FACT SHEET

L-1331

FACTORS INFLUENCING MORTGAGE PREPAYMENT

Wayne Hayenga, Kenneth Graeber and William Adkins*

Prepaying mortgage principal can save large interest costs incurred when purchasing property. However, there are many factors to be considered when deciding whether or not to prepay a mortgage. This publication examines the advantages and disadvantages of mortgage principal payment.

A 20-year loan for $20,000 at 9 percent interest requires monthly interest and principal payments of $180.00. Over the 20-year period, 240 payments are made for a total outlay of $43,200, of which $23,200 is interest. On the surface it appears that if the total mortgage were prepaid, one could save more than $20,000, thereby gaining more than a 100 percent return on money invested. However, this is not accurate.

The $23,200 to be "saved" is all interest. Interest is the rent paid on borrowed money. Since interest on mortgages is paid as it is earned, the interest cost or interest saving must be viewed over the length of the note. What is saved by paying off the mortgage is the mortgage interest rate on the *unpaid balance*. In our example, the return on $20,000 to the lender is 9 percent, and this represents the return the borrower can save by repaying the lender in full.

The same principle applies for partial prepayments of mortgage principal. The mortgage schedule shown below reflects the interest and principal portions of the $180 monthly payment on a note of $20,000, at 9 percent, for 20 years. The initial payment reduces the principal by $30 and includes $150 in interest. (An interesting point to note is that the portion of the payment going to interest exceeds the portion going to principal until the fourth month of the twelfth year.)

Partial mortgage prepayment reduces the term of the loan and the total amount of interest paid; the monthly payments continue at the same rate. The mortgagee could choose to prepay the principal portion of the second month's payment, $30.20, when he makes his first month's payment. Thereafter the schedule would shift forward and the mortgage would be retired one month earlier. In doing so, the mortgagee would save the $149.80 interest charge associated with the second month's payment, assuming there is no prepayment penalty. Principal can be prepaid for more than just one month. The interest associated with payments covered by the principal prepayment would be saved, and the mortgage retired that much sooner.

Despite large interest savings compared to the size of principal payments, the savings rate is still only the mortgage rate on the loan, in this example 9 percent. Principal prepayment reduces the loan funds available to the borrower over the life of the loan. When adjustments are made for this reduction over the loan period, the saving rate is equal to the interest rate.

Factors to consider in decisions regarding prepayment of mortgages include prepayment penalties, alternative investments and alternative sources of funds.

Prepayment Penalties

Principal prepayment policies vary among lending institutions. When applying for or assuming a loan, the borrower should determine the prepayment options and requirements of the loan. Some lending institutions allow borrowers to prepay any amount. Others limit amounts and require a penalty if prepayments exceed these amounts in a given time period. These penalties should be compared to interest savings associated with prepayment.

As an illustration, consider the $20,000, 20-year, 9 percent mortgage if the lender requires a 1 percent penalty on the balance outstanding for prepayment of any year's principal. Assume the borrower elected to prepay the principal for the second year. The prepayment penalty would be $191.78. Total interest costs would be reduced by $1,511.40. The "saving" rate in this example would be the mortgage rate, 9 percent, less the 1 percent penalty, or 8 percent.

Alternative Investments

Funds used to prepay a mortgage could be used for other purposes. If the borrower has consumer credit loans on which he pays a higher interest rate than the mortgage, prepayment of these would bring greater returns to dollars than prepayment of the mortgage.

*Respectively, Extension economist-management and project leader in farm management, and Extension economist-real estate, The Texas A&M University System; and research economist and professor, Texas Real Estate Research Center, The Texas A&M University System.

Texas Agricultural Extension Service • The Texas A&M University System • John E. Hutchison, Director • College Station

In addition, the borrower has options for placing this money in investments such as stocks, bonds or certificates of deposit. If returns on these investments exceed the mortgage rate, these investments represent a wiser economic choice.

The borrower should also consider the matter of liquidity or cash availability. He might choose to place the money in an investment which pays a lower rate than his mortgage (such as a savings deposit), but one that guarantees quick access to the money. Since savings deposits are available on demand, he would still have money available to avoid high interest charges on consumer loans or for other investment opportunities that may arise.

Alternative Sources of Funds

Another aspect of home mortgage prepayment is that under Texas law, a mortgage cannot be placed upon a homestead except to cover the original purchase price or to pay for improvements to the homestead. Thus, cash put into a home at the time of purchase, or through mortgage prepayment, cannot be retrieved unless the property is transferred. In other words, any prepayment made cannot be reborrowed at some future time if the property continues to be the owner's homestead.

People generally can borrow the greatest sums of money under the most favorable terms for homesteads (the property for which most mortgages are made). Not to borrow on one's homestead by prepaying the mortgage deprives the owner of this advantage. It may mean that less favorable loans must be sought when other financial needs arise.

Disadvantages of Prepayment

Possible disadvantages of mortgage prepayment include:

1. Alternative investments may yield greater returns than mortgage prepayment.
2. Once mortgage prepayments are made on a homestead, liquidity is lost and cannot be recovered until the property is sold.
3. A favorable mortgage interest rate which might be advantageous in selling the property may be lost. Increased equity through partial mortgage prepayment may be a disadvantage in resale, since a buyer would have to make a larger down payment in order to assume the existing loan.
4. There may be prepayment penalties which could offset part or all of the interest savings.
5. Mortgage prepayment on a homestead causes the owner to lose the largest and often most favorable source of borrowed funds.
6. Income tax deductions for mortgage interest cost may be lost.

Advantages of Prepayment

Prepayment advantages include:

1. If the mortgage rate is higher than interest rates for other possible investments, prepayment can bring significant savings in interest.
2. Prepayment can serve as a form of forced "savings."
3. Prepayment can shield against economic adversity. Funds put into a homestead are protected against attachment in case of business failure or financial collapse.
4. If a mortgage is completely repaid, prepayment of taxes and insurance is no longer required.
5. Prepayment allows the loan to be retired earlier.

Suggestions Before Prepayment

If prepayment of principal is considered, the following questions should be asked:

1. What alternative uses exist for the funds, and what are their rates of return?
2. What alternative sources of funds are available, and what are their costs?
3. How can the principal be prepaid? What procedures must be followed? What prepayment penalty, if any, exists?
4. What interest costs are saved?

Obtain a mortgage payment schedule. The schedule provides information on interest and principal balance, and will be a helpful guide in determining interest savings.

MORTGAGE		INTEREST RATE	MONTHLY PAYMENT	LENGTH OF LOAN
20,000		9%	$180.00	20 Years
Year	Month	Interest portion	Principal portion	Remaining principal balance
1st	1	150.00	30.00	19,970.00
	2	149.80	30.20	19,939.80
	3	149.60	30.40	19,909.40
	4	149.40	30.60	19,878.80
	5	149.00	31.00	19,847.80
2nd	1	144.20	35.80	19,178.60
3rd	1	140.80	39.20	18,726.20
4th	1	137.00	43.00	18,231.40
5th	1	133.00	47.00	17,690.00
10th	1	106.40	73.60	14,120.20
12th	4	90.00	90.00	11,912.20
19th	11	2.40	177.60	141.20
Final payment 19th	12	1.00	141.20	-0-

Educational programs conducted by the Texas Agricultural Extension Service serve people of all ages regardless of socio-economic levels, race, color, sex, religion or national origin.

Cooperative Extension Work in Agriculture and Home Economics, The Texas A&M University System and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8, 1914, as amended, and June 30, 1914.
10M—11-75