Last year I began writing a column on home mortgages that appears in a number of newspapers and on the Web. It invites readers to send in questions. Several thousand have done so, and responding to them has proved quite an education. /// The most interesting thing I have learned is that many mortgage borrowers try to manage their mortgages rather than just sit on them. And as many have found out, the existing instrument is badly designed for that

> purpose. /// This article explains why the standard American mortgage does not meet the needs of a large proportion of borrowers. It also

describes an alternative mortgage designed to work in conjunction with providing borrowers Internet-based access to their account records. The combination of the new instrument and Here's one design that's access to account records would empower borrowers to manage their finances in new and flexible ways. At the same time, bulk around what it would allow lenders to communicate with their customers in the most targeted and cost-effective manner possible. /// The problems that borrowers have with the current mortgage design

consumers appear can be illustrated by sharing a few of the letters I have received,

along with parts of my responses.

Consumers are eager for a mortgage

that allows them more

necibility in payments.

BY JACK GUTTENTAG

#### Rigidity of the monthly payment obligation

Perhaps the feature that causes the most problems is the absolute rigidity of the payment obligation. Here is a sample letter:

"I wasn't able to make my April mortgage payment last year, the first time in two years that happened, and I have made every payment on time since then. But my lender sends me late-charge notices every month since that happened. And when I applied recently for a credit card, I was told that I was a high-risk customer because of my mortgage payment delinquencies. I only skipped one payment, so what is going on?"

What, indeed. I was obliged to inform this borrower that:

"Your loan contract does not give you the right to skip a payment. The payment you skipped made you delinquent, and you have stayed delinquent ever since.

Under the accounting rules used for amortized mortgages, lenders always credit a payment against the earliest unpaid obligation. When you made your payment last May, you received credit for April, which meant that your May payment was late. When you made your payment in June, it was applied to May, leaving the June payment delinquent, and so on. A borrower who skips a payment but pays regularly thereafter stays delinquent (and accumulates late fees) until the skipped payment is made good..."

# Perhaps the feature that causes the most problems is the absolute rigidity of the payment obligation.

In another letter, a borrower who was unable to meet the January payment did exactly what borrowers are supposed to do in this situation: She consulted the lender, who consented to accept one-third of the January payment with the February payment, one-third with the March payment and the remaining one-third with the April payment. The borrower managed this, yet found herself saddled with four 30-day delinquencies on her credit report!

The current mortgage does not allow a borrower to skip any part of a payment under any circumstances. This is bad for lenders as well as borrowers because a borrower who gets behind and doesn't have the means to catch up may be on the slippery slope to default.

#### Poor payment incentives

The current mortgage does not motivate borrowers to pay as early as possible. The following letter illustrates this.

"I consistently pay my mortgage payment two weeks early, believing that this will ultimately result in paying less interest over the life of the loan. Is this a correct assumption?"

I was forced to disillusion this borrower:

"Sorry, but your assumption is wrong. The systems used to keep track of loans understand only one day of the month—the first. So whenever you pay, early or late, it is recorded as if you had paid on the first. This means that you have been giving the lender two weeks' free use of your money. Borrowers who consistently pay late but within the grace period of 15 days enjoy the free use of the lender's money for up to 15 days. Virtue is not always rewarded...."

Not only is there no benefit gained from paying early, but there is also no cost to paying late—up to the 15th of the month. Paying on the 16th, however, results in a late charge and a delinquency report. This makes no sense.

## Inability to reduce the payment on a FRM through partial prepayment

Borrowers are often shocked to learn that they can't reduce the payment on a fixed-rate mortgage (FRM) by prepaying some of the balance, as the following letter illustrates:

"I recently came into an inheritance and want to use the money to reduce my mortgage payment. My lender tells me, however, that I can't do it. If I pay down the balance it just shortens the time until final payoff. Is there any way I can do what I want?"

My reply:

"Sad to say, if you have a fixed-rate mortgage, the only way to accomplish your objective is to refinance. The new loan can be smaller, and the payment will be reduced correspondingly."

## Inability to reduce the payoff period on an ARM through partial prepayment

Adjustable-rate mortgages (ARMs) have the opposite problem. Where the FRM borrower can shorten the payoff period but can't reduce the payment, the ARM borrower can reduce the payment but has great difficulty in shortening the payoff period. Because the payment recalculation on an ARM that occurs on rate-adjustment dates uses the period remaining from the original term, prepayments reduce the payment but leave the term unchanged. The borrower who wants to pay off early must increase the amount of the additional principal payment after every rate adjustment.

### No way to make advance payments

People who make an unconditional payment commitment extending over many years and want to live without anxiety about it maintain a reserve for unexpected contingencies that might affect their ability to pay. Underwriters recognize this when they require borrowers to have cash in the bank equal to two months of PITI (principal, interest, taxes and insurance)

at the time of closing. But after closing, borrowers are stuck with an instrument that discourages the accumulation of reserves. This is reflected in the following letter:

"I work on a commission basis with a large bonus in December, but August is my vacation month when my expenses go up and I have no income. I would like to be able to make an extra monthly payment in December so I can skip the payment in August. My lender says that I can do this, but it means paying in advance with the bank collecting the interest. If I put the money in my deposit account, I only earn 3 percent on it, compared with the 6.5 percent I am paying on the mortgage, and I worry that the money may not be there in August when I need it because I will have spent it in the meantime. . . . Any ideas?"

I had no ideas to offer this borrower, because the standard mortgage does not allow a borrower to store nuts for the winter without losing interest on the nuts.

