit

If you purchased a primary residence in 2008 after April 8, and are a “first-time” homebuyer, you could have qualified for a tax credit equal to 10 percent of up to $75,000 of the purchase price. To be eligible, you must not have owned a residence in the U.S. in the previous three years. The credit phases out between $150,000 and $170,000 of Adjusted Gross Income for joint filers and $75,000 to $95,000 for single filers. It is refundable to the extent it exceeds your regular tax liability, which means that if it more than offsets your tax liability, you’ll get a refund check. But it does not offset the Alternative Minimum Tax. This credit is an interest-free loan, because it will be repaid over 15 years. The repayment period starts two years after the year the credit is claimed. Thus, if you claim a $7,500 tax credit for a purchase in 2008, you will have to pay an extra $500 of income tax in 2010, and in later years.

Under the Economic Stimulus Act, starting in 2009 this credit was expanded to a maximum of $8,000 and the provision requiring repayment was eliminated. The homeowner must stay in the home for three years to avoid repayment. The home must have been purchased by November 30, 2009 to be eligible.

This tax credit was extended and expanded late in 2009. The new provisions included a tax credit for "move-up" buyers of 10% of the purchase price up to $6,500. Sales contracts must have been ratified by April 30, 2010 and closings must have occurred by September 30, 2010. To qualify for the "move-up" tax credit, one must have owned and lived-in their present home five out of eight of the previous years. Income limits were increased to $125,000 for single tax-payments and $225,000 joint filers with the tax credit phasing out $20,000 above these amounts. All other provisions of the previous credit remained in place until April 30, 2010.

## Debt forgiveness

Normally, debt forgiveness results in taxable income. But under the Mortgage Forgiveness Debt Relief Act of 2007, taxpayers may exclude debt forgiven on their principal residence from 2007 to 2012 if the balance of their loan was $2 million or less. The limit is $1 million for a married person filing a separate return. Note that states may tax debt that is forgiven as this Act only addressed Federal taxation. This provision was extended through December of 2020.

# Appendix A: Payment Factor Table

# Interest Rate Factors

| Interest Rate | 40 Yrs | 30 Yrs | 20 Yrs | 15 Yrs | Interest Rate | 40 Yrs | 30 Yrs | 20 Yrs | 15 Yrs |
|---|---|---|---|---|---|---|---|---|---|
| 2.50 | 3.30 | 3.95 | 5.30 | 6.67 | 7.50 | 6.58 | 6.99 | 8.06 | 9.27 |
| 2.625 | 3.37 | 4.02 | 5.36 | 6.73 | 7.625 | 6.67 | 7.08 | 8.13 | 9.34 |
| 2.75 | 3.44 | 4.08 | 5.42 | 6.79 | 7.75 | 6.77 | 7.16 | 8.21 | 9.41 |
| 2.875 | 3.51 | 4.15 | 5.48 | 6.85 | 7.875 | 6.86 | 7.25 | 8.29 | 9.48 |
| 3.00 | 3.58 | 4.22 | 5.55 | 6.91 | 8.00 | 6.95 | 7.34 | 8.36 | 9.56 |
| 3.125 | 3.65 | 4.28 | 5.61 | 6.97 | 8.125 | 7.05 | 7.42 | 8.44 | 9.63 |
| 3.25 | 3.73 | 4.35 | 5.67 | 7.03 | 8.25 | 7.14 | 7.51 | 8.52 | 9.70 |
| 3.375 | 3.80 | 4.42 | 5.74 | 7.09 | 8.375 | 7.24 | 7.60 | 8.60 | 9.77 |
| 3.50 | 3.87 | 4.49 | 5.80 | 7.15 | 8.50 | 7.33 | 7.69 | 8.68 | 9.85 |
| 3.625 | 3.95 | 4.56 | 5.86 | 7.21 | 8.625 | 7.43 | 7.78 | 8.76 | 9.92 |
| 3.75 | 4.03 | 4.63 | 5.93 | 7.27 | 8.75 | 7.52 | 7.87 | 8.84 | 9.99 |
| 3.875 | 4.10 | 4.70 | 5.99 | 7.33 | 8.875 | 7.62 | 7.96 | 8.92 | 10.07 |
| 4.00 | 4.18 | 4.77 | 6.06 | 7.40 | 9.00 | 7.71 | 8.05 | 9.00 | 10.14 |
| 4.125 | 4.26 | 4.85 | 6.13 | 7.46 | 9.125 | 7.81 | 8.14 | 9.08 | 10.22 |
| 4.25 | 4.34 | 4.92 | 6.19 | 7.52 | 9.25 | 7.91 | 8.23 | 9.16 | 10.29 |
| 4.375 | 4.42 | 4.99 | 6.26 | 7.59 | 9.375 | 8.00 | 8.32 | 9.24 | 10.37 |
| 4.50 | 4.50 | 5.07 | 6.33 | 7.65 | 9.50 | 8.10 | 8.41 | 9.32 | 10.44 |
| 4.625 | 4.58 | 5.14 | 6.39 | 7.71 | 9.625 | 8.20 | 8.50 | 9.40 | 10.52 |
| 4.75 | 4.66 | 5.22 | 6.46 | 7.78 | 9.75 | 8.30 | 8.59 | 9.49 | 10.59 |
| 4.875 | 4.74 | 5.29 | 6.53 | 7.84 | 9.875 | 8.39 | 8.68 | 9.57 | 10.67 |
| 5.00 | 4.82 | 5.37 | 6.60 | 7.91 | 10.00 | 8.49 | 8.78 | 9.65 | 10.75 |
| 5.125 | 4.91 | 5.44 | 6.67 | 7.97 | 10.125 | 8.59 | 8.87 | 9.73 | 10.82 |
| 5.25 | 4.99 | 5.52 | 6.74 | 8.04 | 10.25 | 8.69 | 8.96 | 9.82 | 10.90 |
| 5.375 | 5.07 | 5.60 | 6.81 | 8.10 | 10.375 | 8.79 | 9.05 | 9.90 | 10.98 |
| 5.50 | 5.16 | 5.68 | 6.88 | 8.17 | 10.50 | 8.89 | 9.15 | 9.98 | 11.05 |
| 5.625 | 5.24 | 5.76 | 6.95 | 8.24 | 10.625 | 8.98 | 9.24 | 10.07 | 11.13 |
| 5.75 | 5.33 | 5.84 | 7.02 | 8.30 | 10.75 | 9.08 | 9.33 | 10.15 | 11.21 |
| 5.875 | 5.42 | 5.92 | 7.09 | 8.37 | 10.875 | 9.18 | 9.43 | 10.24 | 11.29 |
| 6.00 | 5.50 | 6.00 | 7.16 | 8.44 | 11.00 | 9.28 | 9.52 | 10.32 | 11.37 |
| 6.125 | 5.59 | 6.08 | 7.24 | 8.51 | 11.125 | 9.38 | 9.62 | 10.41 | 11.44 |
| 6.25 | 5.68 | 6.16 | 7.31 | 8.57 | 11.25 | 9.48 | 9.71 | 10.49 | 11.52 |
| 6.375 | 5.77 | 6.24 | 7.38 | 8.64 | 11.375 | 9.58 | 9.81 | 10.58 | 11.60 |
| 6.50 | 5.85 | 6.32 | 7.46 | 8.71 | 11.50 | 9.68 | 9.90 | 10.66 | 11.68 |
| 6.625 | 5.94 | 6.40 | 7.53 | 8.78 | 11.625 | 9.78 | 10.00 | 10.75 | 11.76 |
| 6.75 | 6.03 | 6.49 | 7.60 | 8.85 | 11.75 | 9.88 | 10.09 | 10.84 | 11.84 |
| 6.875 | 6.12 | 6.57 | 7.68 | 8.92 | 11.875 | 9.98 | 10.19 | 10.92 | 11.92 |
| 7.00 | 6.21 | 6.65 | 7.75 | 8.99 | 12.00 | 10.08 | 10.29 | 11.01 | 12.00 |
| 7.125 | 6.31 | 6.74 | 7.83 | 9.06 | 12.125 | 10.19 | 10.38 | 11.10 | 12.08 |
| 7.25 | 6.40 | 6.82 | 7.90 | 9.13 | 12.25 | 10.29 | 10.48 | 11.19 | 12.16 |
| 7.375 | 6.49 | 6.91 | 7.98 | 9.20 | 12.375 | 10.39 | 10.58 | 11.27 | 12.24 |

The above factors represent the monthly payment per thousand. To arrive at a monthly mortgage payment, multiply the mortgage amount in thousands by the factor. It should be noted that these factors represent approximations of the precise monthly payment and a computer should be used for actual disclosure.

| | | | |
|---|---|---|---|
| Example: | 100,000 Mortgage | 7.69 | Factor |
| | 30 Year | x 100 | Mortgage Amount |
| | 8.50 Interest Rate | $769.00 | Monthly Payment |

# Appendix B:
# Estimate of Settlement Costs of a Mortgage Transaction

# ESTIMATE OF SETTLEMENT COSTS OF A MORTGAGE TRANSACTION

**A. ITEMS PAID FOR AT LOAN APPLICATION:**

**1. APPRAISAL** ..... _____
$400 - $700
NOTE: Higher prices for 2-4 units, investor properties, more expensive homes.

**2. CREDIT REPORT** ..... _____
$25 - $150
NOTE: Higher prices for non-married co-borrowers, corrections, updates

**3. APPLICATION/LOCK FEE** ..... _____
.25-1.00% of Loan Amt
NOTE: If charged, may be applied to closing costs at settlement. If so, do not add in total.

