

Appendix B

Financial Markets for Agriculture, Housing, Business, and Development

The Congressional mandate for this study requested a report on the demand for and availability of credit in rural areas for agriculture, housing, and rural development. This appendix examines how well financial markets serve these specific sectors of the rural economy, with the rural business sector considered separately from other development finance. In general, evidence is limited and precludes strong conclusions about rural financial market performance. Rural borrowers who have successfully obtained credit generally pay interest rates comparable to those paid by urban borrowers, based on the limited data available to support such comparisons. Nonetheless, financial markets serving agriculture and rural housing, business, and community development are segmented by geographic location, loan riskiness, and loan terms including size, term to maturity, collateral, and purpose. This segmentation may allow noncompetitive loan pricing and allocations to persist in specific rural communities.

To determine how financial market performance affects rural borrowers, a variety of data sources are analyzed. Each data source omits information relevant to loan pricing decisions and no source includes data on unfunded (denied) rural loan applications. Some data sources provide loan-specific information while others are surveys of borrowers. Sufficient information is not available to gauge whether credit is as readily available in rural as in urban markets, but comparisons of interest rates paid by urban and rural borrowers suggest that differences in borrowing costs are minor. In cases where interest rates differ, disparities are typically small and consistent with the greater cost of doing business in sparsely populated areas. Exceptions exist for both housing and small business. A surprising number of rural housing loans have unconventional terms that add to their cost, while SBA-guaranteed small business loans appear to

be slightly less expensive in rural than in urban areas. Plausible explanations exist for both observations and further research is needed to determine if they indicate market imperfections.

A lack of data precludes much discussion about equity financing for new businesses and financial support for community development projects, but anecdotal evidence suggests that markets serving high-risk ventures may be less developed in rural areas. The informal nature of these markets and the premium placed on the managerial and technical expertise of the entrepreneur/project director both suggest that risk capital may be easier to arrange within urban settings.

While credit market problems are not widespread in rural America, no systematic attempt has been made to examine financial market performance in individual communities, so sporadic problems may exist for certain borrowers or locales. The structure of Federal and State programs, GSE charters, and banking laws has encouraged segmentation in agricultural, housing, and business loan markets. For example, struggling and low-resource farms are served through Federal and State direct and guaranteed loan programs, part-time farmers primarily through commercial banks, and large commercial farms through the FCS and insurance companies. A similar stratification and segmentation occurs in housing and business credit markets. Various barriers and competitive advantages, including subsidies, capitalization rules, location of lending officers, and organizational structures, sustain this segmentation. Segmentation *per se* is not necessarily a problem. However, in sparsely populated rural economies, financial market segmentation can support noncompetitive pricing and lending behavior, which can retard economic development. Further study is required to assess the uniformity of access to credit among rural communities.

Agriculture

Farming is a capital-intensive industry, and farmers rely on credit to finance a small but significant portion of the assets they employ (Dodson, 1996). The sector's credit needs are served by a wide range of lenders, with banks, the Farm Credit System, USDA, and life insurance companies being the major institutional sources of credit. Surveys of lenders and borrowers suggest that competition for creditworthy borrowers has been very intense among agricultural lenders for the past several years (USDA, 1996).

An analysis of farm credit demand by farm size, farm wealth, and operator age suggests market segmentation exists in this market despite the presence of several nationwide lenders. While most lenders supply some credit to each group analyzed, lenders have niches where they are more dominant (Dodson and Koenig, 1994 and 1995). Banks, for example, dominate lending to part-time and younger farmers, while

the FCS has a large market share among larger commercial farms and older operators (fig. B-1).

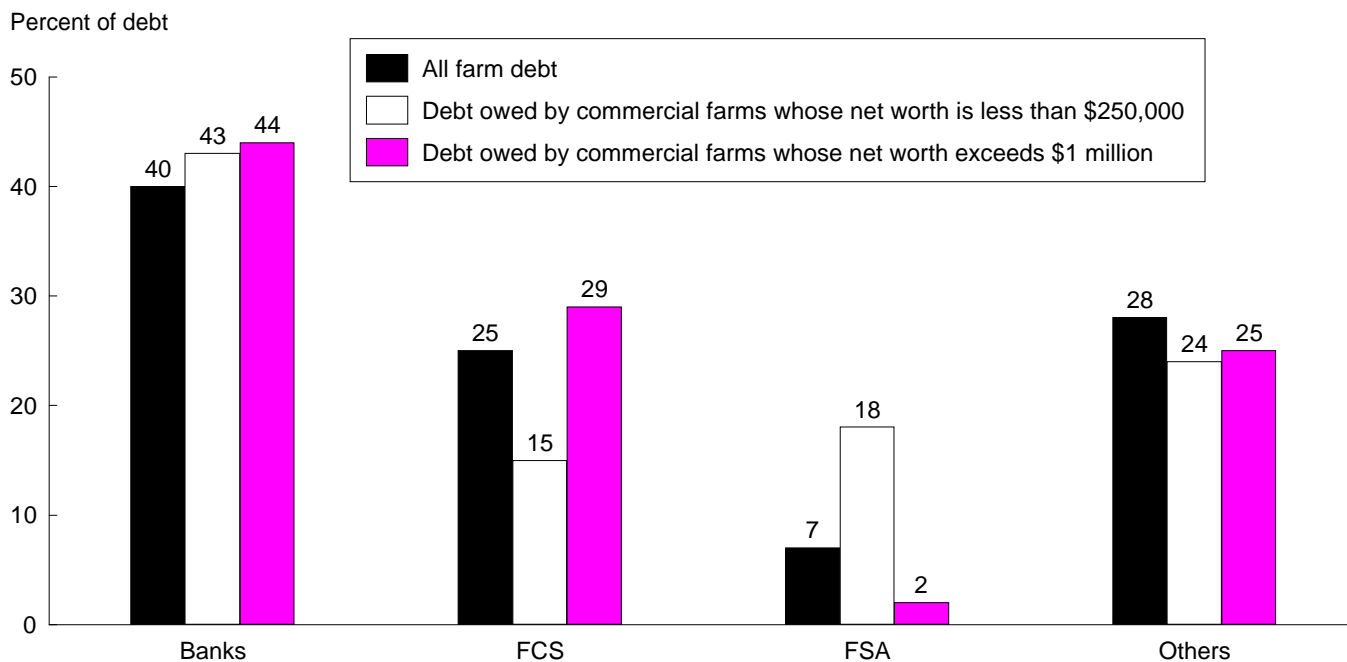
Market segmentation does not necessarily mean that lenders choose to restrict access to particular groups of farmers. Market segmentation can also be explained by legal, social, or economic factors that confer competitive advantages on particular lenders for making particular types of loans. Legal factors could explain the FCS's high market share among farms with higher net worth: regulatory restrictions or liquidity may limit the ability of smaller banks to make large loans typically demanded by farms with high net worth. Legal factors may also explain regional differences in commercial bank market shares. Midwestern States traditionally had fairly tight restrictions on bank branching, limiting the size of commercial banks serving many agricultural areas and making diversification more difficult.

Social factors or custom could partially explain the FCS's prominence among older farmers. As the

Figure B-1

Sources of credit for U.S. agriculture, 1995

Commercial banks predominate; FCS and FSA serve different clientele.



Source: Calculated by ERS from 1995 Farm Costs and Returns Survey and *Agriculture Income and Finance*, AIS-60.

largest provider of farm credit through the 1970's and early 1980's, FCS lenders may have established customer loyalty among some of its borrowers. Those who survived the 1980's farm debt crisis (now likely to be older, well-established farm operators) may be more likely to choose the FCS as their primary lender. Younger farmers may not have the same loyalty to the FCS.

Cost advantages consistent with specialization could explain some segmentation as well. The FCS enjoys high debt market shares in New England and the Mid-Atlantic States, regions where agriculture represents a small proportion of the regional economy. In these regions, commercial banks may find the agricultural loan market too small to justify developing the expertise necessary to compete for farm lending.

Differences in credit risk among borrowers and differing underwriting standards among lenders can contribute to market segmentation. As a result of the financial adversity FCS institutions experienced during the 1980's, they have pursued more conservative lending practices. Younger and lower wealth borrowers may not meet the FCS's current underwriting standards unless family members cosign their loans.

Market segmentation creates concern about the level of competition in individual markets. Some markets are more competitive than others. Nontraditional lenders (individuals, merchants, and farm implement dealers) and nondebt sources of financing become more important when commercial banks are not active competitors. For example, individuals and others supply over a fourth of all non-real-estate farm credit in New England, where few commercial banks actively pursue farm lending.

While available data indicate that markets are segmented, most groups or regions typically have more than one source of credit. Specific groups of farmers or counties may have limited access to credit, but data to undertake such a detailed analysis are not available. Assessment of whether particular groups of farmers or regions are subject to credit rationing requires loan application data from all lenders making farm loans. However, farm lenders do not report this information. In any case, nontraditional lenders and other financing alternatives reduce the possibility that substantial credit gaps could persist for credit-worthy farmers.

Cost of Agricultural Credit

In a fully competitive credit market, prevailing rates and terms reflect the marginal costs of the highest cost viable lender. Differences in rates and other terms result from differences in the riskiness of the borrower/applicant and from other factors that influence the cost of serving particular borrowers or making particular loans. Average interest rates and total borrowing costs can legitimately differ among lenders or types of lenders in a competitive market because of differences in the types of loans that predominate in their portfolios.

