

A Case for Variable Rate Mortgages

John P. Danforth

Assistant Vice President
Research Department
Federal Reserve Bank of Minneapolis

Mortgages with interest rates that can change over the life of the loan—variable rate mortgages (VRMs)—have been prohibited¹ in most of the United States since the 1930s. But this prohibition is counterproductive and unnecessary. Rather than encouraging homeownership, one of its main purposes, it discourages it by denying borrowers features many would prefer to those of the traditional fixed rate mortgages (FRMs)—including lower interest rates. And the prohibition isn't needed to accomplish anything else: borrowers could still get the benefits of FRMs without it. To really encourage homeownership, therefore, (and to reduce taxes, too) mortgage lenders throughout the U.S. should be authorized to offer variable rate mortgages.

A Housing Goal

Banning VRMs is one of many governmental actions aimed at least in part at the same goal: to assure adequate housing, particularly the opportunity for every American family to own a home. It's impossible to say just when housing opportunities achieved the status of a national goal. But that status was implied in both the Housing Act of 1949 and the Housing and Urban Development Act of 1968.

These acts and much other legislation reflect the view that our housing goal will not be achieved without active government involvement in the housing market. There is good economic justification for such involvement if we assume that society as a whole benefits when individuals own their homes. Each individual's decision to buy a house is based on purely individual benefits, and the costs of homeownership will undoubtedly exceed the benefits for some people. If the gains to society from having one more homeowner would more than make up the differ-

ence, the government should intervene to encourage home purchases.

Policymakers may or may not have been motivated by this theoretical argument, but they have chosen to encourage individual homeownership and to do it by actively participating in the mortgage market. Perhaps they chose to help the mortgage market because it seemed to need help: half of all mortgage borrowers had to default during the Great Depression. Whatever the reason, policymakers created a host of regulations and agencies aimed at improving borrowers' credit terms²—especially interest rates.

Most of these regulations and agencies were meant to keep interest rates low. Many state governments acted directly and placed ceilings on the rates lenders could charge on their home mortgage loans. The federal government took a more indirect route. Since the rates mortgage borrowers must pay are determined to some extent by what lenders must pay to get funds to lend, policymakers tried to reduce the cost of these funds and then let competition among lenders pass the reductions on to borrowers. The federal government thus set ceilings too, but on the interest banks and S&Ls could pay on their deposit liabilities. (These ceilings are popularly known as *Regulation Q*.) It also established a complicated

¹We are not using *prohibited* in a strict sense here: variable rate mortgages are rarely explicitly prohibited. But many states effectively prohibit them by outlawing increases in interest rates and/or payments over the life of mortgage contracts.

²Credit terms include a long list of mortgage contract attributes such as interest charge, down payment, and contract length. This study concentrates on the magnitude and variability of interest charges over the life of the mortgage contract.

maze of agencies to help move nondeposit funds from national money markets to the mortgage market. The Federal Home Loan Bank System, for instance, sells investors government agency bonds which get tax breaks, then lends the proceeds to S&Ls; usually at below-market rates. The Federal Housing Administration insures lenders against loss on home mortgage loans. And the Federal National Mortgage Association, the Government National Mortgage Association, and the Federal Home Loan Mortgage Corporation provide lenders with a secondary market for insured mortgage loans where they can get money quickly.

While keeping interest rates low was obviously a primary concern of policymakers trying to encourage homeownership, it wasn't the only one. They believed that borrowers also would find mortgages more attractive if the rates they had to pay for them could not be changed. So both the federal government and most state governments effectively prohibited many of the financial firms they chartered from offering mortgages with variable interest charges.

A Counterproductive Prohibition

Unfortunately, however, this prohibition works against the nation's housing goal instead of for it, mainly because it makes homeownership less attractive for many people. Of course some borrowers prefer paying a fixed rate of interest on their mortgage loans, but others prefer the advantages they could get by accepting changeable rates—and those advantages are considerable.

