



Can Federal Policy Changes Improve the Performance of Rural Mortgage Markets?

Rural families pay more on average for mortgage financing than do urban families. While the \$2 million estimated annual efficiency cost is too low to justify policy action, the estimated \$300 million of additional interest paid by rural borrowers presents an equity concern. Part of the difference in interest rates may be due to inefficiencies in rural financial markets. Low-cost remedies improve secondary market access, promote Federal mortgage guarantees, or generally improve the delivery of mortgage-related information to borrowers and lenders.

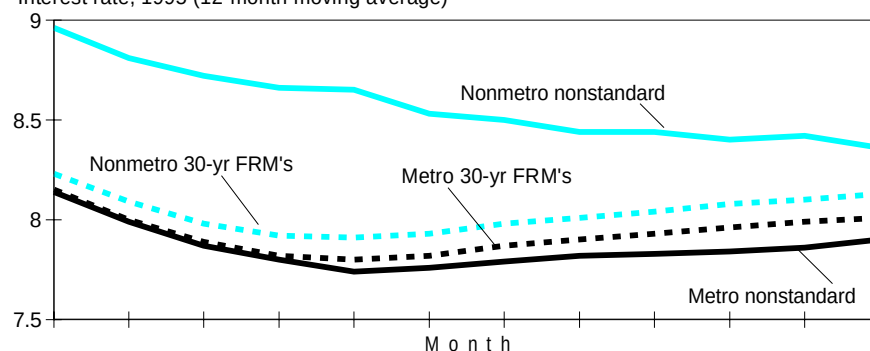
Interest rates on home mortgages tend to be higher in rural areas than in urban. Those differences may reflect both expenses associated with mortgage lending and the competitiveness and efficiency of mortgage markets. The smaller size and greater remoteness of many rural areas can raise lender costs. Additionally, rural financial markets, including mortgage markets, generally have fewer competitors than urban markets do. Thus, lenders may be apt to charge more, to provide fewer products and services, or to incur inefficiently high expenses. Banks in less competitive markets have been shown to operate this way (Rhoades, 1992). Differences between rural and urban rates probably reflect both mortgage market efficiency (including competitiveness) and the costs and risks associated with mortgage lending.

Housing is an important part of the rural economy, with approximately \$20 billion worth of single-family homes built in 1997. Rural housing expenditures in 1997 totaled over

\$150 billion, when one also considers purchases of existing single-family homes, multiple-unit and manufactured housing, and home maintenance, repair, and renovation. These expenditures, averaging nearly \$7,000 per year per rural household, were financed largely with home mortgages. ("Rural" areas include all U.S. counties outside of metropolitan statistical areas.)

Public concern about the adequacy of financial markets providing home mortgages to rural areas is evidenced by legislative actions: for example, the Federal Agriculture Improvement and Reform Act of 1996 required that Congress be given a report on the availability of credit for "agriculture, housing, and rural development"; and the Federal Housing Enterprises Safety and Soundness Act of 1992 established a system to set, monitor, and enforce goals for Government-Sponsored Enterprises (GSE's) to purchase mortgages on homes in "central cities, rural areas, and other underserved areas."

Figure 1
Rural interest rates exceed urban rates most on nonstandard mortgages and least on 30-year fixed-rate mortgages (FRM's)
Interest rate, 1995 (12-month moving average)



Nonstandard loans are those other than 30-year FRM's, 15-year FRM's, and adjustables.
Source: ERS tabulations from Federal Housing Finance Board survey data.

Home Mortgage Data Sources

HUD's *Survey of Mortgage Lending Activity* covers 11 major lender groups and various types. No rural/urban delineation.

Census's *Survey of Residential Finance*, last conducted in 1991 includes information on the mortgage recipient, mortgage holder, and loan. No rural/urban delineation.

The *American Housing Survey* is conducted bi-annually by Census and HUD. The most recent published data are for 1995.

The *Federal Housing Finance Board Monthly Survey of Rates and Term on Conventional Single-Family Nonfarm Mortgage Loans* includes only fully-amortized, not government-insured, first-trust home purchase mortgages.

HUD's Office of Federal Housing Enterprise Oversight (OFHEO) annually provides a public database on Fannie Mae and Freddie Mac mortgage purchases.

On Average, Rural Mortgages Cost More...