If markets are not fully competitive, borrowing costs might also reflect the ability of lenders to charge rates and set terms that allow them to make above-average profits. For a lender to maintain above-average profitability in this way, barriers must prevent other lenders from entering the market and borrowers from leaving the market.

The interest rate data that follow shed little light on the competitiveness of farm lending markets. FCS institutions and commercial banks tend to specialize in different types of loans, making it likely that their average interest rates will differ even if the markets they serve are competitive. On the other hand, barriers to entry exist for some markets because of their small size, branching restrictions, and exclusive FCS territories. These barriers dampen competition among lenders and can lead to above-normal profits for the lenders dominating such markets.

Bank and FCS interest rate trends. Annual effective average interest rates on commercial bank farm loans and contractual (not effective) FCS annual interest rates on farm loans published by USDA show how interest rates charged by these two groups of lenders have behaved over time. Both data series include interest rates on new real estate and non-real-estate loans. Figure B-2 shows the interest rate premium commercial banks charged on farm loans relative to the rates charged by the FCS (i.e., the bank interest rate minus the FCS interest rate) from 1977 to 1995. While all the caveats covered in the following box apply to this comparison, one key point emerges—the relative interest rates charged by commercial banks and FCS institutions have changed considerably over time; observations at a particular point in

Data Limitations Impair Credit Cost Comparisons

All data sources reviewed for this study have limitations. Data on the interest rates and terms charged by commercial banks and the FCS do not control for all factors that influence the cost of serving particular borrowers or making particular loans. The interest rate charged a borrower reflects various types of risk (e.g., default, interest rate, liquidity, inflation) and the risk aversion of both the lender and the borrower. Available data do not allow comparison of loans with similar risk levels or profiles, given that creditworthiness varies with the borrower's circumstances and that each lender serves a slightly different set of borrowers or financial service needs.

The interest rate on a loan may cover such items as funding, risk-bearing, operating costs, and profit margins. However, some of these costs can also be covered by noninterest terms or fees. Any costly terms or charges that are a condition of borrowing must be added to the interest rate to measure the true cost of credit. In the case of the FCS, the cost associated with the required purchase of cooperative stock is omitted from available data. The stock purchase requirement raises the true cost of borrowing above the contractual interest rate unless it is effectively netted out through patronage dividends. Conversely, if patronage dividends are high enough, they can lower the effective interest rate below the contractual rate on FCS loans. In the case of banks, required compensating balances in a savings or demand deposit account are omitted from available data. Such balances raise the effective interest rate on a loan above that stated in the loan documents.

Rough estimates of the effect of FCS stock purchase requirements and patronage dividends on effective interest rates during 1995 can be made using annual aggregate data from the System. These estimates show that the stock ownership requirement may have increased the average effective loan rate by 20-40 basis points across all FCS loans outstanding in 1995. For most FCS associations in 1995, small or nonexistent cash patronage distributions to borrowers had a negligible impact on the effective borrowing rate. Associations served by the AgFirst Farm Credit Bank accounted for the majority of patronage distributions reported by FCS

associations that directly served farmers in 1995. For these AgFirst borrowers, cash patronage distributions lowered that district's average effective borrowing rate in 1995 by over 50 basis points.

Thus, contractual rates might understate the FCS effective rate, particularly for small loans. For FCS associations adhering to the minimum stock purchase requirement (some associations require more than the minimum), the effect of stock ownership on the effective interest rate decreases as the loan size increases above \$50,000. This is because the minimum stock purchase requirement for FCS associations is 2 percent of loan principal or \$1,000, whichever is less.

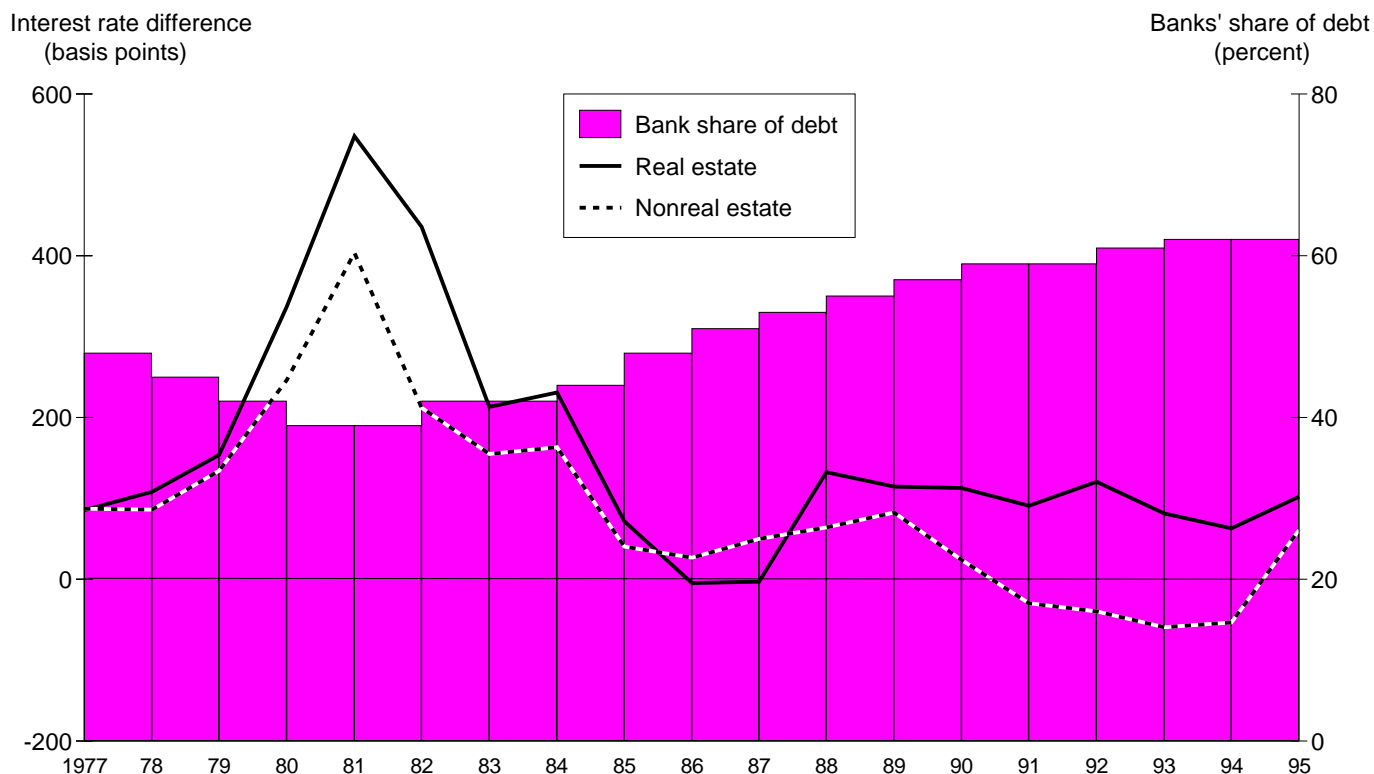
Other examples of credit costs that may not be transparent in the interest rate are application, lien filing, legal, appraisal, and government loan guarantee fees. Also, loan contracts may have conversion fees if the loan is repriced before maturity or may levy penalties for early repayment of the loan. The latter has been common on loans originated for the Farmer Mac secondary loan market. Analysis of aggregate FCB data shows that loan fee income was less than 10 basis points on average outstanding loan volume in 1995. A 1991 study of the cost of delivering agricultural loans by commercial banks found that fee income from commercial loans was comparable to this amount (Ellinger and Barry, 1991). Also, costs associated with insurance to cover production loss, property, life, and health as a condition of obtaining the loan are not available.

Lenders vary on how they set interest rates and other loan-related fees and requirements. Such policies depend on the lender-borrower relationship, credit market competitiveness, the nature of the credit request, the type of lender, and the creditworthiness of the borrower. Everything else being equal, smaller loans are more likely to be charged loan fees because smaller loans offer less interest revenue to cover fixed lending costs. Such charges have a greater impact on the cost of borrowing for smaller and shorter maturity loans. Aggregate data on noninterest expenses can be misleading since they average loan-related fees generated from new lending over all loans held, including those that generated no such fees.

Figure B-2

Commercial bank interest rate premia and holdings of agricultural loans, 1977-95

The difference between the effective interest rates at banks and contractual rates charged by the FCS varies considerably from year to year, as does the distribution of farm debt held.



Note: A basis point is one-hundredth of 1 percent. The lines plot the annual average effective interest rate on new farm loans made by commercial banks minus the annual average contractual interest rate on new farm loans made by the FCS. When the basis point spread is positive, bank rates are nominally greater than FCS rates. While the interest rate data used provides a broad comparison of the rates offered by the two lenders, the rates are calculated somewhat differently and do not represent the total cost of borrowing (see text). Real estate loans include all loans secured by farm real estate; all other agricultural loans are categorized as non-real-estate loans. The bars represent the share of total FCS and commercial bank farm debt held by commercial banks at the end of the year.

Source: USDA, *Agricultural Income and Finance*, AIS-60; Board of Governors of the Federal Reserve System, *Agricultural Finance Databook*, various issues; USDA, *Agricultural Finance Statistics*, 1960-83.

time may no longer apply as market conditions change.