The most obvious advantage stems from the fact that rates that vary can move down as well as up, while fixed rates are just that—fixed. If, for example, the cost of funds to lenders fell unexpectedly, holders of VRMs would benefit: their interest rates would be reduced automatically. Holders of FRMs, however, could not take advantage of those lower rates without paying closing costs on a new mortgage and possibly prepayment penalties on their current one.

This advantage of VRMs is greater than it may seem, for the need to pay the extra costs of refinancing a fixed rate mortgage would come at a bad time for most people. This is because changes in interest rates are linked to changes in inflation and income growth.

Both lenders and borrowers make some predictions of inflation when they make mortgage con-

tracts. Lenders set the interest rate based on what they think inflation will be over the life of the loan so that they'll be sure to get some real return for the use of their funds. Borrowers are willing to accept these interest rates because they expect inflation not only to reduce the real value of their mortgage payments but also to boost their income over the life of the loan so that they'll pay a shrinking share of their income for the mortgage.

If inflation slowed unexpectedly, eventually pulling down interest rates, lenders obviously wouldn't suffer from their wrong prediction, but some borrowers would. The growth in their inflation-tied income would slow too, making them less able than they expected to afford anything with a fixed price—including a mortgage. The ability to change the interest rate on a mortgage would thus be a great advantage. While people with VRMs would be able to pay less for their mortgage when they could afford less, people with FRMs would have to either pay more of their income than they expected for their mortgage or else pay extra refinancing costs when they could least afford them.

One reason many have not recognized this advantage of VRMs is that since the mid-1960s lenders seem to have consistently underestimated inflation when they set FRM rates, which has, of course, given FRM borrowers the advantage. It's hard to believe lenders will make such mistakes much longer, but even if they made them occasionally, VRM borrowers would not be as bad off as some may think. For if inflation rose faster than expected, pushing variable and new mortgage rates above those on old fixed-rate loans, income would rise faster than expected too. People with VRMs would therefore be paying higher rates when they were best able to afford them.

Overall, VRM rates would be lower

And over the life of the loan, VRM borrowers would come out ahead. For probably the most attractive feature of VRMs is the level of their interest rates compared to FRMs': they'd be lower. This is because making loans at fixed rates is much riskier for mortgage lenders.

The increased risk comes from not being able to adjust loan rates to match changes in the cost of funds. Mortgage lenders rely mostly on short-term deposit liabilities, and the rate of interest they must pay for them varies quite a bit. By definition, how-

ever, the rate they charge on FRMs cannot change at all. While lenders try to predict what short-term rates will be over the life of the loan when they set fixed mortgage rates, the chances of being wrong are great. Thus lenders' profit—the margin between the cost of liabilities and the return on assets—can vary unpredictably.

It is, of course, the possibility of sharp drops in income resulting from unexpected jumps in short-term interest rates which poses the greatest threat to mortgage lenders. Consider the implications of an unexpected 2 percentage point rise in short-term rates (not an unheard of jump) for an S&L holding \$100 million in FRMs. If the rate paid on that firm's liabilities rose by the same amount, its profit for the year would suffer an unpredicted \$2 million decline, most likely pushing it well into the red for the year and possibly into bankruptcy.

But don't Regulation Q ceilings protect lenders from such dramatic shifts in the cost of funds? To some extent, yes, but that protection is mostly illusory. When interest rates on nondeposit short-term liabilities such as commercial paper and U.S. Treasury securities rise above the ceiling for deposits, savers begin shifting funds out of deposits and into the more profitable investments. This process, called *disintermediation*, forces mortgage lenders to acquire liabilities not covered by interest rate ceilings, that is, to pay the higher costs of funds despite Regulation Q. For instance, banks and S&Ls can offer six-month, \$10,000-plus savings certificates with interest rates tied to Treasury bill rates³ and \$100,000-plus certificates of deposit at rates they are free to choose. Furthermore, federally chartered thrifts, which specialize almost completely in long-term mortgage lending and are thus especially vulnerable to unexpected jumps in short-term interest rates, can borrow from the Federal Home Loan Bank at rates which are typically below their market alternatives but which may be far above Regulation Q ceilings. So even with government agencies' help, Regulation Q does not effectively shield mortgage lenders from upward swings in short-term rates and the resulting plunge in earnings.