**SUBTOTAL** ..... _____

---

**B. PREPAID ITEMS**

**1. ONE YEARS HOMEOWNERS INSURANCE** ..... _____
(First Year Premium) $2.00 to $3.00 per $1,000 Loan Amt
NOTE: Paid Directly by Applicant (may be credit if refinance)

**2. CONVENTIONAL MORTGAGE INSURANCE** ..... _____
(First Year Premium) .25% to 3.0% of Loan Amt
NOTE: Applicable over 80% LTV conventional mortgages. Varies by loan type, LTV, credit score and more. Not applicable for monthly or lender-paid MI.

**3. ESCROWS**
NOTE: On refinances, escrow account will be refunded by present lender

**3A. REAL ESTATE TAXES** ..... _____
2 to 14 Months
NOTE: Will be higher in states collecting only one time each year

**3B. HOMEOWNERS INSURANCE** ..... _____
2 Months
NOTE: From annual estimate above

**3C. MORTGAGE INSURANCE** ..... _____
(Monthly Premium) 2 Months
NOTE: .20% to 1.75% monthly. Applicable to Conventional over 80% LTV varying by same factors as 2 above. Monthly not charged if paid in a lump sum by borrower. Applicable for all FHA loans.

**4. PREPAID INTEREST** ..... _____
Estimate 15 Days
NOTE: Actual amount will vary in accordance with settlement date (collected from settlement date until the end of the month).

**SUBTOTAL** ..... _____

---

**C. LENDER CHARGES**

**1. LOAN ORIGINATION FEE** ..... _____
Up to 1% of Loan Amt
NOTE: Figured on base loan amount for FHA, including funding fee for VA

**2. DISCOUNT POINTS** ..... _____
Varies
NOTE: Each discount point is 1.0% of the loan amount including financed MI.

**3. DOCUMENT PREPARATION/REVIEW OR CLOSING FEE** ..... _____
$150-$350

**4. LENDER INSPECTION/COURIER FEES** ..... _____
$50-$125

**5. TAX SERVICE FEE** ..... _____
$50-100
NOTE: 3-5 cannot be paid by applicant on VA loans except if paying for 3rd party service. 5 cannot be paid by applicant on FHA loans.

**6. VA FUNDING FEE** ..... _____
If Not Financed
NOTE: 1.25% to 3.30% with higher rates for 100% LTV, second time use, Reservists. 0.5% for IRRRL's. Can be financed.

**7. FHA MORTGAGE INSURANCE** ..... _____
If Not Financed
NOTE: 1.75% for all "forward" loans. 0.5% for Streamline Refis which qualify for special program. Can be financed in loan amount.

SUBTOTAL ..... _____

---

**D. ATTORNEY/SETTLEMENT COMPANY CHARGES**

**1. ATTORNEY FEES**: ..... _____
$300-$1,000
NOTE: May be separate charge to seller. Includes preparation of documents, title exam, courier charges, and payoff fees.

**2. SURVEY** ..... _____
$150-$400
NOTE: Recertification of present survey or survey affidavit acceptable on most refinances

**3. TITLE INSURANCE:**

**3A.** Owners Policy: Based upon sales price (optional) ..... _____
$300 to $3,000
NOTE: Owner policy includes lender policy below

**3B. LENDER POLICY**: Based upon loan amount (mandatory) ..... _____
$20 to $2,000
NOTE: May be additional charges for endorsements for condos, Leasehold

**SUBTOTAL** ..... _____

---

**E. TAXES**

**1. RECORDING FEES** ..... _____
$20-$70
NOTE: Will vary based upon property type (condos higher) typically less for refinance

**2. RECORDATION/INTANGIBLE/TRANSFER TAXES** ..... _____
NOTE: Will vary from zero in some states to over 2% of the sales price. Many states reduce or do not charge on a refinance—except typically on an increase in loan amount.

**SUBTOTAL** ..... _____

---

**F. MISC. FEES TO COMPLETE APPRAISAL OF HOME**

**1. FINAL INSPECTION** ..... _____
$50-$100
NOTE: For new homes or other appraisal requirements such as repairs

**2. PEST INSPECTION** ..... _____
$40-$60
NOTE: May not be required for high rise condos over the fourth floor or refinances

**3. WELL/SEPTIC INSPECTION** ..... _____
$75-$250
NOTE: VA will require hook-up to public water supply if available

**4. HOME INSPECTION FEE** ..... _____
$150-$300
NOTE: May be financed on FHA loans up to $200

**5. FLOOD CERTIFICATION** ..... _____
$12-$20

**SUBTOTAL** ..... _____

---

**TOTAL CASH REQUIRED**

**A. Items Paid for At Loan Application** ..... _____

**B. Prepaid Items** ..... _____

**C. Lender Charges** ..... _____

**D. Attorney Fees** ..... _____

**E. Taxes** ..... _____

**F. Misc. Fees to Complete Appraisal of Home** ..... _____

**Downpayment** ..... _____

**TOTAL CASH** _____

# Appendix C: Federal Monthly Withholding Tax Tables and Percentage Method Tables

# 2021 Percentage Method Tables for Automated Payroll Systems

**STANDARD Withholding Rate Schedules**
(Use these if the Form W-4 is from 2019 or earlier, or if the Form W-4 is from 2020 or later and the box in Step 2 of Form W-4 is **NOT** checked)

| If the Adjusted Annual Wage Amount (line 2a) is: | | The tentative amount to withhold is: | Plus this percentage— | of the amount that the Adjusted Annual Wage exceeds— |
|---|---|---|---|---|
| At least— | But less than— | | | |
| A | B | C | D | E |
| **Married Filing Jointly** | | | | |
| $0 | $12,200 | $0.00 | 0% | $0 |
| $12,200 | $32,100 | $0.00 | 10% | $12,200 |
| $32,100 | $93,250 | $1,990.00 | 12% | $32,100 |
| $93,250 | $184,950 | $9,328.00 | 22% | $93,250 |
| $184,950 | $342,050 | $29,502.00 | 24% | $184,950 |
| $342,050 | $431,050 | $67,206.00 | 32% | $342,050 |
| $431,050 | $640,500 | $95,686.00 | 35% | $431,050 |
| $640,500 | | $168,993.50 | 37% | $640,500 |
| **Single or Married Filing Separately** | | | | |
| $0 | $3,950 | $0.00 | 0% | $0 |
| $3,950 | $13,900 | $0.00 | 10% | $3,950 |
| $13,900 | $44,475 | $995.00 | 12% | $13,900 |
| $44,475 | $90,325 | $4,664.00 | 22% | $44,475 |
| $90,325 | $168,875 | $14,751.00 | 24% | $90,325 |
| $168,875 | $213,375 | $33,603.00 | 32% | $168,875 |
| $213,375 | $527,550 | $47,843.00 | 35% | $213,375 |
| $527,550 | | $157,804.25 | 37% | $527,550 |
| **Head of Household** | | | | |
| $0 | $10,200 | $0.00 | 0% | $0 |
| $10,200 | $24,400 | $0.00 | 10% | $10,200 |
| $24,400 | $64,400 | $1,420.00 | 12% | $24,400 |
| $64,400 | $96,550 | $6,220.00 | 22% | $64,400 |
| $96,550 | $175,100 | $13,293.00 | 24% | $96,550 |
| $175,100 | $219,600 | $32,145.00 | 32% | $175,100 |
| $219,600 | $533,800 | $46,385.00 | 35% | $219,600 |
| $533,800 | | $156,355.00 | 37% | $533,800 |

**Form W-4, Step 2, Checkbox, Withholding Rate Schedules**
(Use these if the Form W-4 is from 2020 or later and the box in Step 2 of Form W-4 **IS** checked)

| If the Adjusted Annual Wage Amount (line 2a) is: | | The tentative amount to withhold is: | Plus this percentage— | of the amount that the Adjusted Annual Wage exceeds— |
|---|---|---|---|---|
| At least— | But less than— | | | |
| A | B | C | D | E |
| **Married Filing Jointly** | | | | |
| $0 | $12,550 | $0.00 | 0% | $0 |
| $12,550 | $22,500 | $0.00 | 10% | $12,550 |
| $22,500 | $53,075 | $995.00 | 12% | $22,500 |
| $53,075 | $98,925 | $4,664.00 | 22% | $53,075 |
| $98,925 | $177,475 | $14,751.00 | 24% | $98,925 |
| $177,475 | $221,975 | $33,603.00 | 32% | $177,475 |
| $221,975 | $326,700 | $47,843.00 | 35% | $221,975 |
| $326,700 | | $84,496.75 | 37% | $326,700 |
| **Single or Married Filing Separately** | | | | |
| $0 | $6,275 | $0.00 | 0% | $0 |
| $6,275 | $11,250 | $0.00 | 10% | $6,275 |
| $11,250 | $26,538 | $497.50 | 12% | $11,250 |
| $26,538 | $49,463 | $2,332.00 | 22% | $26,538 |
| $49,463 | $88,738 | $7,375.50 | 24% | $49,463 |
| $88,738 | $110,988 | $16,801.50 | 32% | $88,738 |
| $110,988 | $268,075 | $23,921.50 | 35% | $110,988 |
| $268,075 | | $78,902.13 | 37% | $268,075 |
| **Head of Household** | | | | |
| $0 | $9,400 | $0.00 | 0% | $0 |
| $9,400 | $16,500 | $0.00 | 10% | $9,400 |
| $16,500 | $36,500 | $710.00 | 12% | $16,500 |
| $36,500 | $52,575 | $3,110.00 | 22% | $36,500 |
| $52,575 | $91,850 | $6,646.50 | 24% | $52,575 |
| $91,850 | $114,100 | $16,072.50 | 32% | $91,850 |
| $114,100 | $271,200 | $23,192.50 | 35% | $114,100 |
| $271,200 | | $78,177.50 | 37% | $271,200 |