In the early 1980's, a period of high and volatile interest rates, bank rates were high relative to FCS rates.¹ During this period, the FCS used average cost pricing to hold down its interest rates, which rapidly increased its market share of farm debt relative to

¹ However, the effective difference between FCS and bank interest rates was more overstated prior to 1985 since FCS institutions typically applied a 5 to 10 percent stock purchase requirement then as opposed to a 2 to 5 percent requirement in the 1990's.

commercial banks (fig. B-2). This pricing advantage eroded when economywide interest rates fell, lowering the banking industry's cost of funds faster than the average yield on FCS securities could fall. As a result, the commercial banking industry's share of farm debt held by these two groups of lenders began to rise sharply. The System now pursues a marginal cost pricing policy, making its loan pricing more consistent with standard banking practices.

FCS interest rates remained relatively high following the farm financial crisis as the System rebuilt capital and capitalized a new insurance fund. It also had

high administrative and servicing costs in part because of its many delinquent farm loans. The competitiveness of commercial bank interest rates was further aided in the early 1990's when the Federal Reserve lowered short-term interest rates to combat a recession. This monetary policy greatly lowered the cost of bank deposits, their primary source of loanable funds. From 1991 through 1994, bank non-real-estate interest rates were lower than FCS rates. In 1995, this pattern was reversed with bank rates on non-real-estate debt once again rising relative to FCS rates. The FCS is now well capitalized and its lending volume is growing once again.

Bank and FCS interest rates in 1995. Commercial bank and FCS interest rate data on new farm loans made in 1995 were obtained from the Federal Reserve System's Survey of Terms of Bank Lending (STBL) and from the Farm Credit Administration's Loan Account Reporting System (LARS), respectively. The STBL contains data on 21,000 farm loans made by 220 commercial banks during the second week of the second month of each quarter of the year. Data from corresponding time periods were obtained on 7,009 FCS farm loans from LARS.²

Both STBL and LARS report insufficient detail to accurately compare effective interest rates or to calculate the total cost of credit on farm loans. In addition to the previously mentioned caveats, other precautions need to be addressed. The STBL is a stratified random sample of a relatively small proportion of banks making agricultural loans. While the STBL panel of banks was chosen to ensure statistical reliability of estimates, the data may not be representative of all farm loans made by the banking industry. LARS, on the other hand, is a census of all farm loans made by FCS institutions during the sample periods. Due to the differences in the two data sets as well as their many deficiencies, statistical testing of differences in mean interest rates is not reported.

Only loans with similar characteristics that are sufficiently represented in both data sets are discussed.

² The LARS data are provided by FCS institutions to the FCA but have not been audited or verified by the regulator. Lender and borrower identifiers were removed from both data sets to protect their confidentiality. For that reason, no regional breakdowns are possible. The STBL data analyzed here exclude the 211 largest loans made by banks to further protect confidentiality.

Loans are grouped by loan amount, maturity, collateral (real estate or non-real-estate), and interest rate type (fixed or variable). Not all variables are defined the same across the two data sets. The STBL includes rates on loans made during the survey period that had a prior commitment from the lender. Over 80 percent of the STBL loans were made this way, which means that the credit decision on the loan was likely made at some other time than when the rate was recorded. A substantial portion of these bank loans could be advances on lines of credit. LARS includes only rates on new loan contracts.

Nearly half of the STBL loans were demand notes that did not have a specific maturity date. These were classified as having less than 1 year of maturity. Since these loans are callable by the lender, it was assumed they would be priced similar to loans with short maturities.³ The STBL also includes very short-term loans, including overnight loans. The LARS data do not contain such short-term loans, so bank loans with less than 31 days of maturity were excluded from the analysis.

The STBL presented other problems. Only 3 percent of STBL loans were secured by farm real estate, making the statistical properties of the sample of real estate loans questionable. Non-real-estate loans include those not secured by real estate regardless of their purpose. Likewise, because few loans in either data set carried fixed interest rates, comparisons of fixed-rate loans were possible for only a few size and maturity combinations. Over 80 percent of FCS non-real-estate loans and 84 percent of bank non-real-estate loans had variable interest rates. Since fewer than 100 bank loans had maturities greater than 10 years, a comparison of rates on long-term loans was infeasible.

Quarterly interest rates reported for 1995 for both the FCS and banks were contractual rates and not effective rates. Differences in interest rate compounding were not taken into account. While compounding differences between the two lenders should be minor, neither data set accounts for loan surcharges or loan

³ Comparing average interest rates on demand notes and loans with less than 1 year of maturity revealed that the rates were the same in two quarters and only slightly different in the other two.

Table B-1—Average interest rates on FCS and bank non-real-estate farm loans, 1995¹

When controlling for loan characteristics, contractual interest rates on FCS and bank loans were similar in 1995.

| Loan date and maturity ² | Variable rates ³ | | | | | | Fixed rates ³ | |
|-------------------------------------|-----------------------------|-------|--------------------|-------|----------------|-------|--------------------------|-------|
| | \$1,000 - 25,000 | | \$25,000 - 100,000 | | Over \$100,000 | | \$1,000 - 25,000 | |
| | FCS | Banks | FCS | Banks | FCS | Banks | FCS | Banks |
| | <i>Percent</i> | | | | | | | |
| First Quarter: | | | | | | | | |
| 1 year or less ⁴ | 10.61 | 10.40 | 10.17 | 10.03 | 10.02 | 9.76 | NA | 9.92 |
| 1 to 3 years | 10.30 | 10.30 | 9.90 | 10.25 | 9.89 | NA | 10.93 | 10.46 |
| 3 to 10 years | 10.01 | 10.24 | 9.59 | NA | NA | NA | 10.72 | NA |
| Second Quarter: | | | | | | | | |
| 1 year or less ⁴ | 10.41 | 10.51 | 9.54 | 10.06 | 8.82 | 9.64 | 8.90 | 10.14 |
| 1 to 3 years | 10.25 | 10.37 | 9.56 | NA | NA | NA | 10.43 | 10.21 |
| 3 to 10 years | 10.07 | NA | 9.59 | NA | 9.37 | NA | 10.17 | NA |
| Third Quarter: | | | | | | | | |
| 1 year or less ⁴ | 10.05 | 10.30 | 9.63 | 9.78 | 8.93 | 9.35 | NA | 10.10 |
| 1 to 3 years | 9.95 | NA | 9.07 | NA | NA | NA | 9.92 | 10.44 |
| 3 to 10 years | 9.72 | NA | 9.18 | NA | 8.57 | NA | 9.99 | NA |
| Fourth Quarter: | | | | | | | | |
| 1 year or less ⁴ | 10.22 | 10.19 | 9.65 | 9.78 | 9.43 | 9.31 | 9.31 | 10.10 |
| 1 to 3 years | 9.76 | 10.40 | 9.44 | NA | NA | NA | 9.56 | 9.94 |
| 3 to 10 years | 9.66 | NA | 9.28 | NA | NA | NA | 9.53 | NA |

¹ Rates are not directly comparable. See text for explanation.

² Based on loans made during the second week of the second month of each quarter by all FCS institutions and a sample of commercial banks.

³ Variable rate loans include all those where the interest rate can change during the life of the loan contract. Fixed-rate loans have interest rates that are constant for the life of the loan contract.

⁴ Commercial bank loans that mature in greater than 31 days but within 1 year or less, including demand notes with no stated maturity.

NA = Not available because of insufficient data.

Source: Calculated by ERS from the Federal Reserve System's "Survey of Terms of Bank Lending" and the Farm Credit System's "Loan Account Reporting System."

points that may be charged up front, which would increase the effective interest rate on the loan.

Table B-1 reports the results of our analysis of the STBL and LARS data for 1995. To standardize the data as much as possible, three different maturity groups and up to three different size classes for variable- and fixed-rate non-real-estate loans are compared for each quarter of 1995. Given the lack of information on noninterest fees, other common loan requirements, and borrower creditworthiness, combined with other discrepancies between these two sources of data, no economic importance can be attributed to the relatively small differences that exist in average contractual interest rates charged on bank and FCS loans. While we can neither prove nor dis-

prove that the cost of borrowing systematically differed between the FCS and the banking industry in 1995, the data suggest that, as competitors, these two groups of lenders offered roughly equivalent rates and terms in that year.

