

A Reprint from *Tierra Grande*


Romancing The LOAN

by Jack C. Harris

Any time mortgage interest rates drop, homeowners flock to refinance their loans. The question is, should they? Refinancing is not always beneficial. In some instances, there is more to be gained by banking the money required for refinancing charges and fees. And timing can be key. If rates have not hit bottom, borrowers may save more by waiting for even lower rates.

Refinancing lowers the monthly payment, but getting the new loan usually involves some cost. Borrowers hope monthly savings will eventually total more than the cost to refinance.

A borrower refinancing a mortgage loan has three options:

- Get a new loan and pay all the fees and points in cash.
- Get a new loan and finance the costs into the loan.
- Get a “no cost” loan that charges no fees or points.

Table 1. Mortgage Rates for Refinancing with Cash Payment of Closing Costs

Old Rate	Cost = 1%	Cost = 2%	Cost = 3%	Cost = 4%	Cost = 5%
New loan is in effect for at least 3 years after refinancing					
10	9.625	9.25	8.875	8.5	8.125
9	8.625	8.25	7.875	7.5	7.125
8	7.625	7.25	6.875	6.5	6.125
7	6.625	6.25	5.875	5.5	5.125
New loan is in effect for at least 6 years after refinancing					
10	9.75	9.5	9.375	9.125	8.875
9	8.75	8.5	8.375	8.125	8
8	7.75	7.5	7.375	7.125	7
7	6.75	6.5	6.375	6.125	6
New loan is in effect for at least 10 years after refinancing					
10	9.75	9.625	9.5	9.375	9.25
9	8.75	8.625	8.5	8.375	8.25
8	7.75	7.625	7.5	7.375	7.25
7	6.875	6.75	6.5	6.375	6.25

Source: Real Estate Center at Texas A&M University

Table 2. Mortgage Rates for Refinancing with Financed Closing Costs

Old Rate	Cost = 1%	Cost = 2%	Cost = 3%	Cost = 4%	Cost = 5%
New loan is in effect for at least 3 years after refinancing					
10	9.5	9.125	8.75	8.375	8
9	8.5	8.125	7.75	7.375	7
8	7.5	7.125	6.75	6.375	6
7	6.5	6.125	5.75	5.5	5.25
New loan is in effect for at least 6 years after refinancing					
10	9.75	9.5	9.25	9	8.75
9	8.75	8.5	8.25	8	7.875
8	7.75	7.5	7.25	7.125	6.875
7	6.75	6.5	6.25	6.125	5.875
New loan is in effect for at least 10 years after refinancing					
10	9.75	9.625	9.5	9.25	9.125
9	8.75	8.625	8.5	8.25	8.125
8	7.75	7.625	7.5	7.375	7.125
7	6.75	6.625	6.5	6.375	6.25

Source: Real Estate Center at Texas A&M University

Previous rules of thumb used to determine whether refinancing is worthwhile are mostly obsolete. Tables 1, 2 and 3 serve the same purpose but are based on specific loan characteristics and financial calculations.

Loans with cash costs should offer sufficient savings to provide a competitive return on the cost of refinancing. Otherwise, the borrower is better off keeping the existing loan and putting the money it would cost to refinance in an interest-bearing account.

Table 1 can be used to determine the maximum interest rate on the new loan that provides a good return over the time the loan is outstanding. A borrower should refinance only if the new loan rate is no higher than the rate in the table. The lower interest rate on the new loan reduces the monthly payment and allows the loan to amortize faster. The information in this table is based on the following assumptions:

- the amount of the new loan equals the balance of the old loan (no cash out),
- there is no prepayment penalty,
- all costs are paid in cash at closing,
- maturity of both loans is 30 years and
- the borrower can get a return of 2 percentage points below the refinanced interest rate on alternative, safe investments.

To use the table, first determine how long the borrower expects to hold the new loan. The table has sections for three-, six- and ten-year holding periods (pick the one that most closely matches the time horizon). The longer the new loan, the more savings will accumulate.

Second, estimate the cost of refinancing as a percentage of the loan amount. The table shows costs from 1 to 5 percent of the loan. Find the interest rate on the existing loan in the left-hand column. The intersection of the cost column and the row showing the old rate indicates the

maximum interest rate the new loan could carry for refinancing to be worthwhile.