## 2021 Wage Bracket Method Tables for Manual Payroll Systems with Forms W-4 From 2020 or Later

**MONTHLY Payroll Period**

| If the **Adjusted Wage Amount** (line 1h) is | | **Married Filing Jointly** | | **Head of Household** | | **Single or Married Filing Separately** | |
|---|---|---|---|---|---|---|---|
| | | Standard withholding | Form W-4, Step 2, Checkbox withholding | Standard withholding | Form W-4, Step 2, Checkbox withholding | Standard withholding | Form W-4, Step 2, Checkbox withholding |
| At least | But less than | The Tentative Withholding Amount is: | | | | | |
| **$0** | **$525** | $0 | $0 | $0 | $0 | $0 | $0 |
| **$525** | **$545** | $0 | $0 | $0 | $0 | $0 | $1 |
| **$545** | **$565** | $0 | $0 | $0 | $0 | $0 | $3 |
| **$565** | **$585** | $0 | $0 | $0 | $0 | $0 | $5 |
| **$585** | **$605** | $0 | $0 | $0 | $0 | $0 | $7 |
| **$605** | **$625** | $0 | $0 | $0 | $0 | $0 | $9 |
| **$625** | **$645** | $0 | $0 | $0 | $0 | $0 | $11 |
| **$645** | **$665** | $0 | $0 | $0 | $0 | $0 | $13 |
| **$665** | **$685** | $0 | $0 | $0 | $0 | $0 | $15 |
| **$685** | **$705** | $0 | $0 | $0 | $0 | $0 | $17 |
| **$705** | **$725** | $0 | $0 | $0 | $0 | $0 | $19 |
| **$725** | **$745** | $0 | $0 | $0 | $0 | $0 | $21 |
| **$745** | **$765** | $0 | $0 | $0 | $0 | $0 | $23 |
| **$765** | **$785** | $0 | $0 | $0 | $0 | $0 | $25 |
| **$785** | **$805** | $0 | $0 | $0 | $1 | $0 | $27 |
| **$805** | **$825** | $0 | $0 | $0 | $3 | $0 | $29 |
| **$825** | **$845** | $0 | $0 | $0 | $5 | $0 | $31 |
| **$845** | **$865** | $0 | $0 | $0 | $7 | $0 | $33 |
| **$865** | **$885** | $0 | $0 | $0 | $9 | $0 | $35 |
| **$885** | **$905** | $0 | $0 | $0 | $11 | $0 | $37 |
| **$905** | **$925** | $0 | $0 | $0 | $13 | $0 | $39 |
| **$925** | **$945** | $0 | $0 | $0 | $15 | $0 | $41 |
| **$945** | **$975** | $0 | $0 | $0 | $18 | $0 | $44 |
| **$975** | **$1,005** | $0 | $0 | $0 | $21 | $0 | $48 |
| **$1,005** | **$1,035** | $0 | $0 | $0 | $24 | $0 | $51 |
| **$1,035** | **$1,065** | $0 | $0 | $0 | $27 | $0 | $55 |
| **$1,065** | **$1,095** | $0 | $3 | $0 | $30 | $3 | $59 |
| **$1,095** | **$1,125** | $0 | $6 | $0 | $33 | $6 | $62 |
| **$1,125** | **$1,155** | $0 | $9 | $0 | $36 | $9 | $66 |
| **$1,155** | **$1,185** | $0 | $12 | $0 | $39 | $12 | $69 |
| **$1,185** | **$1,215** | $0 | $15 | $0 | $42 | $15 | $73 |
| **$1,215** | **$1,245** | $0 | $18 | $0 | $45 | $18 | $77 |
| **$1,245** | **$1,275** | $0 | $21 | $0 | $48 | $21 | $80 |
| **$1,275** | **$1,305** | $0 | $24 | $0 | $51 | $24 | $84 |
| **$1,305** | **$1,335** | $0 | $27 | $0 | $54 | $27 | $87 |
| **$1,335** | **$1,365** | $0 | $30 | $0 | $57 | $30 | $91 |
| **$1,365** | **$1,395** | $0 | $33 | $0 | $60 | $33 | $95 |
| **$1,395** | **$1,425** | $0 | $36 | $0 | $63 | $36 | $98 |
| **$1,425** | **$1,455** | $0 | $39 | $0 | $67 | $39 | $102 |
| **$1,455** | **$1,485** | $0 | $42 | $0 | $71 | $42 | $105 |
| **$1,485** | **$1,515** | $0 | $45 | $0 | $74 | $45 | $109 |
| **$1,515** | **$1,545** | $0 | $48 | $0 | $78 | $48 | $113 |
| **$1,545** | **$1,575** | $0 | $51 | $0 | $81 | $51 | $116 |
| **$1,575** | **$1,605** | $0 | $54 | $2 | $85 | $54 | $120 |
| **$1,605** | **$1,635** | $0 | $57 | $5 | $89 | $57 | $123 |
| **$1,635** | **$1,665** | $0 | $60 | $8 | $92 | $60 | $127 |
| **$1,665** | **$1,695** | $0 | $63 | $11 | $96 | $63 | $131 |
| **$1,695** | **$1,725** | $0 | $66 | $14 | $99 | $66 | $134 |
| **$1,725** | **$1,755** | $0 | $69 | $17 | $103 | $69 | $138 |
| **$1,755** | **$1,785** | $0 | $72 | $20 | $107 | $72 | $141 |
| **$1,785** | **$1,815** | $0 | $75 | $23 | $110 | $75 | $145 |
| **$1,815** | **$1,845** | $0 | $78 | $26 | $114 | $78 | $149 |
| **$1,845** | **$1,875** | $0 | $81 | $29 | $117 | $81 | $152 |
| **$1,875** | **$1,905** | $0 | $85 | $32 | $121 | $85 | $156 |
| **$1,905** | **$1,935** | $0 | $88 | $35 | $125 | $88 | $159 |
| **$1,935** | **$1,965** | $0 | $92 | $38 | $128 | $92 | $163 |
| **$1,965** | **$1,995** | $0 | $96 | $41 | $132 | $96 | $167 |
| **$1,995** | **$2,025** | $0 | $99 | $44 | $135 | $99 | $170 |
| **$2,025** | **$2,055** | $0 | $103 | $47 | $139 | $103 | $174 |
| **$2,055** | **$2,085** | $0 | $106 | $50 | $143 | $106 | $177 |
| **$2,085** | **$2,115** | $1 | $110 | $53 | $146 | $110 | $181 |
| **$2,115** | **$2,145** | $4 | $114 | $56 | $150 | $114 | $185 |
| **$2,145** | **$2,175** | $7 | $117 | $59 | $153 | $117 | $188 |
| **$2,175** | **$2,205** | $10 | $121 | $62 | $157 | $121 | $192 |
| **$2,205** | **$2,235** | $13 | $124 | $65 | $161 | $124 | $196 |