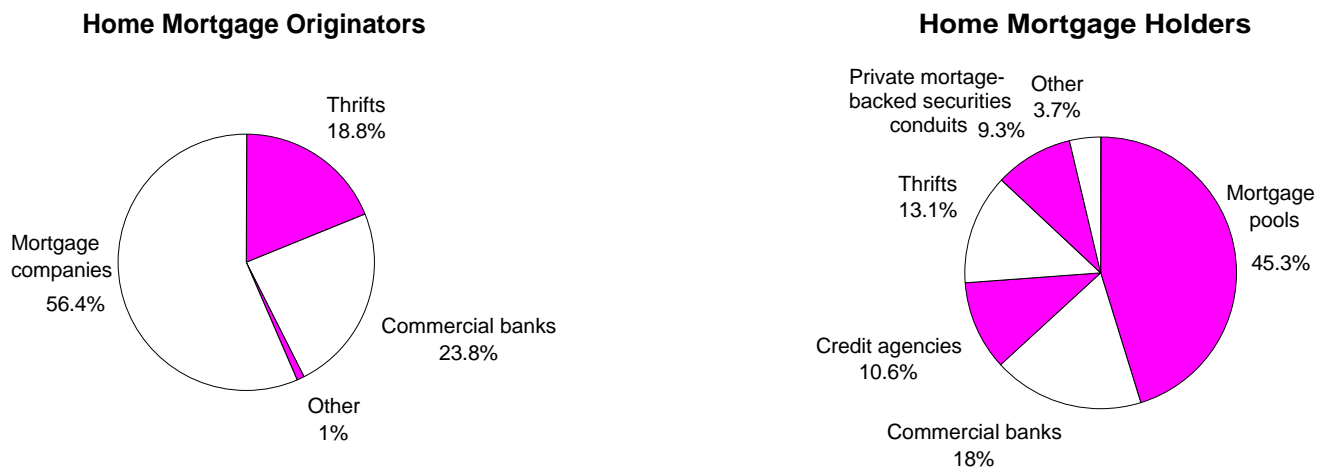
Housing

The home mortgage market is very different from those serving the other economic sectors discussed here, largely because of the significant presence of competing GSE's and Federal insurance programs. While the credit needs of the farm and rural business sectors are served primarily by portfolio lenders that originate, service, and hold loans to maturity, the housing sector relies on loan originators who sell

Figure B-3

Home mortgage originators and holders, 1995

Mortgage companies, commercial banks, and thrifts originate more mortgages than they hold.



Source: Calculated by ERS from data reported in HUD's *Survey of Mortgage Lending Activity*, 1996.

their loans through secondary loan markets. Active secondary markets in home mortgages can greatly intensify retail market competition, helping to hold down borrowing costs.

Nationwide, the majority of home mortgage lending is done by mortgage companies, with banks and thrifts also having significant shares (fig. B-3).⁴ In contrast to their dominance of lending activity, mortgage companies held only 1 percent of all outstanding home mortgage debt at the end of 1995. Commercial banks and thrifts also had shares of mortgage holdings that were somewhat below their shares of mortgage originations. GSE's and Federal agencies held 56 percent of all home mortgage debt, of which 45 percent was in mortgage pools against which securities have been sold, and the other 11 percent was held in their portfolios. Additional secondary market activity is reflected in the 9 percent of home mortgage debt held by private mortgage-backed securities conduits, which mostly deal in loans not eligible for purchase by Fannie Mae or Freddie Mac, either because they are larger than the GSE's are allowed to purchase or because they fail other underwriting standards. While loans larger

than the GSE's can purchase are most accurately referred to as "jumbo" loans, they are also often called "nonconforming" loans, ignoring eligibility issues other than loan size.

The importance of nonlocal participants in home mortgage lending is underscored by the fact that two-thirds of all outstanding home mortgage debt was financed either through the secondary mortgage market or with Federal backing. And, only part of the remaining one-third was originated and held by a single lender.

Commercial banks are a much more important source of mortgage credit in rural than in urban areas, while thrifts and mortgage companies did less rural mortgage lending (fig. B-4). Banks originated over 46 percent of rural housing loans—far exceeding their 20 percent share of urban mortgage originations.⁵ Rural and urban mortgage markets differ in other ways as well. Thirty-year fixed and adjustable-rate

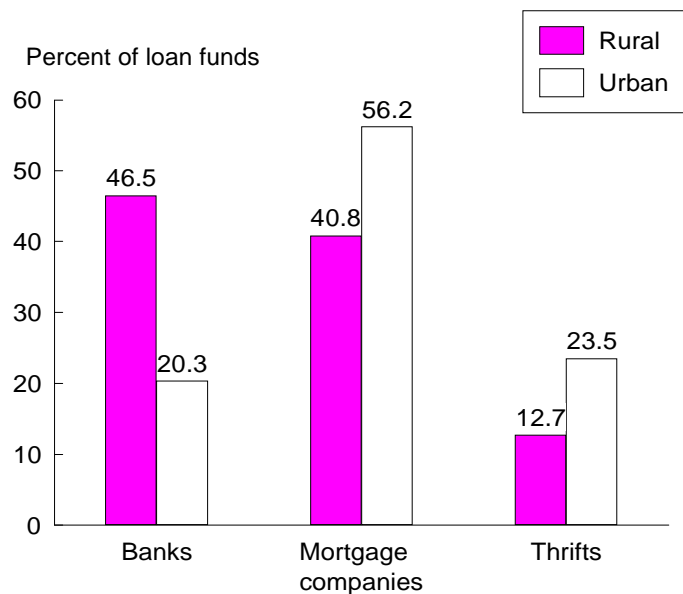
⁴ The data cover mortgage financing for the purchase of owner-occupied, single-family housing—excluding residential structures with over 4 housing units, rental housing, and mobile homes. Mobile-home residents have greater housing finance costs because mobile home loans generally have shorter terms and carry higher interest rates than do loans to purchase conventionally constructed housing.

⁵ This distribution was tabulated by ERS using 1995 data from monthly surveys of home mortgage lending conducted by the Federal Housing Finance Board. These data may not yield reliable estimates of market shares for two reasons. First, relative to other lenders, the survey had few bank participants. Data were weighted to reflect this reality, based on the national distribution of mortgage originations by lender type and location as reported by HUD. The accuracy of the comparison of bank shares of rural and urban mortgage markets thus depends on their having similar undersampling rates. Second, when banks had mortgage company subsidiaries, the loan origination activity was most often reported by the mortgage company, not the bank. This occurred much more often for larger banks serving urban markets.

Figure B-4

Rural and urban mortgage market characteristics, 1995**Mortgage loan originators**

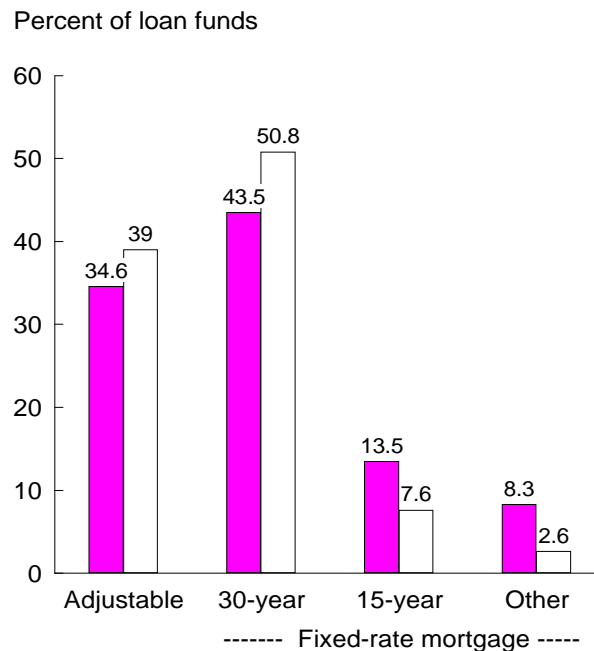
Banks are a far more important source of funds in rural areas.



Source: Calculated by ERS from Federal Housing Finance Board data.

Type of mortgages

Rural mortgage more often had shorter maturities.



mortgages constituted 90 percent of all urban mortgage lending and 80 percent of the rural total. Other mortgage loans had fixed rates and a term usually less than 30 years.⁶ It is not clear whether rural areas have a greater share of short-term loans because lenders are reluctant to lend for longer periods or because rural borrowers prefer such loans. The 1993 American Housing Survey suggests that the typical rural homeowner may be more able to make the higher monthly payments that accompany shorter term loans.

- The median value of owner-occupied homes was \$58,500 in rural areas, nearly \$40,000 lower than the median price for urban homes.

⁶ This agrees with the results of a HUD analysis of the 1991 Residential Finance Survey (HUD, 1995). Compared with urban mortgages, rural mortgages had relatively short terms, or required balloon payments instead of being fully amortized. Short-term loans were particularly common in smaller (under 10,000 population) rural counties.

- The median ratio of property value to income was 1.9 for rural homeowners and 2.5 for urban homeowners.
- The median percentage of income spent on housing was 16 percent for rural and 19 percent for urban homeowners.

Federal involvement in rural housing finance.

Federal programs to insure (or guarantee) home mortgages are used less in rural areas. Based on the 1993 American Housing Survey, 17 percent of outstanding rural home mortgages carried Federal insurance, compared with over 25 percent of urban loans. The FHA insured only 8 percent of rural mortgages—about half of its urban mortgage market share. The VA insured less than 5 percent of rural mortgages, well below its nearly 8-percent share of urban mortgages. Only the USDA's Rural Housing Service (RHS—then part of the Farmers Home Administration) had its largest market share in rural

Home Mortgage Data Sources

The Home Mortgage Disclosure Act (HMDA) requires large metropolitan mortgage lenders to provide information on all loan applications, including those that are rejected. While HMDA data have been used extensively to analyze the home mortgage market in urban areas, no comparable data exist for rural mortgage lending.

HUD's Survey of Mortgage Lending Activity collects monthly data about mortgage originations, purchases, sales, and holdings from 11 major lender groups. Mortgages include short-term construction financing and long-term mortgages secured by various types of property, including single-family homes and multifamily housing. No distinction is made between loans used to refinance existing mortgages and those used for home purchase, nor is information available on the mortgage activities of other lenders, such as individuals. Information is not published by rural location.

