What Is the Loan-to-Value (LTV) Ratio?

The loan-to-value (LTV) ratio is an assessment of lending risk that financial institutions and other lenders examine before approving a mortgage. Typically, loan assessments with high LTV ratios are considered higher risk loans. Therefore, if the mortgage is approved, the loan has a higher interest rate.

Additionally, a loan with a high LTV ratio may require the borrower to purchase mortgage insurance[1] to offset the risk to the lender. This type of insurance is called private mortgage insurance (PMI).

Key Takeaways

- Loan-to-value (LTV) is an often used ratio in mortgage lending to determine the amount necessary to put in a down-payment and whether a lender will extend credit to a borrower.
- Most lenders offer mortgage and home-equity applicants the lowest possible interest rate when the loan-to-value ratio is at or below 80%.
- Fannie Mae's HomeReady and Freddie Mac's Home Possible mortgage programs for low-income borrowers allow an LTV ratio of 97% (3% down payment) but require mortgage insurance until the ratio falls to 80%.

Understanding the Loan-to-Value (LTV) Ratio

Interested homebuyers can easily calculate the LTV ratio of a home. This is the formula:

\begin{aligned} <V ratio=\frac{MA}{APV}\\ &\textbf{where:}\\ &MA = \text{Mortgage Amount}\\ &APV = \text{Appraised Property Value}\\ \end{aligned}
where:Mortgage AmountAppraised Property Value

An LTV ratio is calculated by dividing the amount borrowed by the appraised[2] value of the property, expressed as a percentage. For example, if you buy a home appraised at $100,000 for its appraised value, and make a $10,000 down payment[3], you will borrow $90,000. This results in an LTV ratio of 90% (i.e., 90,000/100,000).

Determing an LTV ratio is a critical component of mortgage underwriting[4]. It may be used in the process of buying a home[5], refinancing[6] a current mortgage into a new loan, or borrowing against accumulated equity[7] within a property.

Lenders assess the LTV ratio to determine the level of exposure to risk they take on when underwriting a mortgage. When borrowers request a loan for an amount that is at or near the appraised value (and therefore has a higher LTV ratio), lenders perceive that there is a greater chance of the loan going into default[8]. This is because there is very little equity built up within the property. As a result, in the event of a foreclosure[9], the lender may find it difficult to sell the home for enough to cover the outstanding mortgage balance and still make a profit from the transaction.

The main factors that impact LTV ratios are the amount of the down payment, sales price, and the appraised value of a property. The lowest LTV ratio is achieved with a higher down payment and a lower sales price.

How LTV is Used by Lenders

A LTV ratio is only one factor in determining eligibility for securing a mortgage, a home-equity loan[10], or a line of credit[11]. However, it can play a substantial role in the interest rate that a borrower is able to secure.

Most lenders offer mortgage and home-equity applicants the lowest possible interest rate when their LTV ratio is at or below 80%. A higher LTV ratio does not exclude borrowers from being approved for a mortgage, although the interest on the loan may rise as the LTV ratio increases. For example, a borrower with an LTV ratio of 95% may be approved for a mortgage. However, their interest rate may be a full percentage point higher than the interest rate given to a borrower with an LTV ratio of 75%.

If the LTV ratio is higher than 80%, a borrower may be required to purchase private mortgage insurance (PMI)[12]. This can add anywhere from 0.5% to 1% to the total amount of the loan on an annual basis. For example, PMI with a rate of 1% on a $100,000 loan would add an additional $1,000 to the total amount paid per year (or $83.33 per month). PMI payments are required until the LTV ratio is 80% or lower. The LTV ratio will decrease as you pay down your loan and as the value of your home increases over time.

In general, the lower the LTV ratio, the greater the chance that the loan will be approved and the lower the interest rate is likely to be. In addition, as a borrower, it's less likely that you will be required to purchase private mortgage insurance (PMI).

While it is not a law that lenders require an 80% LTV ratio in order for borrowers to avoid the additional cost of PMI, it is the practice of nearly all lenders. Exceptions to this requirement are sometimes made for borrowers who have a high income, lower debt, or have a large investment portfolio.

Example of LTV

For example, suppose you buy a home that appraises for $100,000. However, the owner is willing to sell it for $90,000. If you make a $10,000 down payment, your loan is for $80,000, which results in an LTV ratio of 80% (i.e., 80,000/100,000). If you were to increase the amount of your down payment to $15,000, your mortgage loan is now $75,000. This would make your LTV ratio 75% (i.e., 75,000/100,000).

Variations on Loan-to-Value Ratio Rules

Different loan types may have different rules when it comes to LTV ratio requirements.

FHA Loans

FHA loans are mortgages designed for low-to-moderate-income borrowers. They are issued by an FHA-approved lender and insured by the Federal Housing Administration (FHA)[13]. FHA loans require a lower minimum down payment and credit scores than many conventional loans. FHA loans allow an initial LTV ratio of up to 96.5%, but they require a mortgage insurance premium (MIP)[14] that lasts for as long as you have that loan (no matter how low the LTV ratio eventually goes). Many people decide to refinance their FHA loans once their LTV ratio reaches 80% in order to eliminate the MIP requirement.

VA and USDA Loans

VA and USDA loans—available to current and former military or those in rural areas—do not require private mortgage insurance even though the LTV ratio can be as high as 100%. However, both VA and USDA loans do have additional fees.

Fannie Mae and Freddie Mac

Fannie Mae's HomeReady and Freddie Mac's Home Possible mortgage programs for low-income borrowers allow an LTV ratio of 97%. However, they require mortgage insurance until the ratio

falls to 80%.

For FHA, VA, and USDA loans, there are streamline refinancing options available. These waive appraisal requirements so the home's LTV ratio doesn't affect the loan. For borrowers with an LTV ratio over 100%—also known as being "underwater" or "upside down"—Fannie Mae's High Loan-to-Value Refinance Option and Freddie Mac's Enhanced Relief Refinance are also available options.

LTV vs. Combined LTV (CLTV)

While the LTV ratio looks at the impact of a single mortgage loan when purchasing a property, the combined loan-to-value[15] (CLTV) ratio is the ratio of allsecured loans on a property to the value of a property. This includes not only the primary mortgage used in LTV but also any second mortgages, home equity loans or lines of credit, or other liens. Lenders use the CLTV ratio to determine a prospective home buyer's risk of default when more than one loan is used—for example, if they will have two or more mortgages, or a mortgage plus a home equity loan or line of credit (HELOC). In general, lenders are willing to lend at CLTV ratios of 80% and above and to borrowers with high credit ratings. Primary lenders tend to be more generous with CLTV requirements since it is a more thorough measure.

Let's look a little closer at the difference. The LTV ratio only considers the primary mortgage balance on a home. Therefore, if the primary mortgage balance is $100,000 and the home value is $200,000, LTV = 50%.

Consider, however, the example if it also has a second mortgage in the amount of $30,000 and a HELOC of $20,000. The combined loan to value now becomes ($100,000 + $30,000 + $20,000 / $200,000) = 75%; a much higher ratio.

These combined considerations are especially important if the mortgagee defaults and foes into foreclosure.

Disadvantages of Loan-to-Value (LTV)

The main drawback of the information that a LTV provides is that it only includes the primary mortgage that a homeowner owes, and does not include in its calculations other obligations of the borrower, such as a second mortgage or home equity loan.Therefore, the CLTV is a more inclusive measure of a borrower's ability to repay a home loan.

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