## 2021 Wage Bracket Method Tables for Manual Payroll Systems with Forms W-4 From 2020 or Later

**MONTHLY Payroll Period**

| If the **Adjusted Wage Amount** (line 1h) is | | **Married Filing Jointly** | | **Head of Household** | | **Single or Married Filing Separately** | |
|---|---|---|---|---|---|---|---|
| | | Standard withholding | Form W-4, Step 2, Checkbox withholding | Standard withholding | Form W-4, Step 2, Checkbox withholding | Standard withholding | Form W-4, Step 2, Checkbox withholding |
| At least | But less than | The Tentative Withholding Amount is: | | | | | |
| **$2,235** | **$2,275** | $16 | $129 | $69 | $165 | $129 | $204 |
| **$2,275** | **$2,315** | $20 | $133 | $73 | $170 | $133 | $213 |
| **$2,315** | **$2,355** | $24 | $138 | $77 | $174 | $138 | $222 |
| **$2,355** | **$2,395** | $28 | $143 | $81 | $179 | $143 | $230 |
| **$2,395** | **$2,435** | $32 | $148 | $85 | $184 | $148 | $239 |
| **$2,435** | **$2,475** | $36 | $153 | $89 | $189 | $153 | $248 |
| **$2,475** | **$2,515** | $40 | $157 | $93 | $194 | $157 | $257 |
| **$2,515** | **$2,555** | $44 | $162 | $97 | $198 | $162 | $266 |
| **$2,555** | **$2,595** | $48 | $167 | $101 | $203 | $167 | $274 |
| **$2,595** | **$2,635** | $52 | $172 | $105 | $208 | $172 | $283 |
| **$2,635** | **$2,675** | $56 | $177 | $109 | $213 | $177 | $292 |
| **$2,675** | **$2,715** | $60 | $181 | $113 | $218 | $181 | $301 |
| **$2,715** | **$2,755** | $64 | $186 | $117 | $222 | $186 | $310 |
| **$2,755** | **$2,795** | $68 | $191 | $121 | $227 | $191 | $318 |
| **$2,795** | **$2,835** | $72 | $196 | $126 | $232 | $196 | $327 |
| **$2,835** | **$2,875** | $76 | $201 | $131 | $237 | $201 | $336 |
| **$2,875** | **$2,915** | $80 | $205 | $136 | $242 | $205 | $345 |
| **$2,915** | **$2,955** | $84 | $210 | $141 | $246 | $210 | $354 |
| **$2,955** | **$2,995** | $88 | $215 | $145 | $251 | $215 | $362 |
| **$2,995** | **$3,035** | $92 | $220 | $150 | $256 | $220 | $371 |
| **$3,035** | **$3,075** | $96 | $225 | $155 | $262 | $225 | $380 |
| **$3,075** | **$3,115** | $100 | $229 | $160 | $271 | $229 | $389 |
| **$3,115** | **$3,155** | $104 | $234 | $165 | $280 | $234 | $398 |
| **$3,155** | **$3,195** | $108 | $239 | $169 | $289 | $239 | $406 |
| **$3,195** | **$3,235** | $112 | $244 | $174 | $297 | $244 | $415 |
| **$3,235** | **$3,275** | $116 | $249 | $179 | $306 | $249 | $424 |
| **$3,275** | **$3,315** | $120 | $253 | $184 | $315 | $253 | $433 |
| **$3,315** | **$3,355** | $124 | $258 | $189 | $324 | $258 | $442 |
| **$3,355** | **$3,395** | $128 | $263 | $193 | $333 | $263 | $450 |
| **$3,395** | **$3,435** | $132 | $268 | $198 | $341 | $268 | $459 |
| **$3,435** | **$3,475** | $136 | $273 | $203 | $350 | $273 | $468 |
| **$3,475** | **$3,515** | $140 | $277 | $208 | $359 | $277 | $477 |
| **$3,515** | **$3,555** | $144 | $282 | $213 | $368 | $282 | $486 |
| **$3,555** | **$3,595** | $148 | $287 | $217 | $377 | $287 | $494 |
| **$3,595** | **$3,635** | $152 | $292 | $222 | $385 | $292 | $503 |
| **$3,635** | **$3,675** | $156 | $297 | $227 | $394 | $297 | $512 |
| **$3,675** | **$3,715** | $160 | $301 | $232 | $403 | $301 | $521 |
| **$3,715** | **$3,755** | $164 | $306 | $237 | $412 | $306 | $530 |
| **$3,755** | **$3,795** | $169 | $311 | $241 | $421 | $311 | $538 |
| **$3,795** | **$3,835** | $174 | $316 | $246 | $429 | $316 | $547 |
| **$3,835** | **$3,875** | $178 | $321 | $251 | $438 | $321 | $556 |
| **$3,875** | **$3,915** | $183 | $325 | $256 | $447 | $325 | $565 |
| **$3,915** | **$3,955** | $188 | $330 | $261 | $456 | $330 | $574 |
| **$3,955** | **$3,995** | $193 | $335 | $265 | $465 | $335 | $582 |
| **$3,995** | **$4,035** | $198 | $340 | $270 | $473 | $340 | $591 |
| **$4,035** | **$4,075** | $202 | $345 | $275 | $482 | $345 | $600 |
| **$4,075** | **$4,115** | $207 | $349 | $280 | $491 | $349 | $609 |
| **$4,115** | **$4,155** | $212 | $354 | $285 | $500 | $354 | $618 |
| **$4,155** | **$4,215** | $218 | $360 | $291 | $511 | $360 | $630 |
| **$4,215** | **$4,275** | $225 | $367 | $298 | $524 | $367 | $644 |
| **$4,275** | **$4,335** | $232 | $375 | $305 | $537 | $375 | $659 |
| **$4,335** | **$4,395** | $240 | $382 | $312 | $550 | $382 | $673 |
| **$4,395** | **$4,455** | $247 | $389 | $319 | $564 | $389 | $687 |
| **$4,455** | **$4,515** | $254 | $402 | $327 | $579 | $402 | $702 |
| **$4,515** | **$4,575** | $261 | $416 | $334 | $593 | $416 | $716 |
| **$4,575** | **$4,635** | $268 | $429 | $341 | $608 | $429 | $731 |
| **$4,635** | **$4,695** | $276 | $442 | $348 | $622 | $442 | $745 |
| **$4,695** | **$4,755** | $283 | $455 | $355 | $636 | $455 | $759 |
| **$4,755** | **$4,815** | $290 | $468 | $363 | $651 | $468 | $774 |
| **$4,815** | **$4,875** | $297 | $482 | $370 | $665 | $482 | $788 |
| **$4,875** | **$4,935** | $304 | $495 | $377 | $680 | $495 | $803 |
| **$4,935** | **$4,995** | $312 | $508 | $384 | $694 | $508 | $817 |
| **$4,995** | **$5,055** | $319 | $521 | $391 | $708 | $521 | $831 |
| **$5,055** | **$5,115** | $326 | $534 | $399 | $723 | $534 | $846 |
| **$5,115** | **$5,175** | $333 | $548 | $406 | $737 | $548 | $860 |

## 2021 Wage Bracket Method Tables for Manual Payroll Systems with Forms W-4 From 2020 or Later

**MONTHLY Payroll Period**

| If the **Adjusted Wage Amount** (line 1h) is | | **Married Filing Jointly** | | **Head of Household** | | **Single or Married Filing Separately** | |
|---|---|---|---|---|---|---|---|
| | | Standard withholding | Form W-4, Step 2, Checkbox withholding | Standard withholding | Form W-4, Step 2, Checkbox withholding | Standard withholding | Form W-4, Step 2, Checkbox withholding |
| At least | But less than | The Tentative Withholding Amount is: | | | | | |
| **$5,175** | **$5,235** | $340 | $561 | $413 | $752 | $561 | $875 |
| **$5,235** | **$5,295** | $348 | $574 | $420 | $766 | $574 | $889 |
| **$5,295** | **$5,355** | $355 | $587 | $427 | $780 | $587 | $903 |
| **$5,355** | **$5,415** | $362 | $600 | $435 | $795 | $600 | $918 |
| **$5,415** | **$5,475** | $369 | $614 | $442 | $809 | $614 | $932 |
| **$5,475** | **$5,535** | $376 | $627 | $449 | $824 | $627 | $947 |
| **$5,535** | **$5,595** | $384 | $640 | $456 | $838 | $640 | $961 |
| **$5,595** | **$5,655** | $391 | $653 | $463 | $852 | $653 | $975 |
| **$5,655** | **$5,715** | $398 | $666 | $471 | $867 | $666 | $990 |
| **$5,715** | **$5,775** | $405 | $680 | $478 | $881 | $680 | $1,004 |
| **$5,775** | **$5,835** | $412 | $693 | $485 | $896 | $693 | $1,019 |
| **$5,835** | **$5,895** | $420 | $706 | $492 | $910 | $706 | $1,033 |
| **$5,895** | **$5,955** | $427 | $719 | $499 | $924 | $719 | $1,047 |
| **$5,955** | **$6,015** | $434 | $732 | $507 | $939 | $732 | $1,062 |
| **$6,015** | **$6,075** | $441 | $746 | $514 | $953 | $746 | $1,076 |
| **$6,075** | **$6,135** | $448 | $759 | $523 | $968 | $759 | $1,091 |
| **$6,135** | **$6,195** | $456 | $772 | $536 | $982 | $772 | $1,105 |
| **$6,195** | **$6,255** | $463 | $785 | $550 | $996 | $785 | $1,119 |
| **$6,255** | **$6,315** | $470 | $798 | $563 | $1,011 | $798 | $1,134 |
| **$6,315** | **$6,375** | $477 | $812 | $576 | $1,025 | $812 | $1,148 |
| **$6,375** | **$6,435** | $484 | $825 | $589 | $1,040 | $825 | $1,163 |
| **$6,435** | **$6,495** | $492 | $838 | $602 | $1,054 | $838 | $1,177 |
| **$6,495** | **$6,555** | $499 | $851 | $616 | $1,068 | $851 | $1,191 |
| **$6,555** | **$6,615** | $506 | $864 | $629 | $1,083 | $864 | $1,206 |
| **$6,615** | **$6,675** | $513 | $878 | $642 | $1,097 | $878 | $1,220 |
| **$6,675** | **$6,735** | $520 | $891 | $655 | $1,112 | $891 | $1,235 |
| **$6,735** | **$6,795** | $528 | $904 | $668 | $1,126 | $904 | $1,249 |
| **$6,795** | **$6,855** | $535 | $917 | $682 | $1,140 | $917 | $1,263 |
| **$6,855** | **$6,915** | $542 | $930 | $695 | $1,155 | $930 | $1,278 |
| **$6,915** | **$6,975** | $549 | $944 | $708 | $1,169 | $944 | $1,292 |
| **$6,975** | **$7,035** | $556 | $957 | $721 | $1,184 | $957 | $1,307 |
| **$7,035** | **$7,095** | $564 | $970 | $734 | $1,198 | $970 | $1,321 |
| **$7,095** | **$7,155** | $571 | $983 | $748 | $1,212 | $983 | $1,335 |
| **$7,155** | **$7,215** | $578 | $996 | $761 | $1,227 | $996 | $1,350 |
| **$7,215** | **$7,275** | $585 | $1,010 | $774 | $1,241 | $1,010 | $1,364 |
| **$7,275** | **$7,335** | $592 | $1,023 | $787 | $1,256 | $1,023 | $1,379 |
| **$7,335** | **$7,395** | $600 | $1,036 | $800 | $1,270 | $1,036 | $1,393 |
| **$7,395** | **$7,455** | $607 | $1,049 | $814 | $1,284 | $1,049 | $1,410 |
| **$7,455** | **$7,515** | $614 | $1,062 | $827 | $1,299 | $1,062 | $1,429 |
| **$7,515** | **$7,575** | $621 | $1,076 | $840 | $1,313 | $1,076 | $1,448 |
| **$7,575** | **$7,635** | $628 | $1,089 | $853 | $1,328 | $1,089 | $1,467 |
| **$7,635** | **$7,695** | $636 | $1,102 | $866 | $1,343 | $1,102 | $1,487 |
| **$7,695** | **$7,755** | $643 | $1,115 | $880 | $1,362 | $1,115 | $1,506 |
| **$7,755** | **$7,815** | $650 | $1,128 | $893 | $1,381 | $1,128 | $1,525 |
| **$7,815** | **$7,875** | $657 | $1,142 | $906 | $1,400 | $1,142 | $1,544 |
| **$7,875** | **$7,935** | $664 | $1,155 | $919 | $1,420 | $1,155 | $1,563 |
| **$7,935** | **$7,995** | $672 | $1,168 | $932 | $1,439 | $1,168 | $1,583 |
| **$7,995** | **$8,055** | $679 | $1,181 | $946 | $1,458 | $1,181 | $1,602 |
| **$8,055** | **$8,115** | $686 | $1,194 | $959 | $1,477 | $1,194 | $1,621 |
| **$8,115** | **$8,175** | $693 | $1,208 | $972 | $1,496 | $1,208 | $1,640 |
| **$8,175** | **$8,235** | $700 | $1,221 | $985 | $1,516 | $1,221 | $1,659 |
| **$8,235** | **$8,295** | $708 | $1,234 | $998 | $1,535 | $1,234 | $1,679 |
| **$8,295** | **$8,355** | $715 | $1,249 | $1,012 | $1,554 | $1,249 | $1,698 |