The Census Bureau's Survey of Residential Finance has been conducted once each decade since 1971. It is a detailed study that links information about the mortgage recipient, the mortgage holder, and loan characteristics. Published results from the 1991 survey do not report information separately for rural areas.

The American Housing Survey, a joint activity of the Census Bureau and HUD, is conducted every other year. The most recent available results are from 1993. This is a survey of housing units with personal interviews of their occupants. Financial information is collected on numerous items including the home mortgage, other housing expenses, and household income. Published data cover numerous geographic delineations including rural/urban, and metropolitan central cities, suburbs, and nonmetropolitan areas.

The Federal Housing Finance Board's (FHFB) Monthly Survey of Rates and Terms on Conventional Single-Family Nonfarm Mortgage Loans includes only fully amortized conventional first mortgages for home purchase. Loans insured by government agencies are not included. Survey respondents report several pieces of information for all such loans closed during the last 5 business days of the month. Most months, 200 to 300 different lenders participate in the survey. Mortgaged properties can be identified by urban/rural location. The FHFB publishes the results, including tables specifically for rural loans.

Mortgage activity for Fannie Mae and Freddie Mac is gathered both from the above surveys and from a full accounting of their mortgage purchasing activity. Some special tabulations of rural activities are now required by HUD regulations pursuant to the "Federal Housing Enterprises, Financial Enterprises, Financial Safety, and Financial Soundness Act of 1992."

America.⁷ But at less than 4 percent, the RHS presence in rural mortgage markets was still the smallest of the three Federal agencies that insure (or guarantee) rural home mortgages.

The two principal GSE's serving housing, Fannie Mae and Freddie Mac, also handle a relatively small percentage of rural home mortgages. In 1994, 9.4 percent of the housing units financed by Fannie Mae and 12.4 percent of those financed by Freddie Mac were in rural communities. In contrast, Survey of Residential Finance data indicate that 17 percent of mortgages originated from 1989 to 1991 were for rural housing (HUD, 1995). While these data are not fully comparable, it seems clear that the housing

GSE's are not as active in rural America as they are in urban communities.⁸

Rural access to secondary mortgage markets.

Several studies report that rural lenders make less use of secondary markets than do urban lenders. A 1993 study found that rural banks and thrifts more often held loans in portfolio, rather than selling them in the secondary market (ICF, 1993). Although rural lenders may less often desire to sell loans they originate, this study concluded that increased access to the secondary market could still be important for rural lenders. HUD analyzed loans from the 1991 Residential Finance Survey and found, as well, that

⁷ RHS loans to rural parts of metropolitan counties were less than 1 percent of the urban market, but they still represented 40 percent of all RHS loans.

⁸ GSE activity is measured as loans purchased in that year, which may have been used to purchase a home or to refinance an existing mortgage. In addition, the GSE's buy loans secured by rental units. The American Housing Survey information includes all outstanding home mortgages on owner-occupied housing units, as of the survey date.

rural lenders more often held in portfolio the loans they originated (HUD, 1995). Larger lenders made more use of secondary markets, but they seldom served more remote rural communities. HUD also reported that only 16 percent of rural mortgages carried private mortgage insurance, compared with 22 percent of urban loans, despite the fact that rural loans were also less likely to be insured by any Federal agency. Secondary markets typically require that mortgages with a loan-to-value ratio above 80 percent be insured.

A 1990 survey of bankers and realtors about regulations that prevent rural access to mortgage credit found that secondary market underwriting standards designed for urban areas, such as access to fire hydrants and hard surfaced roads, are a barrier for rural lenders (Center for Community Change, 1990). Since this report, GSE's have changed their underwriting standards to accommodate unique rural characteristics. However, the effectiveness of these changes remains unknown.

Poor access to secondary markets can mean greater regional variability in mortgage rates and terms, higher mortgage costs, and less available mortgage financing. If the benefits of secondary market sales accrue within individual markets, then rural areas are probably at some disadvantage.

- Rural lenders have made less use of secondary markets, even though they are accessible. Small rural lenders may be unable to justify the initial expense involved in learning how to structure loans and assemble documentation for the secondary market sales. And, the less competitive nature of rural mortgage markets could make it easier for lenders to achieve “satisfactory” profits from their mortgage lending without selling loans into the secondary market. Rural lenders may also see little potential for significantly expanded lending activity in their local market, and thus have less reason to raise additional funds by selling the loans they do make.
- Rural properties often fail to meet underwriting standards for GSE purchase. Although GSE's have tried to address this issue, many rural homes still fail underwriting standards, perhaps because many underwriters have not yet adopted the revised rural standards. Rural homes are

more likely to fail the older underwriting standard because they are, on average, older, more remote from public services, and more often lack characteristics that are common in suburban homes.

- Rural households may have loan applications rejected because of loan qualification standards that discount income which varies from year to year, or that comes from self-employment that has not continued essentially unchanged for at least 3 years. Rural workers are more likely to be self-employed, and incomes of many rural residents dependent on agriculture and other basic industries can fluctuate with the fortunes of commodity markets.

Rural and urban areas both have greater access to home mortgage financing through the rapid growth of secondary markets for residential mortgages, but smaller and more remote rural areas may not have gained comparable access to such financing. A lack of effective competition can increase lender profits and consumer prices, and numerous rural areas likely have few active mortgage lenders.

Rural/Urban Differences in Home Mortgage Interest Rates

Rural interest rates are, on average, somewhat higher than those in urban areas, but some of the difference can be explained by borrower and loan characteristics. No objective data exist on whether loan qualification standards affect rural borrowers more adversely. Data do show that, on average, rural borrowers have smaller loans and loan payments relative to their incomes. This could reflect either the greater difficulty rural home buyers face in meeting underwriting standards largely designed for urban areas, a more frequent desire of urban home buyers to borrow amounts near the maximum for which they qualify, or low housing prices in rural areas.

The general reasons to anticipate some rural disadvantages in credit markets apply to rural home mortgage markets as well—the lack of effective competition because of barriers to entry, small market sizes, and market segmentation. On average, rural mortgage lenders are fewer and smaller than their urban counterparts. Research on urban mortgage markets

Table B-2—Effective interest rate premia on rural conventional home mortgages, 1995

Rural borrowers typically paid slightly higher rates than urban borrowers.

| Mortgage type | Effective interest rate | | Variance explained by regression |
|-------------------------------|--|-------------------------------|----------------------------------|
| | Excess of rural interest rate over urban | Rural excess after regression | |
| | —Percent— | | Adjusted R ² |
| All conventional home | 0.36 | 0.17 | 0.40 |
| Conforming loans ¹ | 0.33 | 0.17 | 0.40 |
| Jumbo loans | 0.16 | 0.17 | 0.37 |
| All fixed-rate loans | 0.13 | 0.14 | 0.45 |
| Conforming loans | 0.13 | 0.13 | 0.45 |
| Jumbo loans | -0.04 | 0.19 | 0.40 |
| 30-year fixed-rate loans | 0.11 | 0.06 | 0.49 |
| Conforming loans | 0.11 | 0.05 | 0.50 |
| Jumbo loans | 0.02 | 0.15 | 0.34 |
| 15-year fixed-rate loans | 0.13 | 0.07 | 0.52 |
| Conforming loans | 0.14 | 0.06 | 0.52 |
| Jumbo loans | -0.08 | 0.08 | 0.61 |
| Other fixed-rate loans | 0.42 | 0.29 | 0.44 |
| Conforming loans | 0.43 | 0.18 | 0.45 |
| Jumbo loans | -0.09 | -0.41 | 0.50 |
| All adjustable-rate loans | 0.43 | 0.24 | 0.18 |
| Conforming loans | 0.44 | 0.24 | 0.18 |
| Jumbo loans | 0.14 | 0.14 | 0.19 |
| 30-year adjustable-rate loans | 0.32 | 0.23 | 0.16 |
| Conforming loans | 0.32 | 0.22 | 0.16 |
| Jumbo loans | 0.14 | 0.16 | 0.18 |
| Other adjustable-rate loans | 0.98 | 0.09 | 0.34 |
| Conforming loans | 0.97 | 0.08 | 0.32 |
| Jumbo loans | 0.01 | -0.03 | 0.18 |

¹ Conforming loans do not exceed \$203,150, except in Hawaii and Alaska where the maximum is \$304,725.

Source: ERS analysis of 1995 data from the Federal Housing Finance Board's Monthly Survey of Rates and Terms on Conventional Single-Family Mortgage Loans.

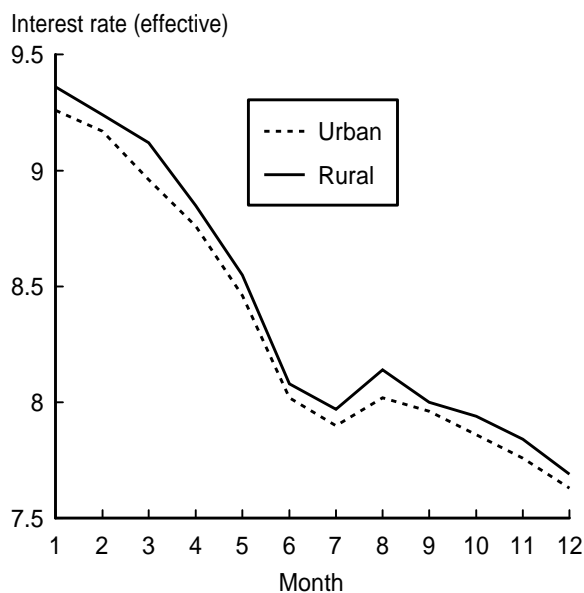
has found that mortgage rates tend to be higher in less competitive markets (Rhoades, 1992).