The increased risk of such plunges ultimately makes borrowers pay more for FRMs than they would have to for VRMs. That's because managers and resource owners are typically risk avoiders. An

increase in the riskiness of mortgage lending leads them to shift resources out of mortgage loans and into less risky investments. As this occurs, potential borrowers must compete for the dwindling supply of mortgage credit, and they do so by bidding up credit terms. In the end, rates on FRMs rise to a point where the payments borrowers are willing to make and so the expected return from mortgage lending are high enough to compensate managers and resource owners for the added risk. Lenders obviously wouldn't need this kind of compensation on VRMs. In fact, if they were allowed, lenders would encourage borrowers to choose VRMs by offering lower average charges on them over the life of the mortgage contract.

Prohibiting VRMs does no good

Attractive as these features are, some say, prohibiting VRMs is warranted to assure borrowers of the benefits of FRMs. But this is simply not true. The prohibition is not only counterproductive, it is unnecessary. It does not give borrowers any benefits they would not be able to get without it.

If VRMs were allowed, certainly FRMs would still be available to those who prefer fixed rates, and they would have to pay no more than if VRMs were still prohibited. There is no reason for lenders to offer VRMs exclusively if the return on FRMs is high enough to make them take the risk. And current FRM interest rates are obviously already high enough to do that, or mortgage money would be draining into less risky activities.

A few policymakers seem to think that prohibiting VRMs is necessary to protect consumers from big business; indeed, some say this was a main reason for the prohibition. They argue that borrowers can't assess the likely course of interest rates as well as lenders, and lenders would take advantage of that if VRMs were allowed.

We see at least three flaws in that line of reasoning. First, if borrowers have less information than lenders, that disadvantage exists when they're taking out FRMs too: prohibiting VRMs doesn't protect borrowers from lenders. Second, that protection isn't necessary anyway. While some borrowers may know less than lenders about future interest rate develop-

³These instruments were first allowed in June 1978 as a result of disintermediation pressures.

ments, individual lenders are unlikely to know more than other lenders. Competition for customers would therefore prevent lenders from taking advantage of their informational edge over borrowers in the setting of VRM terms just as it does now with FRM terms. And third, if VRMs were allowed, any borrowers who nevertheless felt at an informational disadvantage and that the disadvantage was in some sense more severe with VRMs could choose to take out FRMs. Of course the borrowers could underestimate their relative lack of information and take the wrong type of mortgage, but to prohibit what may often be the right choice because it isn't always the right choice seems a rather extreme application of consumer protectionism.

Drop it—for everybody's sake

The experience in California, one of the few states where VRMs have been explicitly authorized,⁴ supports this analysis. Many borrowers there obviously find VRMs attractive. As of June 1978, they had taken \$15 billion worth of them, about 40 percent of all mortgages held by lenders offering VRMs. And borrowers who prefer FRMs are not suffering as a result. While initial rates on all types of mortgages have risen nationwide since VRMs were allowed in California, rates on FRMs have not risen any more in that state than elsewhere. As expected, though, in California average rates on VRMs have been lower than those on FRMs.

Dropping this counterproductive prohibition on VRMs nationwide would thus not cost borrowers anything, and it could benefit nearly everybody. Those people now happy with FRMs would lose nothing; they would still be able to get them and at no higher price. But people now accepting FRMs unhappily or completely discouraged from homebuying by them would be able to get the kind of mortgages they'd prefer. If VRMs were allowed, therefore, more mortgages would be made, the government's housing goal would be promoted, and society as a whole could benefit. As a bonus, taxpayers would benefit too. If lenders could vary some mortgage rates to more closely match the cost of funds, their dependence on government agencies would be reduced—and so could the taxes that support these agencies.

⁴California's state-chartered S&Ls have been offering VRMs since 1975. Effective January 1979, the Federal Home Loan Bank Board authorized the state's federally chartered S&Ls to offer VRMs too.

The views expressed herein are those of the author and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.