# Appendices D-G

Appendix D: Fannie Mae Loan Level Pricing Matrix
https://www.fanniemae.com/content/pricing/llpa-matrix.pdf

Appendix E: Fannie Mae Eligibility Matrix
https://www.fanniemae.com/content/eligibility_information/eligibility-matrix.pdf

Appendix F: Freddie Mac Post Settlement Delivery Fee Matrix
http://www.freddiemac.com/singlefamily/pdf/ex19.pdf

Appendix G: Freddie Mae LTV Matrix
http://www.freddiemac.com/singlefamily/factsheets/sell/ltv_tltv.htm

# Glossary

*Above Par.* When a mortgage is sold for more than its face value because it has an above market interest rate. For example, a $100,000 mortgage may be sold for 101.00, or $101,000 because of a higher rate than market.

*A Credit Mortgages*. Mortgages which generally meet the credit underwriting guidelines of Fannie Mae, Freddie Mac, FHA, VA or major jumbo purchasers. Those who have credit ratings or other qualification deficiencies would be rated as *A-, B, C* or *D* credit.

*Acquisition Cost.* The sales price of a property plus FHA allowable closing costs. Before down payment simplification, FHA allowed certain closing costs to be financed by adding them to the sales price before calculating the required down payment. This is now reflected in tables for low closing cost and high closing cost states with different down payment requirements for each.

*Adjustable Rate Mortgage*. A mortgage in which the interest rate changes at certain intervals during the term of the mortgage.

*Adjusted Sales Price*. IRS term for the sales price of a home minus the costs of the sale. Used to calculate capital gains.

*Adjustment Period*. The length of time that dictates interest rate adjustments on an adjustable rate mortgage. A *six-month ARM* would have an adjustment every six months.

*Adjustment Period Cap.* The amount that the interest rate is allowed to increase or decrease at the time of adjustment of an adjustable rate mortgage. A one-year adjustable would have an *annual cap*, since the adjustment period is every year.

*Alternative Documentation*. Use of bank statements, W-2's, and pay stubs to document an applicant's income and assets instead of verification forms mailed by the lender.

*Amortization Schedule*. A table that shows the principal changes of a mortgage balance on a monthly or annual basis.

*Annual Percentage Rate (APR)*. Calculation that standardizes rates, points and other costs of a financing instrument such as a mortgage loan. This figure is disclosed as part of the *truth-in-lending statement* that is required by the *Federal Truth-in-Lending Act*. The statement is required on all consumer loans but is required to be disclosed within three working days of application for residential owner-occupied mortgage loans pursuant to the *Real Estate Settlement Procedures Act (RESPA)*.

*Application Fee*. Fee charged by a lender at the time of loan application. This fee may include the cost of an appraisal, credit report, lock-in fee or other closing costs which are incurred during the process or the fee may be in addition to other charges.

*Appraisal.* An estimate of value—in this case for real property. For residential properties, the appraiser would utilize the *Uniform Residential Appraisal Report, or URAR*.

*Appreciation.* The increase in value of property over time.

*Assumption*. The act of taking over the previous borrower's obligation of a mortgage note. Assumptions may be advantageous if the terms of the mortgage are advantageous and these terms are not changed by the lender when the mortgage is assumed.

*Automated Underwriting Systems*. Technological systems that take into account credit scores and other characteristics of borrowers (such as job histories) to develop a rating upon which an underwriting decision can be based. These systems include *Desktop Underwriter* (Fannie Mae) and *Loan Prospector* (Freddie Mac).

*Back-to-Back Settlement.* Transactions involving selling one home and purchasing another on the same day, usually within hours of one another. The seller typically moves from one settlement table to the next in order to accomplish the purchase transaction.

*Balloon*. A mortgage that does not fully amortize over the term of the mortgage. The principal remaining at the end of the term is called a balloon payment.

*Base Mortgage Amount.* The mortgage amount before mortgage insurance or VA funding fee is added.

*Bi-weekly Mortgage.* A mortgage that requires one-half of one monthly payment every two weeks. The resulting extra monthly payment each year lowers the mortgage term to approximately 22-25 years.

*Bridge Loan*. Short-term mortgage, usually interest only, utilized to help a purchaser settle on a home before his/her present home is sold.

*Buydown.* To lower the interest rate on a mortgage. A *permanent buydown* would lower the rate for the entire term of the mortgage. A *temporary buydown* would lower the rate for a certain portion of the mortgage term, usually the first few years.

*Capital Gains Income*. Income derived through the sale of assets such as real estate.

*Capped Rate*. A rate commitment by a lender which locks-in a maximum rate but allows the borrower to relock if market rates decrease. Also referred to as cap and float.

*Cash Out Refinance.* A refinance in which the borrower takes cash, or equity out of the property.

*Certificate of Deposit Index (CODI).* The average of the most recently published monthly yields on 3-month certificates of deposits for the 12 most recent calendar months as published by the Federal Reserve Board.

*Certificate of Eligibility (COE).* Issued by VA to certify the amount of entitlement available to a veteran.

*Certificate of Insurance*. Document which adds the mortgage holder on a particular unit to the master insurance policy for a condominium development.

*Certificate of Reasonable Value (CRV).* Appraisal of a property for a VA mortgage. Appraisal of a subdivision would be a *Master Certificate of Reasonable Value*, or *MCRV*.

*Certificate of Veteran Status*. FHA form filled out by the Department of Veteran Affairs in order to establish a borrower's eligibility for an *FHA Vet Mortgage*.

*Closing Costs*. The costs incurred in order to purchase real estate. May include points, taxes, fees and more.

*Co-borrower*. Two or more borrowers obtaining the same mortgage. If a co-borrower is not living in the house he/she would be known as a *non-owner occupant co-borrower*.

*Combined Loan-to-Value.* The principal balance of all mortgages on the property (including second and third trusts) divided by the value of the property.

*Commercial Mortgage*. A loan that secures commercial real estate.

*Commercial Real Estate*. Office buildings, shopping centers, apartment buildings and other property which is utilized for the production of income rather than as residences. If residential real estate has more than four units it is considered commercial real estate.