Home mortgages are complex products, with numerous factors that differentiate loans and affect interest rates. During 1995, the average effective interest rate on rural mortgages exceeded that on urban mortgages by 36 basis points, but much of this difference can be explained by controlling for specific loan characteristics such as loan to value ratio, loan size, and the type of lender making the loan (table B-2).⁹ In addition, the remaining difference might well be

Figure B-5

Effective interest rates on 30-year fixed-rate mortgages, 1995

Rural interest rates were slightly higher than urban rates in 1995.



Source: ERS tabulations from Federal Housing Finance Board data: fully amortized commercial mortgages for home purchase.

explained by other factors if appropriate data were available. (See the accompanying box for a brief explanation of how regression analysis was used to investigate the reason that rural interest rates exceed urban rates.)

Most home mortgage lending is in the form of 30-year fixed interest rate mortgages and adjustable rate mortgages (ARM's). The rural/urban difference in interest rates for 30-year fixed mortgages is much less than for all mortgages, with rural interest rates averaging only 11 basis points more (fig. B-5). In addition, regression analysis was able to explain half of this difference with factors such as loan size and whether the loan conformed to Fannie Mae limits.¹⁰

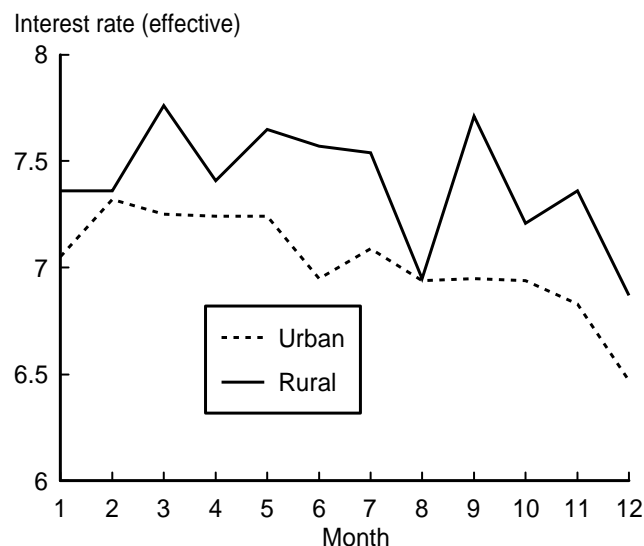
⁹ The effective interest rate is the contract interest rate plus the interest rate equivalent of points and other fees and charges for loan origination, amortized over 10 years.

¹⁰ The conforming loan limit is the largest loan that can be purchased by Fannie Mae or Freddie Mac, and was generally \$203,150 for 1995. Alaska and Hawaii are exceptions, with conforming loan limits 50 percent higher than in other States. Most loans are at or below the conforming threshold, and the regression results were more significant when only conforming loans were used. Average rural and urban interest rates were changed little by the conforming loan restriction.

Figure B-6

Effective interest rates on 30-year adjustable-rate mortgages, 1995

Rural interest rates were consistently higher than urban rates in 1995.



Source: ERS tabulations from Federal Housing Finance Board data: fully amortized commercial mortgages for home purchase.

When these factors are accounted for, the remaining difference between urban and rural interest rates was only 5 basis points on 30-year conforming fixed-rate mortgages. The effective rates on 30-year ARM's (fig. B-6) and most other types of mortgages (not shown) were also higher in rural areas. Regression analysis explained much of the rural/urban differences in these rates as well, but in general the rural premium remained higher than that on 30-year fixed-rate mortgages.

Loan quality differences (as measured by percentage of downpayment, income history, other indebtedness, etc.) have an important impact on interest rate differentials found for other loan types. No independent indicators of loan quality are available with the data analyzed. The lack of such information tempers any conclusion that home mortgages are more expensive in rural than in urban areas.

Table B-3 shows raw data on fixed-rate mortgages that are fully amortized, first-trust home mortgages made by private sector originators to finance home purchases by an owner-occupant without using

Explaining Interest Rate Differences Using Regression Analysis

Regression analysis was used to investigate the extent to which higher rural effective interest rates were actually capturing differences in loan characteristics. Independent variables in the conforming loan regression included continuous variables for loan size and the loan/value ratio, and discrete variables for rural location, whether the purchased home was new or existing, type of lender, and month of loan origination. In other regressions, where they did not define the category of loan being analyzed, independent variables were included for loan term, fixed or adjustable interest rate, and whether the loan was conforming. Dependent variables were the effective interest rates on various types of mortgages. Separate regressions are reported for all loans in each category, and for conforming and jumbo subsets. Results are presented in table B-2. While rural/urban differences in interest rates generally narrowed from their aggregate levels, in most cases they remained statistically valid (greater than zero) at the 95-percent confidence level.

The ability of regression analysis to identify factors that are related to interest rate differentials is limited by information available. Little or no information is available for several factors that are known to affect interest rates.

- No information is available about the borrower, while such characteristics as income, wealth, and credit history are clearly important to determining loan quality.
- While the mortgaged property is the security on which loan funds are advanced, we know only its purchase price and whether it is new or existing.
- The lender is identified only as a commercial bank, savings and loan association, savings bank, or mortgage company. Thus, the lending activities of huge regional or national banking organizations cannot be differentiated from those of small independent banks.
- No measure of the competitiveness of the local mortgage lending market exists—not even the number of mortgage lenders that are active or willing to lend in each market.

Table B-3—Loan characteristics and effective interest rate of fixed-interest-rate home mortgage loans, 1995

A higher proportion of rural loans, from all types of lenders, have nonstandard terms.

| Loan category | Thrifts | | | Mortgage companies | | | Commercial banks | | | All lenders | | |
|---------------------|----------|------------|-----------|--------------------|------------|-----------|------------------|------------|-----------|-------------|------------|-----------|
| | Raw data | Wtd. dist. | Int. rate | Raw data | Wtd. dist. | Int. rate | Raw data | Wtd. dist. | Int. rate | Raw data | Wtd. dist. | Int. rate |
| | Number | Percent | | Number | Percent | | Number | Percent | | Number | Percent | |
| All rural mortgages | 4,330 | 100 | 8.23 | 4,547 | 100 | 8.17 | 839 | 100 | 8.50 | 9,716 | 100 | 8.32 |
| Jumbo loans | 64 | 1 | 7.93 | 68 | 2 | 8.26 | 13 | 1 | 8.46 | 145 | 1 | 8.32 |
| Conforming loans | 4,266 | 99 | 8.23 | 4,479 | 98 | 8.17 | 826 | 99 | 8.50 | 9,571 | 99 | 8.32 |
| Loan amount: | | | | | | | | | | | | |
| \$50,000 or less | 1,530 | 37 | 8.40 | 906 | 20 | 8.28 | 273 | 37 | 8.76 | 2,709 | 30 | 8.56 |
| \$50,001-\$100,000 | 2,018 | 46 | 8.16 | 2,322 | 52 | 8.18 | 407 | 47 | 8.40 | 4,747 | 49 | 8.27 |
| \$100,001-\$150,000 | 548 | 13 | 8.07 | 927 | 20 | 8.10 | 118 | 12 | 8.11 | 1,593 | 16 | 8.10 |
| \$150,001-\$203,150 | 166 | 4 | 7.94 | 320 | 7 | 7.99 | 26 | 1 | 8.38 | 512 | 4 | 8.05 |
| Over \$203,150 | 68 | 1 | 7.94 | 72 | 2 | 8.25 | 15 | 2 | 8.41 | 155 | 2 | 8.29 |
| Loan term: | | | | | | | | | | | | |
| Under 15 years | 263 | 4 | 8.48 | 122 | 3 | 8.15 | 73 | 22 | 9.39 | 458 | 11 | 9.21 |
| 15 years | 1,043 | 27 | 8.02 | 949 | 21 | 7.82 | 191 | 24 | 8.33 | 2,183 | 23 | 8.08 |
| 15-30 years | 341 | 7 | 8.40 | 193 | 4 | 8.19 | 26 | 6 | 8.35 | 560 | 5 | 8.30 |
| 30 years | 2,647 | 61 | 8.28 | 3,283 | 72 | 8.28 | 549 | 49 | 8.20 | 6,479 | 60 | 8.25 |
| Over 30 years | 36 | 1 | 8.74 | 0 | 0 | — | 0 | 0 | — | 36 | 0 | 8.74 |
| All urban mortgages | 30,337 | 100 | 8.10 | 35,219 | 100 | 8.13 | 3,026 | 100 | 8.24 | 68,582 | 100 | 8.15 |
| Jumbo loans | 1,244 | 4 | 8.02 | 1,622 | 4 | 8.24 | 107 | 3 | 7.96 | 2,973 | 4 | 8.16 |
| Conforming loans | 29,093 | 96 | 8.11 | 33,597 | 96 | 8.13 | 2,919 | 97 | 8.25 | 65,609 | 96 | 8.15 |
| Loan amount: | | | | | | | | | | | | |
| \$50,000 or less | 5,089 | 18 | 8.24 | 3,948 | 11 | 8.29 | 780 | 29 | 8.53 | 9,817 | 16 | 8.37 |
| \$50,001-\$100,000 | 12,567 | 42 | 8.12 | 13,627 | 40 | 8.16 | 1,230 | 40 | 8.20 | 27,424 | 40 | 8.16 |
| \$100,001-\$150,000 | 7,855 | 24 | 8.04 | 10,574 | 30 | 8.09 | 621 | 20 | 8.05 | 19,050 | 27 | 8.08 |
| \$150,001-\$203,150 | 3,540 | 11 | 7.97 | 5,387 | 15 | 8.00 | 255 | 7 | 8.02 | 9,182 | 13 | 8.00 |
| Over \$203,150 | 1,286 | 4 | 8.03 | 1,683 | 5 | 8.24 | 140 | 3 | 7.93 | 3,109 | 4 | 8.15 |
| Loan term: | | | | | | | | | | | | |
| Under 15 years | 536 | 2 | 8.22 | 828 | 2 | 7.96 | 44 | 2 | 8.82 | 1,408 | 2 | 8.17 |
| 15 years | 4,955 | 19 | 7.90 | 4,347 | 12 | 7.82 | 497 | 18 | 8.06 | 9,799 | 14 | 7.89 |
| 15-30 years | 942 | 3 | 8.34 | 619 | 2 | 8.06 | 75 | 3 | 8.52 | 1,636 | 2 | 8.26 |
| 30 years | 23,778 | 76 | 8.14 | 29,424 | 84 | 8.19 | 2,395 | 76 | 8.26 | 55,597 | 81 | 8.19 |
| Over 30 years | 126 | 0 | 8.66 | 1 | 0 | 7.99 | 15 | 0 | 7.96 | 142 | 0 | 8.29 |