The central problem with the standard mortgage is that it recognizes only 12 days a year, which are the first days of each month, and calculates interest and pays down principal 12 times a year on those days. Further, all payments are credited sequentially as of the first day of the month following the last credited payment, regardless of when they are received, early or late. These features create the problems illustrated in the previous letters. It's time to provide a more flexible instrument that borrowers can use to meet diverse and changing circumstances.

#### The flexible-payment mortgage

I call the proposed new instrument the flexible-payment mortgage. Here is how it would work:

- Interest accrues daily, and payments reduce principal by the same amount on the day received. There is nothing novel about this; home-equity loans work this way now.
- Monthly payments are calculated and amortization schedules derived as they are now, on the assumption that the payment is made on the first day of each month. The payment calculated in this way is the "reference payment," but it is not an obligatory payment.
- The borrower's obligation is defined in terms of the balance rather than the payment. On any given day, there is a maximum balance that declines day by day over the term of the loan.
- The maximum balance schedule is calculated at the time the loan is closed. It is the amortization schedule calculated in the conventional manner over the contract term using the reference payment.
- Payments may be made on any day for any amount and reduce the balance by the same amount on that day. Since interest accrues daily, there is no need to partition payments into interest and principal components.
- As long as the loan balance is below the maximum balance, the borrower is OK. Furthermore, it doesn't matter how the balance was reduced to its current level. It is up to the borrower to determine when payments are made and how large they are.
  - A contract violation arises when the actual balance is

greater than the maximum balance (let's call this "excess balance"). An excess balance up to an amount equal to half the reference payment might be allowable—the equivalent of the current 15-day grace period. No late charges need be imposed, however, because interest continues to accrue. Default would be triggered by an excess balance in excess of, say, three reference payments.

#### Illustrations of payment flexibility

The flexible-payment mortgage deals with all the problems of the standard mortgage described earlier:

- Adjusting the payment to circumstances: Borrowers can establish their own payment schedule—monthly, weekly, biweekly, semi-monthly or whatever makes the most sense for them.
- Saving up nuts for the winter: Borrowers can pay down the balance in advance so they can skip payments later. Payments in advance earn the rate on the mortgage rather than a lower bank rate.
- Equity in payment timing: If borrowers pay early, they benefit; if they pay late, they lose—by amounts precisely related to the exact timing of that lateness. There are no critical deadlines with safety on one side and a heavy penalty on the other.
- Partial prepayments to control payoff period and payment: Borrowers with FRMs who make partial prepayments can reduce the payment rather than the payoff period, if that is what they wish to do; ARM borrowers can reduce the payoff period rather than the payment, if that is what they wish to do.

It's time to provide a more flexible instrument that borrowers can use to meet diverse and changing circumstances.

#### The flexible-payment mortgage and the Internet

Borrowers who take out a flexible-payment mortgage would have access to their loan files on the Internet. They could see at a glance where they are that day, how they got there and where they are going.

On the day they log in, borrowers would immediately see their current balance, maximum balance, daily interest accrual and number of days until balance equals maximum balance.

Borrowers could also reconstruct the history of how they got to where they are now. The history would show all payments on the date made, the balance and maximum balance on every day on which a payment was made and the interest accrual during the periods between payments.

Finally, borrowers would be offered easy simulation capacity so they can play "what ifs" with regard to future payments. They would be able to specify future payments in a variety of ways and in each case trace the impact on the balance versus the maximum balance. In this way, the flexible-payment

mortgage could become the core of the intelligent household's financial planning.

#### The flexible-payment mortgage and lenders

Assuming the same interest rate and points, the effective yield earned by lenders should be higher on the flexible-payment mortgage than on the standard mortgage. For a borrower making 12 payments a year who always pays on the first day of the month, the effective yield to the lender will be the same on both instruments. But it will be higher on the flexible-payment mortgage, to the extent that borrowers on that mortgage pay with greater frequency than monthly, and to the extent that borrowers using standard mortgages take advantage of the 15-day grace period to pay late.

But the major benefit of the flexible-payment mortgage to lenders is strategic. Information on the status of borrowers' accounts and on the ways in which borrowers are managing their accounts will permit the marketing of ancillary services in a much more targeted and focused manner than is possible now. Furthermore, lenders will be able to communicate with borrowers very inexpensively by leaving customer-tailored messages on the Web sites that lenders construct for this purpose.

One ancillary service that lenders could offer is a built-in facility for additional loans. The simplest arrangement would allow borrowers to draw an additional amount, at any time, up to the maximum balance. But the lender could selectively offer larger draws, perhaps up to the original balance, for borrowers with payment records that meet specified cri-

teria. The possibilities are endless.

There is every reason to believe that the greater payment flexibility of the flexible-payment mortgage will result in fewer defaults. Perhaps of even greater importance, borrower propensity to refinance should be significantly dampened because it would mean the loss of payment flexibility that borrowers have "earned" by their prior prepayments. For example, a borrower with a maximum balance of \$120,000 who has paid down the actual balance to \$100,000 through partial prepayments has stored up valuable nuts for the winter that would be lost through a refinancing.

A shift to the flexible-payment mortgage would require major changes in loan servicing systems. These systems must handle interest accruals and payment credits on a daily basis, which some existing systems already can do. However, changing existing contracts to the new system for borrowers who wanted it might not be cost effective.

The other major cost that lenders must incur is the development of the Web sites where borrowers go to access their accounts. These sites must interface with the servicing systems on which the account records are maintained, which is neither a trivial undertaking nor a massive one. There are numerous mortgage software development companies that would jump into the market in the blink of an eye to bid for the opportunity. MB

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