*Commitment*. An agreement for future action. A *rate commitment* would be an agreement to lend at a certain rate. A *loan commitment* would be an agreement to lend and represents another term for *loan approval.*

*Comparables*. Properties utilized in an appraisal to determine the value of the property being appraised.

*Compensating Factor.* A positive characteristic of a mortgage application that may offset a negative factor.

*Compressed Buydown.* A temporary buydown that has rate changes every six months as opposed to annually.

*Conditional Right to Refinance*. A provision of a balloon mortgage which, at the time of the scheduled balloon payment, allows the borrower to covert to a fixed rate for the remainder of the loan term.

*Conditional Commitment*. Term for an FHA appraisal. An FHA appraisal for a subdivision would be called a *Master Conditional Commitment*, or MCC.

*Condominium*. A project in which each unit owner has title to a unit and has an undivided interest to the common areas.

*Condominium Association Fee.* A fee paid by the homeowner to the association that governs a condominium complex for his/her part of the maintenance and management of the project.

*Conforming Mortgage.* A mortgage that can be purchased by Fannie Mae or Freddie Mac.

*Construction Mortgage.* A loan secured by real estate which is for the purpose of funding the construction of improvements, or building(s), upon the property.

*Construction-to-Permanent Mortgage.* A loan secured by real estate that is for the purpose of replacing a construction mortgage soon after the improvements are completed.

*Consumer Price Index.* An index of the Federal Government's measure of price increases at the retail level.

*Contingencies.* Conditions without which a transaction would be voided.

*Contribution.* Cash or other concession by the seller of a property in order to induce a purchaser to buy that property.

*Conventional Mortgage.* A mortgage not guaranteed by VA or insured by FHA, Rural Housing or State Bond Agencies.

*Conversion Feature*. A feature of a mortgage that allows the conversion to another interest rate, mortgage term, or type of mortgage instrument.

*Cooperative (COOP).* A form of ownership in which the right to occupy the unit is obtained by the purchase of shares in a corporation which owns the building.

*Cost of Funds Index*. An index that is made up of the cost to depository institutions of acquiring funds.

*Coverage*. The portion of the mortgage that mortgage insurance insures against default.

*Credit Package*. The portion of a loan application and documentation that is comprised of the information regarding the applicant's credit, income and asset history. The additional aspect of a loan application concerns the property being financed (appraisal).

*Credit Report*. A report run by an independent credit agency that verifies certain information concerning an applicant's credit history.

*Credit Score*. Automated systems that compile the credit characteristics of an individual into a single numeric rating. The rating would take into consideration the amount of open credit, credit payment history, number of credit inquiries, as well as other indications.

*Deed in lieu of foreclosure.* A deed instrument in which a borrower conveys all interest in a property to the lender to satisfy a loan that is in default and avoid foreclosure proceedings.

*Deed of Trust*. A legal document that enables the lender, or *mortgagee*, to hold legal claim or title to a property while the note is outstanding. *The Deed of Trust* transfers title to a *trustee* designated by the lender.

*Default*. The non-payment of a mortgage or other loan in accordance with the terms as specified in the note.

*Delegated Underwriting*. The delegation of underwriting authority from an investor or agency to the lender.

*Department of Housing and Urban Development*. A cabinet level Federal Agency which houses the Federal Housing Administration (FHA) and Government National Mortgage Association (Ginnie Mae).

*Department of Veterans Affairs (VA)*. Cabinet level Federal Agency whose chief purpose is to aid veterans through a variety of programs.

*Depreciation*. The decrease in value of an asset over a fixed period of time.

*Desktop Underwriter (DU)*. Fannie Mae's automated underwriting system (Desktop Originator is used by mortgage brokers).

*Discount Point*. A charge by a lender levied to *buy down* the interest rate (equals 1% of the loan amount).

*Distributive Shares*. Increments of FHA insurance from a pool of mortgages insured during the same time period. In the past unused shares were distributed by FHA to the holders of the mortgages within that pool.

*Down Payment*. Money given by the purchaser of a property to the seller to acquire the mortgage and hence the property. The difference between the sales price and mortgage amount is the down payment.

*Draws*. Money taken out of an escrow account to finance the rehabilitation or construction of a house.

*Easement*. A right to utilize another property other than one's own. For example, a utility company may be granted an easement for utility lines.

*Encroachment*. The existence of a protrusion or infringement of a structure such as a fence on a property.

*Equity*. The net value of an asset. In the case of real estate, it would be the difference between the present value of the property and the mortgage amount on that property.

*Escrow*. Money held by a third party on behalf of the first party to be utilized for requirements of a second party. A *servicer* is a third party that holds an escrow on behalf of a borrower to pay taxes and insurance payments to the applicable entities when they become due.

*Extended Locks*. Mortgage rate commitments that are for longer than the typical 60-day lock-in term.

*Farmers Home Administration (FmHA)*. Federal agency that guarantees mortgages in rural areas. Renamed as the Rural Housing Authority or the Rural Housing Program.

*Federal Bond Subsidy Act*. Federal legislation empowering state and local governments to issue tax free bonds to fund mortgages for lower and middle-income borrowers.

*Federal Home Loan Mortgage Corporation (Freddie Mac)* and *Federal National Mortgage Association (Fannie Mae)*. Government Sponsored Enterprises (GSEs) that are publicly traded corporations supervised by the Federal Government. The purpose of the entities is to help facilitate the access of mortgage money by creating a secondary market for conventional mortgages. Conventional mortgages purchased by Freddie Mac and Fannie Mae are called *conforming* mortgages.

*Federal Housing Administration (FHA)*. Government agency located within the Department of Housing and Urban Development. Administers the FHA mortgage program.

*Fee Simple*. Unrestricted ownership of real property.

*FHA Direct Endorsement*. FHA program in which lenders approve FHA mortgages directly as opposed to submitting the applications to the agency for approval.

*FHA Lender Connection*. Internet-based system that allows lenders to work with FHA online.

*Final Inspection*. Home inspection made by a lender, VA, FHA or the appraiser after a new home or repairs have been completed.

*First Mortgage*. The primary or original loan secured upon real estate.

*Fixed Rate Mortgage*. A mortgage in which the interest rate (and usually the payment) does not change over the term of the mortgage.

*Fixed Payment Mortgage*. A mortgage in which the payment does not change over the term of the mortgage. This is usually due to the interest rate being fixed.

*Float*. Application in which the lender has not committed to lend at a particular interest rate (not *locked-in*).

*Floor*. The lowest interest rate of an adjustable rate mortgage.

*Free and Clear*. A property with no mortgage liability placed upon it.

*FSBO*. An acronym that stands for *sale by owner*, as opposed to a home that is listed for sale through a real estate company.

*Full Documentation*. Mortgage verification process that relies upon verification forms sent by the lender rather than alternative documentation (such as pay stubs) provided by the applicant.

*Fully Amortized*. A mortgage that has a zero balance at the end of the mortgage term.

*Fully Indexed Accrual Rate*. The index plus the margin for an adjustable rate mortgage (FIAR).

*Grace Period*. A length of time (usually 15 days) after a mortgage payment is due in which the lender will not charge a late penalty or report the payment as late.

*Graduated Payment Mortgage (GPM)*. A mortgage which has regularly scheduled payment increases during some portion of the mortgage term.

*Green Card.* Immigration status which permits the holder to work in the United States, obtain a social security number and become an apprentice to attain citizenship (the permit is no longer green in color).

*Gross Monthly Income.* A person's income before deductions for taxes, medical insurance, etc. After deductions, the income is referred to as *take home pay* or *net income*.

*Ground Rent.* The land upon which a home is located is under a long-term lease (*leasehold ownership* as opposed to *fee simple*).

*Growing Equity Mortgage (GEM).* A type of graduated payment mortgage that has a shorter mortgage term due to future payment increases.

*Government Mortgages.* Mortgages insured or guaranteed by the government (FHA, VA, Rural Housing, or State Bond Agencies).

*Government National Mortgage Association (Ginnie Mae).* Government agency located within the Department of Housing and Urban Development. Created in 1968, its purpose is to facilitate the access of mortgages through creation of a secondary market for government mortgages (FHA and VA).

*Grossing-Up Income*. Increasing the value of income that is not taxed when qualifying for a mortgage.

*Guaranty*. Amount of money VA will reimburse a lender upon default of a VA mortgage. Also referred to as the amount of *entitlement* or *eligibility*.

*Home Equity Line of Credit (HELOC).* An open line of credit against the equity in a home (typically a second mortgage).

*Homeowners Association Fees (HOA Fees)*. A fee typically paid monthly by a homeowner to a homeowner's association in order for the association to take care of areas owned in common by all homeowners within a *planned unit development*.

*Homeowners Insurance*. Insurance carried by the homeowner to protect the dwelling against fire and other hazards. Also known as "fire insurance."

*Index.* An indicator that is typically measured by an average of a variable over a certain period of time. Adjustable rate mortgage indices are measures of the movement of interest rates.

*In-File Credit Report*. Report directly from the credit repositories without any investigative data such as interviews with employers. Many loan programs will now base decisions using "in-files" merged from two or three repositories.

*Intangible Tax*. The tax of something that is not tangible. The taxation of a real estate transaction would be considered an example of an intangible tax and sometimes is referred to as such.