Source: ERS tabulations from Federal Housing Finance Board data.

Federal programs or insurance. “Raw data” are the number of loans from which population estimates are derived, and are provided as a guide for interpreting results. While available information about the sample did not support estimates of statistical reliability, clearly results are more robust when based on a larger number of sample observations. The reader is thus cautioned as to some uncertainty about the absolute precision of some estimates. Still, data reveal that:

- For all lender types, nonstandard loans (i.e., those not for either 15 or 30 years) are a larger proportion of rural mortgages. This difference is most extreme for commercial banks, where

such loans are 28 percent of rural mortgages but only 5 percent of urban mortgages. Most 30- and 15-year loans can be easily sold into the secondary market, while notes of other terms are more likely to require sophisticated packaging, if a ready market even exists.

- While 30-year loans had a smaller share of banks’ rural lending, the interest rates on these loans were slightly below both the average rural rate of other lenders and the bank rate for urban loans. This suggests that rural banks may restrict 30-year mortgages to their prime bor-

rowers more than other lenders do or that rural borrowers prefer shorter amortization schedules.

- On the basis of size, nearly all rural fixed-rate mortgages qualify for purchase by the housing GSE's. Jumbo mortgages are only 1 percent of the rural total.

Rural and urban home buyers face very different markets for mortgage loans, as do rural and urban lenders. Competition between lenders is likely to be much more intense in urban markets, where mortgage companies predominate. Mortgage companies hold down operating costs and risk by specializing in standard mortgage products that can be quickly sold. Portfolio lenders, on the other hand, can profit by making nonstandard mortgage products that can command higher interest rates because they are not attractive to secondary markets. The extent to which the resulting mix of mortgages in rural and urban markets is a function of borrower needs or local lender competition remains an open question. But based on our analysis of nationwide data, the premium rural home buyers pay on their mortgages is not prohibitively high. It is possible that home mortgages are harder to acquire and are more expensive in some rural communities, particularly those isolated from urban centers. More work needs to be done, and more detailed data will be required, to determine if mortgage markets vary widely among rural communities.

Nonfarm Rural Businesses

Small businesses everywhere depend primarily on commercial banks for financial services, but particularly those in rural areas. Most established rural businesses have reasonable access to credit. Surveys conducted by the National Federation of Independent Business and by the Federal Reserve show that rural firms are generally satisfied with their financial institutions and that they pay interest rates and face loan terms similar to those applied to urban business loans. A lack of data prevents us from concluding much about rural startups and their ability to obtain sufficient financing. Nonetheless, anecdotal evidence suggests that rural entrepreneurs may have more difficulty than urban entrepreneurs in finding risk capital.

This section examines the sources and availability of credit and equity capital to rural businesses. The most recent information available on small business credit is a survey of members of the National Federation of Independent Business (NFIB), completed in the spring of 1995, concerning their use of credit during the previous 3 years. This section reports preliminary results from the NFIB survey, supplemented with preliminary results from the 1993 National Survey of Small Business Finance (NSSBF), published by researchers at the Federal Reserve Board. The overall conclusions are:

- Commercial banks are the primary source of credit for small businesses everywhere. They are more often the sole source of financial services for rural businesses.
- Rural businesses give their primary financial institution high marks for "credit availability" factors more often than urban businesses do.
- The spread of interstate branching will likely not decrease the availability of funding for most small businesses. Outside control of local banks in its various forms (interstate banking, branch banking, multibank holding companies, or a combination of these methods) is generally not an obstacle to rural business credit, though that does not preclude the existence of such problems in any particular rural community.
- There are good reasons to expect that rural entrepreneurs have a more difficult time acquiring outside investment capital, but data are not available to ascertain the seriousness of the problem (see box, "Data Deficiencies...").

Sources of credit. Nonbank sources of financing for small businesses include venture capital, finance companies, brokerage companies, insurance companies, and other financial institutions. Commercial banks, however, are the main source of funding for small businesses. NFIB respondents were asked to indicate their two most important sources of working capital (table B-4) and investment capital (table B-5). Rural firms most often identified banks as their primary source of both working capital and investment capital. Excluding respondents that rely on internal capital (retained earnings), banks clearly dominate as the source of both types of capital. Rural firms rely

Table B-4—Sources of business working capital during the last fiscal year

Commercial banks are the most often used source of working capital for rural businesses and the most often used external source for urban businesses.

| Source of capital | Rural firms | | Urban firms | |
|---------------------------------------|----------------|-----------|-------------|-----------|
| | Primary | Secondary | Primary | Secondary |
| | <i>Percent</i> | | | |
| Bank loans (excluding credit cards) | 40.7 | 13.2 | 30.7 | 12.3 |
| Finance company loans | 1.4 | 3.7 | 1.9 | 1.8 |
| Other loans (family, investors, etc.) | 8.5 | 10.0 | 11.8 | 11.8 |
| Trade credit | 7.4 | 7.4 | 9.6 | 8.0 |
| Retained earnings | 31.6 | 9.9 | 34.7 | 8.4 |
| Credit cards | 3.6 | 9.3 | 5.3 | 11.1 |
| No secondary source | NA | 23.1 | NA | 23.6 |

Source: ERS computations based on the 1995 NFIB Credit, Banks, and Small Business survey.

Note: The columns do not sum to 100 percent because some firms did not answer the question. NA = not applicable.

Table B-5—Sources of business investment capital during the last fiscal year

Commercial banks are also the most often used source of funds for capital outlays.

| Source of capital | Rural firms | | Urban firms | |
|---------------------------------------|----------------|-----------|-------------|-----------|
| | Primary | Secondary | Primary | Secondary |
| | <i>Percent</i> | | | |
| Bank loans (excluding credit cards) | 39.2 | 8.5 | 29.7 | 8.4 |
| Finance company loans | 2.5 | 3.4 | 3.7 | 2.6 |
| Other loans (family, investors, etc.) | 6.7 | 7.0 | 9.6 | 8.3 |
| Trade credit | 3.9 | 3.6 | 3.9 | 4.2 |
| Retained earnings | 24.8 | 8.9 | 27.7 | 9.1 |
| Credit cards | 2.7 | 4.4 | 3.6 | 6.2 |
| No capital expenditures made | 12.1 | NA | 14.3 | NA |
| No secondary source | NA | 26.0 | NA | 23.9 |

Source: ERS computations based on the 1995 NFIB Credit, Banks, and Small Business survey.

Note: The columns do not sum to 100 percent because some firms did not answer the question. NA = not applicable.

less on credit cards than urban firms do, both as a primary and secondary source of capital. Businesses with trouble obtaining direct business loans from banks sometimes turn to credit cards and second mortgage loans for their capital needs.

NSSBF results indicate that rural firms use many of the same financial services as urban firms, but that urban firms are more likely to use multiple types of service providers (Cole and Wolken, 1995). Rural firms were also less likely to rely on nondepository institutions, such as finance companies, brokerage firms, and leasing companies, for financial services. This suggests that urban businesses have a wider selection of financial services and probably benefit from greater competition among providers.