Home mortgages are, on average, more expensive in rural than in urban areas, according to mortgage data from the Federal Housing Finance Board's monthly surveys of first-trust, home purchase mortgages that are not government insured (fig. 1). Interest rates on rural home mortgages generally exceed urban rates, particularly when the loans are not 30-year fixed-rate mortgages (FRM's). In 1995 and 1996, the average interest rate—the contract interest rate plus the interest rate equivalent of loan origination fees—on nonmetro mortgages exceeded that on metro mortgages for each major mortgage type: 30-year FRM's, 15-year FRM's, and 30-year adjustable rate mortgages (ARM's). This "rural premium" averaged only 8 basis points (BP's—1 percentage point equals 100 BP's) on 30-year FRM's, but was 18 BP's for 15-year FRM's and 38 BP's for ARM's. Other (non-standard) loans had the largest rural premium, 52 BP's. Based on all of these rural premiums, rural homeowners could easily be paying \$300 million more each year than if their loans were charged the average urban rate. Based on this annual amount, the discounted value of all excess future payments would likely top \$4 billion. The additional monthly interest expense for rural borrowers with 30-year FRM's averages \$6, while those with nonstandard loans pay \$30 more.

To the extent that mortgage lending is either more risky or more costly in rural areas, higher costs to rural bor-

rowers actually contribute to economic efficiency. Higher borrowing costs that result from the less competitive nature of rural markets, however, both shift income from borrowers to lenders and reduce overall economic efficiency. Economic efficiency is reduced because home purchasers will react to higher mortgage interest rates by borrowing less, by making different home purchase decisions, or by otherwise altering their economic behavior. While these distortions lead to a misallocation of resources and loss in economic output, the value of that lost productivity is much less than the extra cost to borrowers via higher interest payments. If half of the rural premium is caused by market imperfections, and the other half by true differences in lending costs and risk, economic losses will be \$200,000 to \$2 million each year. The discounted value of these future economic losses is between \$2.5 million and \$25 million.

...And Higher Rural Costs Are Not Solely Explained by Loan Characteristics

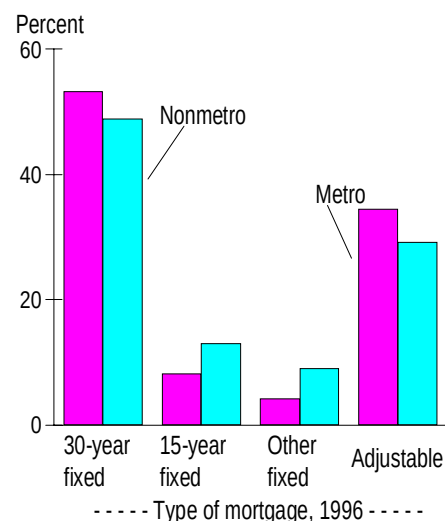
Rural-urban differences in loan, borrower, and lender characteristics help explain higher rural mortgage interest rates. Since rural mortgages are typically smaller, they might carry higher effective interest rates because loan size has little effect on certain lending costs. A higher loan-to-value ratio of rural loans may indicate greater risk. Up to 70 percent of the rural premium on nonstandard loans could be explained by known loan characteristics. While the major explanatory factor for the

rural premium was the smaller size of rural loans, also important was the greater market share of banks, whose mean interest rates on non-standard rural mortgages was above the norm. Rural/urban differences in the loan-to-value ratio had a small but statistically significant impact on interest rates. Similar analysis was done for each of the major mortgage types. In all cases, rural location and smaller loan size were related to higher interest rates, but were the only characteristics consistently significant. Other items that might influence loan pricing, but for which no data are available, include the borrower's income, assets, and credit history, and the lender's ownership, size, and location.

Secondary Markets Are Less Effective for Rural Mortgages

Secondary markets have much to contribute to local financial markets. By facilitating access to nonlocal funds, via both mortgage sales by current lenders and the entry of additional lenders, secondary markets promote competition, increase the potential supply of mortgage financing, and align financing costs more closely to those in other markets. One reason that secondary markets attract more capital to mortgage financing is that loan contracts are standardized, making it easier to judge likely loan performance.

Figure 2
Thirty-year fixed-rate mortgages dominate, but less so in rural areas



Source: ERS tabulations from the Federal Housing Finance Board data.

Consumers also benefit from the greater ease with which alternative loans can be compared.

While local, rural-based mortgage lenders are fewer and smaller, rural homebuyers may also have less access to nonlocal mortgage lenders. Since these lenders are less familiar with the community than local lenders are, they are likely to prefer mortgages that can be resold easily.