*Interest Only Mortgages*. Mortgage programs that require no repayment of principal. Typical of bridge loans, which will balloon at the end of their term.

*Interest Rate Cap*. A limit on interest rate increases and/or decreases during each interest rate adjustment *(adjustment period cap)* or over the term *(life cap)* of the mortgage.

*Investor Purchase*. The purchase of a home for the purpose of generating income by renting the property.

*IRS 4506/Request for Copy of Tax Form*. IRS Form required that allows the lender to pull tax returns on the borrower directly from the IRS, usually accomplished as a quality control check on a certain number of cases after closing. More recently has been replaced by the IRS 8801.

*Jumbo Mortgage*. A mortgage that is larger than the purchase limits of Fannie Mae and Freddie Mac.

*K-1*. Federal tax form that reports the income of an individual from a Partnership or Subchapter S Corporation. Other important information on this form includes the percentage of ownership by the individual as well as capital contributed to the entity.

*Land-to-Value*. The value of the land divided by the total value of the property, including both the land and the home.

*Lender Appraisal Processing Program (LAPP)*. VA program that allows lenders to directly issue appraisals, or *CRVs*.

*Lender-Paid Mortgage Insurance*. Mortgage insurance program that allows the lender to collect a higher interest rate from the borrower and forward the excess payment to the mortgage insurance company to pay for the mortgage insurance.

*Lender Subsidized Buydown*. A buydown that has a higher note rate than market. The higher rate funds the initial costs, or *subsidy*, of the temporary buydown.

*Leverage*. Ability to control a large asset with a smaller asset.

*LIBOR Index*. *London Interbank Offered Rates,* which is the average rate of interest that major world banks are willing to pay each other for U.S. dollar deposits for various terms on the London market.

*Lien*. A claim against a property. A mortgage is one form of a lien.

*Life Cap*. The amount the interest rate is allowed to increase during the term of the mortgage.

*Limited Documentation.* A mortgage that does not verify income, assets or another aspect of the credit package.

*Loan Modification.* A temporary or permanent change in the existing terms of a mortgage.

*Loan Prospector (LP)*. Freddie Mac's automated underwriting system.

*Loan-to-Value (LTV)*. The principal amount of a mortgage on a property divided by the value of that property.

*Lock-in Fee.* A fee that may be charged by lenders at the time of lock-in.

*Lock-in.* The process by which a lender commits to lend at a particular rate as long as the mortgage transaction closes within a specified time period. The document that specifies the terms of the *lock-in* is called a *rate commitment* or *lock-in agreement*.

*Lot Mortgage or Lot Loan*. A loan secured by real estate that contains no improvements or buildings (land).

*Low/Mod Programs*. Acronym for mortgage programs aimed to serve the low-to-moderate income populace.

*Margin.* The amount added to the index on an adjustable rate mortgage to determine the interest rate at each adjustment.

*Master Conditional Commitment (MCC).* An FHA appraisal accomplished for a subdivision.

*Mortgage*. A loan secured against real estate as opposed to personal property. States which are not *Trust States* utilize a *mortgage* as the legal instrument to secure the lien against the real estate which means that the owner holds title rather than a trustee.

*Mortgagee*. The lender of money that is secured by real estate

*Mortgagor*. The borrower of money that is secured by real estate.

*Mortgagee Clause*. Verbiage in the homeowners and title insurance policies which identifies the mortgage holder and its successors and/or assigns.

*Mortgage Insurance*. Insurance that protects the lender against *default*. Insurance can be issued by private sources (private mortgage insurance) or the Federal Housing Administration (MIP).

*Mortgage Insurance Premium (MIP)*. Mortgage insurance charged by FHA to insure a mortgage.

*Moving Treasury Average (MTA).* The 12-month average of the monthly yields of U.S. Treasury securities adjusted to a constant maturity of one year.

*Negatively Amortized Mortgage (Negative Amortization).* A mortgage whose balance may increase with all (scheduled negative) or certain (potential negative) payments.

*Net Proceeds*. Amount of cash that accrues to the seller after expenses are deducted from a home sale.

*Non-conforming Mortgage.* A mortgage that cannot be sold to Fannie Mae or Freddie Mac.

*No-Income Verification Mortgage (Limited Documentation).* A mortgage that does not verify the income stated by the applicant.

*No Point Mortgage*. A mortgage that carries a higher interest rate in exchange for no discount points or origination fee.

*No Ratio Mortgage*. A mortgage that requires no income qualification (as opposed to no-income documentation). In this case—the income level does not matter.

*Note*. A legal instrument that specifies the terms of any debt. When someone borrows money secured against real estate, a note will be signed.

*Open Equity Line*. A second trust mortgage that is an *open line of credit*. That is, the balance can be increased by future draws up to a set amount. Also known as a Home Equity Line of Credit (HELOC).

*Operating Income Statement*. Form that determines the probable cash flow on a property which is to be used for rental purposes.

*Origination Fee*. A charge by a lender for the costs of *originating* a mortgage. Usually equal to one point, or 1% of the mortgage amount.

*Owner-Occupied Purchase*. The purchase of a property for the purpose of the primary residence of the owner.

*Partial Entitlement*. The entitlement remaining after the veteran has used part of his/her full entitlement in obtaining a VA mortgage. The partial entitlement may result from a legislated increase in entitlement that occurs after the veteran has purchased a home.

*Payment Cap*. The limitation on increases or decreases in the payment amount of an adjustable rate mortgage or fixed rate hybrid. Will be associated with potential negative amortization.

*Personal Property*. All other property besides real estate (for example, furnishings).

*PITI*. Total mortgage payment assuming an escrow fund is set up by the lender for real estate taxes (T) and insurance (I). The PI is the principal and interest, or loan payment.

*Planned Unit Development*. A project in which there is land and/or facilities owned in common by owners within the development. Typical common areas might be recreational facilities, wooded areas or parking lots.

*Plans and Specs.* The plans and specifications upon which the construction of a home is based. An appraiser will typically appraise a new property conditionally upon completion of plans and specs. A final inspection is then performed after the house is completed.

*POC*. A charge that is paid outside of closing. This would include closing costs such as the appraisal and credit report which an applicant pays up-front to the lender.

*Point*. A charge by a lender. One point is equal to 1% of the mortgage amount.

*Post Closing Reserves*. The liquid assets of an applicant required by a lender after closing on the mortgage.

*Potential Negative Amortization*. An adjustable rate mortgage that may have principal balance increases at some time during the mortgage term, depending upon the future direction of the index upon which rate adjustments are based and whether a payment cap is invoked.

*Positively Amortized Mortgage*. A mortgage that has a balance decrease with each payment.

*Predatory Lending.* Actions taken by lenders that are not within the best interests of a consumer. Includes steering into a loan program, putting a consumer into a loan which does not benefit them or they can't afford and a host of other activities.

*Prepaids*. Closing costs that are actually paid at closing for charges that will occur in the future. One example would be prepaid interest that will accrue after the closing date until the starting date of the note.

*Prepayment*. To apply a payment to the principal of the mortgage balance before the payment is actually due under the terms of the mortgage. Will cause a mortgage to be retired early.

*Prepayment Penalty*. A charge specified in the note that is levied if a mortgage is paid off before the end of the mortgage term.

*Pre-qualification.* The process of determining one's qualifications for a mortgage and home purchase before the actual home is identified.

*Principal Reduction*. The reduction in loan balance that occurs with each payment of a positively amortized mortgage.

*Processing*. The procedure in which a lender takes a loan application and brings it to the point to *underwriting* for loan approval.

*Profit and Loss Statement (P&L).* A financial statement provided by the applicant that reports the income and expenses for a business during a certain time period. The statement would typically be required of self-employed applicants if the tax returns are not current within 90 days.

*Purchase Money Mortgage*. A mortgage obtained to finance the purchase of real estate.

*Qualification*. The process that determines whether an applicant can be approved for a mortgage loan.

*Rate Reduction Refinance*. The refinance of an existing mortgage balance solely to lower the interest rate.

*Ratio Method.* Method of qualifying which divides the monthly mortgage payment by the gross monthly income of the borrower (*housing* or *first ratio*) and then divides the monthly mortgage payment and monthly debt payments by the gross monthly income (*debt* or *second ratio*).

*Real Estate Settlement Procedures Act (RESPA)*. Federal law that regulates the settlement practices within the real estate industry. This law requires the provision of *Good Faith Estimates of Closing Costs*, prohibits kickbacks for referrals of related services, and standardizes the closing with a required form (*HUD-1*).

*Real Estate Taxes*. Local taxes levied on the ownership of real estate. Also known as property taxes.

*Real Property*. The ownership of real estate.

*Recapture Tax*. A federal tax required on the gain of sale of certain properties financed under the *Federal Bond Subsidy Act* which are sold within 10 years of purchase. This tax is in effect for homes purchased after December 31, 1990.

*Recordation Fees*. Fees charged by a local government to record the documents of a real estate transaction.

*Reduced Closing Cost Mortgage*. A mortgage that carries a higher interest rate in exchange for no points and/or a credit towards other closing costs from the lender.

*Refinance Mortgage*. Money borrowed by the present owner of real estate to replace an existing loan secured by the same real estate or to place a mortgage on *free and clear* property.