For example, if a borrower expects to live in the home for another six years, the current mortgage is 9 percent and it costs 3 percent to refinance, the new loan must have an interest rate of no more than 8.375 percent.

Table 2 functions identically but is for cases in which costs are fully financed into the new loan. Assumptions are the same as for Table 1, except that the new loan is for an amount equal to the old loan balance plus closing costs.

No-cost loans mean no out-of-pocket expense to the borrower. The lender pays the cost of refinancing. Because these loans require no cash investment, refinancing is worthwhile if it reduces the interest rate on the loan. However, borrowers should consider whether they could get an even lower interest rate by paying closing costs. Which type of loan provides the better deal?

Table 3 answers this question. Find the row that comes closest to the interest rate offered on the no-cost loan. Then go to the column representing the percentage cost of refinancing for loans requiring payment of closing costs. If the interest rate offered on the loan with closing costs is lower than the rate indicated at the intersection, then that loan is a better deal than the no-cost loan.

For example: assume a no-cost loan is available at 7 percent interest and the going rate for loans with 2 percent costs is 6.5 percent. Also assume the borrower expects to live in the house for at least ten years. The intersection of the 7 percent row and the 2 percent column is 6.625 percent. The loan with 2 percent closing costs is a better deal because the interest rate offered, 6.5 percent, is lower than 6.625 percent. ➡

Dr. Harris (jharris@cgsb.tamu.edu) is a research economist with the Real Estate Center at Texas A&M University.

Table 3. Mortgage Rates for Full-Cost Loan Equivalent to No-Cost Loan

No-cost Rate	Cost = 1%	Cost = 2%	Cost = 3%	Cost = 4%	Cost = 5%
New loan is in effect for at least 3 years after refinancing					
8	7.625	7.25	6.875	6.5	6.125
7.5	7.125	6.75	6.375	6	5.625
7	6.625	6.25	5.875	5.5	5.125
6.5	6.125	5.75	5.375	5	4.625
New loan is in effect for at least 6 years after refinancing					
8	7.75	7.5	7.275	7.125	7
7.5	7.25	7	6.875	6.625	6.5
7	6.75	6.5	6.375	6.125	6
6.5	6.25	6	5.875	5.625	5.5
New loan is in effect for at least 10 years after refinancing					
8	7.75	7.625	7.5	7.375	7.25
7.5	7.25	7.125	7	6.875	6.75
7	6.75	6.625	6.5	6.375	6.25
6.5	6.25	6.125	6	5.875	5.75

Source: Real Estate Center at Texas A&M University



MAYS BUSINESS SCHOOL

Texas A&M University
2115 TAMU
College Station, TX 77843-2115

<http://recenter.tamu.edu>
979-845-2031
800-244-2144 orders only

Director, Dr. R. Malcolm Richards; **Associate Director**, Gary Maler; **Chief Economist**, Dr. Mark G. Dotzour; **Communications Director**, David S. Jones; **Associate Editor**, Nancy McQuiston; **Assistant Editor**, Kammy Baumann; **Assistant Editor**, Ellissa Brewster; **Art Director**, Robert P. Beals II; **Graphic Designer**, J.P. Beato; **Circulation Manager**, Mark W. Baumann; **Typography**, Real Estate Center; **Lithography**, Wetmore & Company, Houston.

Advisory Committee

Jerry L. Schaffner, Dallas, chairman; Celia Goode-Haddock, College Station, vice chairman; Joseph A. Adame, Corpus Christi; David E. Dalzell, Abilene; Tom H. Gann, Lufkin; Joe Bob McCartt, Amarillo; Catherine Miller, Fort Worth; Nick Nicholas, Dallas; Douglas A. Schwartz, El Paso; and Larry Jokl, Brownsville, ex-officio representing the Texas Real Estate Commission.

Tierra Grande (ISSN 1070-0234), formerly *Real Estate Center Journal*, is published quarterly by the Real Estate Center at Texas A&M University, College Station, Texas 77843-2115. Subscriptions are free to Texas real estate licensees. Other subscribers, \$20 per year.

Views expressed are those of the authors and do not imply endorsement by the Real Estate Center, Mays Business School or Texas A&M University.

©2003, Real Estate Center. All rights reserved.