This is usually done via the national secondary mortgage markets dominated by Fannie Mae and Freddie Mac for conventional loans with initial balances under an annually adjusted cap (\$227,150 in 1998) and by the Government National Mortgage Association (Ginnie Mae, an agency of the Federal Government) for loans insured by a Federal agency such as FHA, VA, or USDA. Rural mortgages are less often sold into these secondary markets. In 1995, rural mortgages were just over 12 percent of Fannie Mae loan purchases and nearly 15 percent of Freddie Mac loan purchases, compared with estimates of the total rural mortgage market ranging from 15.5 to 19 percent of all mortgages. In addition, only 14 percent of all nonmetro mortgages were government insured and eligible for resale through Ginnie Mae compared with 24 percent of metro loans.

Even if all lenders had equal access to these markets, rural participation might still be less because

- the smaller size of many rural lenders and the less competitive structure of rural mortgage markets reduce lender incentives to participate in secondary markets.
- rural properties more often fail to meet secondary market underwriting standards. Rural homes are more likely than urban to be judged deficient for such reasons as excessive distance to a firehouse, unacceptable water or sewer facilities, location on a less-than-all-weather road, and dated plumbing or electrical systems.
- more rural households may have their borrowing capacity reduced by loan qualification standards which discount income that varies widely from year to year and income from self-employment held for less than

several years. Rural workers more often receive some or all of their income from self-employment activities, and rural incomes often fluctuate with the fortunes of economies reliant on a single industry such as agriculture, tourism, or mining. While, on average, rural borrowers do have smaller mortgages (and monthly payments) relative to their incomes, this may also reflect more stringent rural underwriting standards, lower housing prices, or homebuyer reluctance to seek the largest mortgage for which they qualify.

The types of mortgages most often traded in secondary markets—30-year FRM's and, to a lesser extent, adjustable rate mortgages (ARM's) and 15-year FRM's—are a smaller share of rural than urban mortgages. Most loans of these types, particularly the 30-year FRM's, are attractive to secondary markets because of their large number, uniform documentation and underwriting standards, and established performance as investments. While it is likely that some of the mortgages within these broad categories are actually not suited for sale on the secondary markets, it was not possible to determine their number. These three loan types comprise 88 percent of nonmetro, and 96 percent of metro mortgages (fig. 2). It is harder for lenders to sell the remaining mortgages, in part because they are much fewer and more varied. Most are amortized over less than 30 years, raising monthly payments and, in turn, reducing the maximum loan amount for which a borrower can qualify. Nonstandard mortgages may be more common in rural areas because lenders are less willing to make long-term loans or because borrowers prefer them. A comparison of rural and urban statistics for 1995 shows that most rural homeowners can better afford the higher monthly payments associated with these mortgages:

- the median ratio of property value to income was 1.9 for nonmetro and 2.4 for metro homeowners, and
- housing costs were 16 percent of nonmetro and 19 percent of metro homeowners' income.

In summary, substantial evidence indicates that secondary markets are

used less in rural than in urban mortgage lending: (1) rural mortgages are less frequently prime candidates for resale on the secondary market; (2) the housing GSE's appear to purchase a smaller proportion of rural than urban mortgages; and (3) rural loans are under-represented in Ginnie Mae's sales of government-insured mortgages.

Manufactured Housing—Another Case of More Costly Rural Financing

Because manufactured homes are seldom financed with mortgage loans, few are part of the previous analysis. Such homes, often called “mobile homes” although actually quite immobile, are an important source of rural housing. One in seven rural homeowners lives in a mobile home, triple the urban rate. And their housing finance costs exceed those of urban mobile home owners. In 1995, the median interest rate on outstanding rural mobile home loans was 10.7 percent, compared with 10.3 percent for urban mobile home loans. As with conventional mortgages, less lender competition, higher lending costs, and greater risk may all contribute to this rural interest rate premium.

Policy Implications

Low-cost, low-risk policy alternatives can potentially make rural home mortgages more marketable, thus lowering the rural premium on mortgage costs. Since potential efficiency gains are very small, aggregate efficiency can be increased only if policy options are also very inexpensive. Indeed, only virtually cost-free policy alternatives can be justified because they increase economic efficiency, since only then can it be reasonably argued that gains will exceed expenses. Most policy alternatives are supportable only if the more equitable treatment of rural borrowers is a policy objective. Low-cost policy actions are most likely to cause little change in economic efficiency. Such policies include improving rural lender access to secondary markets, greater use of government insurance, and better information that will encourage additional lenders to enter rural markets and current rural lenders to more fully utilize available programs.