*Rehabilitate*. The process of reconstructing or improving property that is in the state of disrepair. A mortgage for such purpose would be referred to as a *rehab mortgage*.

*Rental Equivalency*. A mortgage payment (PITI) after the tax deductions are taken into consideration.

*Rental Negative*. The monthly cash flow loss on an investment property.

*Residential Mortgage*. A loan that is secured by *residential real estate*.

*Residential Real Estate*. Housing built and owned for the purpose of a person(s) making the property his/her home or a property to be rented to tenants. For purposes of classification, residential real estate contains one to four units. Larger rental properties are considered commercial real estate (such as apartment complexes).

*Residual Method*. Method of qualifying that subtracts all expenses from a borrower's income to determine whether there remains a positive *residual*.

*Reverse Annuity Mortgage*. A mortgage which uses present equity in the property to fund monthly payments from the lender to the borrower—in lieu of the borrower receiving the proceeds of the loan in a lump sum.

*Revolving Credit*. Open lines of credit that are subject to variable payments in accordance with the balance. Credit cards are examples of revolving credit.

*Right of Rescission*. Period of three full days after closing in which the consumer is allowed to negate an owner occupied refinance transaction. Loan funding does not occur until this period expires.

*Right to Financial Privacy Act*. Places restrictions upon governmental authorities having access to copies of the financial records of any mortgage applicant.

*Rolled-in*. To include the closing costs of a refinance transaction in the balance of the new mortgage — i.e., to finance the closing costs of the refinance so that they are not paid in cash by the borrower, or *out-of-pocket*.

*Sales Concession*. Cash a seller pays on behalf of a purchaser in order to entice the purchaser to buy the home. Another term for *seller contribution*. For example, the seller may pay a certain number of dollars towards a purchaser's closing costs.

*Scheduled Negative Amortization*. A mortgage that has planned increases in the balance of the mortgage during some portion of the mortgage term. Typically associated with *Graduated Payment Mortgages*.

*Second Home Purchase*. A property purchased for occupancy by the owner but is not the primary residence. Usually recreational or vacation properties.

*Second Mortgage*. A loan that is secured by real estate that is already secured by another loan that is the *first mortgage*.

*Second Trust*. Another term for a *second mortgage*. More common term in *Trust* states.

*Secondary Market.* A market that exists for the purchase and sale of mortgages and *servicing rights* as commodities.

*Self-Employment.* A person who owns at least 25% of the entity (such as a corporation or partnership) that generates income for that person. There may be no separate legal entity, such as the case of a sole proprietor.

*Servicing*. The process by which a lender collects monthly mortgage payments and forwards applicable portions of the payments to the investor, local government and insurance agencies. *Servicing rights* are the right to service these mortgages. These rights are commodities that can be sold via the secondary markets.

*Settlement Agent.* A person or entity that coordinates or conducts a closing or settlement.

*Settlement*. Another term for *closing* of a real estate transaction.

*Shared Appreciation Mortgage*. A mortgage that offers the lender the ability to realize future gains based upon future appreciation of the property, in exchange for a below market interest rate.

*Short Sale.* To sell a home for less than the amount of the present mortgage outstanding on the property.

*Sole Proprietorship*. A form of self-employment in which the individual that is self-employed has formed no separate legal entity such as a corporation.

*Staff Appraiser*. An appraiser who works as an employee for a mortgage company as opposed to the company hiring an independent firm to appraise properties.

*Streamline*. A rate reduction refinance requiring less documentation than a *full package* mortgage application.

*Subsidize*. A term referring to some type of aid. Federally subsidize mortgages typically have an interest rate lower than market because of government assistance. Temporary buydowns are considered *subsidized mortgages,* because there is money placed in an escrow fund to supplement the regular payment for a certain period of time.

*Survey*. The measurement of the boundaries of a parcel of land, including any improvements, easements or encroachments within the boundaries of the property. A *staked survey* is a higher cost but marks the boundaries via wooden or metal stakes.

*Take Home Pay*. One's paycheck after taxes and other deductions have been subtracted.

*Take-Back*. When the seller uses the equity in the property to provide a private mortgage for the purposes of financing the purchase for the buyer. Also known as *owner take-back*.

*Tax Deduction*. An expense that the government allows you to subtract from your income before the tax liability is computed. The Federal Government allows you to subtract certain *itemized deductions* such as mortgage interest in lieu of utilizing the standard deduction.

*Tax Service Contract*. A service performed by a tax service company which identifies the payment due date of local taxes for the servicer of the mortgage.

*Teaser Rate*. A starting rate which is below the *fully indexed accrual rate (FIAR)* on an adjustable rate mortgage.

*Temporary Buydown*. A lower interest rate on a mortgage for a fixed period at the beginning of the term.

*Term*. The full period or life over which a mortgage is scheduled to exist.

*Title*. Ownership record of the property. A settlement agent will conduct a title search to make sure the seller has clear title to the property before conducting settlement. If there is no clear title, it is said that the title has *clouds* or *defects*. *Title Insurance* is typically required to cover the lender against such defects.

*Transfer Taxes*. Taxes levied by a state or local government upon the transfer of real property. Also may be known as *tax stamps*.

*Transmittal Form*. Form that summarizes the data contained within a loan application so that it can be considered by underwriting.

*Treasury Constant Maturities Indices*. A series of indices issued by the Federal Government that measure the yield of treasury securities maturing for a term measured by the index. For example, the one-year *TCM* would measure all outstanding securities with one-year left to maturity.

*Truth-In-Lending Act*. Federal law that requires a truth-in-lending statement to be disclosed for consumer loans. This statement would include disclosure of the *annual percentage rate*, or *APR*, as well as other facets of the mortgage program. The law also requires the *right of rescission* period that follows the closings of owner-occupied refinances.

*Two-Step*®. An adjustable rate mortgage marketed by Fannie Mae which, instead of a five or seven-year balloon payment, has a feature for conversion to a fixed rate to fully amortize the mortgage or to a one-year adjustable.

*Uniform Residential Loan Application Form (Fannie Mae/Freddie Mac 1003/FHA 2900/VA 1802)*. The form that is accepted by all major mortgage sources for application of residential mortgages.

*Uniform Residential Appraisal Report (URAR)*. The appraisal form that is utilized by appraisers of residential properties to estimate the value of properties to be financed with FHA, VA and conventional mortgages.

*Uniform Settlement Statement (HUD-1)*. Settlement summary form required by *RESPA* to be used by closing agents settling a real estate transaction.

*Underwrite*. The process by which a lender analyzes risk in order to determine whether a loan application should be approved and under what conditions that loan should be funded. Automated underwriting does so through automated systems utilizing, among other things, credit scores.

*VA Automatic*. A Department of Veterans Affairs program that allows the lender to approve VA mortgage applications directly instead of sending the applications to the Department for approval.

*VA IRRL Refinance*. Another term for a VA interest rate reduction refinance which is a VA-to-VA refinance accomplished solely to lower the interest rate.

*VA Funding Fee*. Fee charged on VA mortgages to cover the administrative costs of the program.

*Variable Income*. Income that will vary from year to year. Examples of income that will vary include: self-employment, commission, bonus, overtime, part-time employment, and investment income.

*Verification of Deposit*. Form that verifies an applicant's liquid assets held with a particular financial institution. Not needed if alternative documentation (bank statements) is provided.

*Verification of Employment*. Form that verifies an applicant's job history, including employment date, salary, year-to-date income, income for the past year, and probability of continued employment.

*Verification of Mortgage*. Form that verifies an applicant's mortgage history, including the date of the mortgage, present balance, payment, and history of late payments. The *Verification of Loan* and *Verification of Rental History* would garner similar information for personal loans and the applicant's landlord (if renting).

*W-2*. IRS form that reports income paid and taxes withheld for an employee during a calendar year.

*W-4*. IRS form that determines the amount of Federal taxes the employer will withhold from a person's paycheck each pay period.

*Worked-Up*. Process by which a fully verified loan application is prepared by the processor for underwriting.

*Worst Case Scenario*. A scenario in which the rate of an adjustable rate mortgage increases as fast as the caps will allow, i.e. the worst that can happen.

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Gary Eldred, National Initiative for Home Ownership.

*"Dave's analyses of issues and mortgage products have proved invaluable to me in writing a syndicated column on housing and finance. When Hershman talks, you should listen."*

Ken Harney, The Nation's Housing

*"Helped me convert a renter into a homeowner."*

Constantine Woods, Loan Officer

*"Natural part of a buyer presentation."*

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*"...particularly useful because it seems to work in the real world and can be implemented now."*

Paul Scheper, VP/Owner Barron Financial

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Dave Hershman's books and articles are the most widely read in the areas of mortgage finance, management, sales and marketing. He has authored two best-sellers for the Mortgage Bankers Association of America. Dave's books come from real experience as a top producing loan officer who closed over 550 transactions in his first 18 months in the industry. From there Dave has gone on to become a production executive and has headed sales forces for technology companies, including Ellie Mae. He has also helped found a federally chartered bank and served as Chairman of the Board for Prommis Financial Solutions. His books, speeches and seminars have trained tens of thousands mortgage employees, Realtors® and other professionals across the nation.

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