Fewer rural than urban mortgages are the types most often traded in secondary markets, and rural lenders less often sell the mortgages they originate. The rural loans most likely to be overpriced are the 12 percent of rural loans that are clearly not suited for sale on the secondary markets. Not only are these loans more expensive than similar urban loans, but their greater share of rural loans suggests that many of these borrowers should qualify for other types of loans, particularly 30-year FRM's, that are more competitively priced. If the relatively low proportion of standardized mortgages originated by rural lenders reflects the preferences of lenders rather than borrowers, increasing the rural availability of 30-year FRM's could reduce the already small interest premium on such loans and would make fewer rural borrowers dependent on higher cost alternatives. The supply of such loans would rise with increased rural activity by (1) Fannie Mae and Freddie Mac, (2) Ginnie Mae, (3) Federal Home Loan Banks, which are ready financiers for the mortgages of many depository institutions, and (4) private mortgage conduits, which deal mainly in loans that exceed GSE size limits or otherwise fail underwriting standards.

Low-cost strategies to expand rural lenders' use of secondary mortgage markets include: (1) provide better information about how to increase profits by participation in secondary mortgage markets; (2) improve access to secondary markets by rural lenders, particularly small-volume lenders; (3) see that underwriting standards are reasonable and appropriate for evaluating the riskiness of rural loans; and (4) facilitate more participation by nonlocal mortgage lenders in rural markets. Benefits to rural communities from the increased use of secondary markets extend beyond housing. By selling the mortgages they originate, lenders have additional funds with which to make more loans to local borrowers.

The recent history of most Federal mortgage insurance programs is that premiums more than cover program costs, indicating that their benefits have exceeded their costs. The current Federal budget estimates that for every \$100,000 of mortgage insurance written by FHA in 1998, the government will realize a net return of \$750. Rural homebuyers are less likely to use these programs, despite the existence of USDA programs with a specific rural focus. FHA and VA programs are used much less in rural than in urban areas, although the populations are similar in eligibility and need. Improved rural lender understanding of, and access to, these programs should increase their use. Outreach to potential borrowers is also important, since consumer demand is critical to initiating such loans. Benefits of Federal mortgage insurance include automatic qualification for mortgage resale, and eligibility of families who might otherwise be unable to buy a home.

Conclusions

Home mortgages are more expensive for rural than for urban homebuyers, particularly the nonstandard loans not easily sold in secondary markets. Such loans are a much larger share of rural than urban mortgages. Both higher expenses of rural lending and the less competitive lending market typical of rural areas can lead to higher mortgage interest rates, and often both factors seem in play. The resulting loss of overall economic efficiency is probably small, but the higher interest expenses of rural borrowers is much larger, and presents an equity concern, particularly for those borrowers with nonstandard loans. The policy initiatives most likely to be low- or no-cost are those that improve access to secondary markets, increase the use of Federal mortgage guarantees, or generally improve borrower and lender knowledge of—and access to—mortgage-related information.

Contacting the Author

Jim Mikesell
(202) 694-5432
e-mail: MIKESELL@ECON.AG.GOV

Further Readings

Credit in Rural America, Rural Economy Division, Economic Research Service, U.S. Department of Agriculture, AER-749, April 1997.

Rhoades, S.A. *Evidence on the Size of Banking Markets for Mortgage Loan Rates in Twenty Cities*, Staff Study No. 192, Washington, DC, Board of Governors of the Federal Reserve System, 1992.

Mikesell, James J. "Federal Housing Assistance Promotes Homeownership," in *Rural Conditions and Trends*, Economic Research Service, U.S. Department of Agriculture, Volume 9, No. 1, 1998.

Finding Reports in This Series

These reports are available electronically through the **ERS Home Page** at <http://www.econ.ag.gov/> and through the **ERS AutoFAX** at (202) 694-5700. Enter 41100 for a directory of available reports. This document is no. 41112.

Issues in Agricultural and Rural Finance

The Food and Rural Economy Division of ERS/USDA designed this series of policy-oriented, timely publications to provide background and analysis for decisionmakers and others.

**U.S. Department of Agriculture
Economic Research Service**
1800 M Street, NW.
Washington, DC 20036-5831

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotope, etc.) should contact USDA's TARGET CENTER at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Ave, SW., Washington, DC 20250-9410, or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.