The majority of small businesses acquire needed capital from small local financial institutions. Elliehausen and Wolken (1990), Nakamura (1994), and Levonian and Soller (1996) attribute this to the comparative advantage of local financial institutions over nonlocal financial and nonfinancial institutions in acquiring information about businesses seeking credit. For instance, banks can access the checking accounts of their small business customers to monitor business finances. Also, the management of independent banks headquartered in small communities is typically aware of the financial position of the community's businesses, which, in turn, allows them to give their loan officers more freedom to make loan decisions. In contrast, management of larger, multi-bank holding companies often lacks knowledge of

Data Deficiencies Preclude Quantitative Measures of Rural Credit Gaps

Sufficient data do not exist to support unequivocal conclusions about the availability of rural business credit and equity capital. This is because administrative records—the primary source of data on rural credit—are not designed for the purpose of analyzing lender behavior and performance in the context of rural development.

Market definition is a major weakness that is often acknowledged but rarely addressed. Data availability, time constraints, and resource limitations typically lead to markets defined as counties, or perhaps metropolitan statistical areas (MSA's) in the case of urban markets. Yet particular banks do not necessarily market their products throughout an MSA or rural county, nor do they necessarily stop at county lines. Furthermore, the size of the market can vary substantially for different financial products offered by an individual bank. A large bank might compete for loans to large businesses nationwide or even globally, but for small loans, the borrower generally needs to be close to one of the bank's offices.

In the future, more information about where loans are actually being made will be available. Under the 1995 revised regulations governing the Community Reinvestment Act, large banks (generally those with assets above \$250 million) must report new data on their business and farm lending. More importantly, these data must be presented for each of the geographic markets served by the bank. Each rural county containing a branch office will be treated as a separate market, so regulators, researchers, and community activists will be able to identify the extent of rural business lending by large urban banks. Home loan data required by the Home Mortgage Disclosure Act suggest that some large banks may have overlooked profitable lending opportunities in their rural markets.

In addition to administrative records, surveys of businesses and their credit experience can shed light on rural credit conditions. While people can interpret survey results differently, recent small business surveys generally suggest that markets for rural business credit work satisfactorily. However, all such surveys share a major weakness—respondents are limited to firms that have acquired enough funds to stay in business. Data do not exist to evaluate the incidence of businesses that never got started or quickly failed due to a lack of debt or equity capital. Certainly loan requests from potential and active businesses are rejected every day, yet with the exception of HMDA mortgage data, we lack data on rejected applicants. When lenders reject loan applications on the basis of accurate, objective credit evaluations, this does not represent credit rationing. Only when the criteria for approving a loan vary from market to market, or are applied differently in rural settings, do loan rejections become a credit gap issue.

the business environment of the smaller communities in which their bank offices are located. Therefore, these banks establish more rigid guidelines for their loan officers.

Small businesses do not always acquire their funding from local financial institutions. Due to little demand, rural communities may lack some financial services and rural firms may be forced to obtain these services from nonlocal providers. Elliehausen and Wolken (1990) concluded that the majority of small businesses get most of their financial services from their primary institutions (including mortgages, lines of credit, and equipment loans), but that some small rural businesses acquire financing nonlocally.

Credit availability. Availability of credit is often far more critical to a firm's survival than is the price (interest rate) paid for that credit. Each firm responding to the NFIB survey was asked about the importance of 11 characteristics related to financial

institutions, and then requested to rate its principal financial institution on those same characteristics.¹¹ Characteristics related to credit availability (“knows you and your business,” “reliable source of credit,” “easy access to loan officer,” and “speed of decisions”) were reported as being very important more often by rural businesses than “offers the cheapest money available.” Furthermore, rural firms reported their financial institution as being “good” at these

¹¹ The importance of each characteristic was indicated on a scale of 1 to 5, where 1 is very important, 3 is important, and 5 is not important. Firms also rated their principal financial institutions on a scale of 1 to 5, where 1 is good, 3 is acceptable, and 5 is poor. The results on financial institution characteristics must be interpreted carefully. They do not show which characteristic is most important to the sample businesses. Strong ratings (low values in this case) for performance on a particular characteristic have little practical significance if that characteristic is not considered important by many firms. But performance ratings of financial institutions on those characteristics deemed very important by a majority of sample firms should give a good indication as to how satisfied rural businesses are with their lenders.

Table B-6—Importance of financial institution characteristics to business firms and financial institution performance

Credit availability is more often rated as important by rural businesses than is the cost of credit.

| | Rural firms | | Urban firms | |
|---|----------------|------------------|----------------|------------------|
| | Very important | Good performance | Very important | Good performance |
| | <i>Percent</i> | | | |
| Knows you and your business | 72.4 | 45.1 | 65.5 | 34.2 |
| Reliable source of credit | 60.6 | 46.7 | 55.8 | 34.6 |
| Easy access to loan officer | 56.0 | 52.8 | 49.8 | 40.1 |
| Speed of decisions/services | 55.1 | 39.1 | 50.7 | 28.0 |
| Offers the cheapest money available | 52.2 | 15.0 | 46.5 | 12.5 |
| Knows the local market/community | 40.7 | 34.6 | 29.9 | 24.6 |
| Convenient location | 37.2 | 51.1 | 39.7 | 46.4 |
| Knows your industry | 35.6 | 19.9 | 29.4 | 13.6 |
| Offers a wide range of services | 29.5 | 29.6 | 26.0 | 25.6 |
| Provides helpful suggestions, advice, and/or seminars | 24.9 | 16.5 | 22.9 | 11.1 |
| Social contact with loan officer | 17.4 | 20.3 | 11.9 | 13.0 |

Note: Firms were asked to indicate the importance of each characteristic on a scale of 1 to 5, where 1 is very important, 3 is important, and 5 is not important. Firms then rated their principal financial institutions on a scale of 1 to 5, where 1 is good, 3 is acceptable, and 5 is poor. Firms that did not answer a particular question (value 0) were included in calculating the percentages reported above.

Source: ERS computations based on the 1995 NFIB Credit, Banks, and Small Business survey.

availability characteristics more often than urban businesses (table B-6). On the other hand, relatively few rural or urban businesses gave their financial institution accolades for offering low interest rates.

In contrast to previous NFIB surveys, only 8 percent of rural respondents and 13 percent of urban respondents listed availability of credit as their most significant concern with current lending practices (not shown). This lack of concern over credit availability probably reflects 1995's strong economy. During the last recession, businesses—and even banking regulators—felt that credit was too hard to get from many financial institutions, deepening the recession. But by 1993, results from the NSSBF indicate that nearly 60 percent of rural businesses had at least one loan, line of credit, or capital lease. Furthermore, a greater proportion of rural firms had credit lines, vehicle loans, and equipment loans than did urban firms (Cole and Wolken, 1995).

Peterson and Rajan (1994) found that the relationship between a business and its creditors affects the availability of credit more than its price. More specifically, the availability of funds to a business increases as

the length of time doing business with a creditor increases. Also, a creditor will be more likely to increase credit availability if the borrower purchases other services from the creditor, such as deposit accounts at a bank. On the other hand, as the number of creditors used by a firm increases, the availability of credit from each lender decreases and the cost of credit increases.

Particular firms in particular markets sometimes experience more credit denials than their creditworthiness should warrant. Shaffer and Pulver (1990) found that small businesses in markets served exclusively by large banks experienced more credit denials, as did large firms (assets over \$500,000) in communities served only by small banks. Likewise, firms in an area's dominant industry sometimes experience problems obtaining credit, as do firms in unfamiliar industries. But such problems are sporadic and appear to exist because lenders fail to take advantage of risk-sharing techniques, such as loan sales, participations, and government guarantees.

Impacts of interstate banking. Banking industry consolidation, spurred by legislation easing restrictions

on interstate banking, could reduce the availability of credit to small businesses nationwide, and to rural businesses in particular. This could occur if “outside” banks centralize the evaluation of loan applications and reject too many rural loans due to a lack of local knowledge. However, research indicates that interstate branching will not threaten the existence of small banks or small businesses’ access to credit. Rose (1993) presented evidence showing that the consolidation that has occurred in the banking industry as a result of interstate banking has not decreased the supply of credit to small manufacturing firms. Calem (1994) concluded that while the relaxation of in-state branching restrictions has led to a decrease in the number of small banks, interstate branching should not affect their number or the availability of small business finance.¹² McLaughlin (1995) concludes that bank holding companies will consolidate their existing affiliates soon after being permitted to do so in June 1997, but that nationwide banks built through many new bank acquisitions will develop slowly.

Other studies determined that interstate branching will not diminish the availability of small business finance because small banks have little competition in supplying funds to small firms, perhaps because of their proficiency in lending to small businesses. Nakamura (1994) concluded that interstate banking will not change this lack of competition, and consequently the supply of financing to small business by small banks should not decrease. Strahan and Weston (1996) point out that the largest banks in the country have more than one-third of the small business loans and that the percentage of small bank assets involving small business loans has increased. Therefore, even if interstate branching reduces the number of small banks, it will not necessarily cause a substantial decrease in the supply of small business credit.

In contrast, Keeton (1995) stipulates that multi-office banks lend less to small businesses than do indepen-

dent banks and that an increase in multi-office banks due to interstate branching may tighten small business finance. However, he concedes that interstate branching could increase the supply of small business credit. Large multi-office banks are more diversified than small banks, have greater access to nondeposit funds in the event of a liquidity crisis, and are able to shift funds from low loan-demand areas to high demand areas. This enables them to invest larger proportions of their funds in loans than small banks are able to invest. Therefore, an increase in the proportion of banking conducted by multi-office banks may lead to an increase in total lending to all borrowers, including small businesses.

Equity capital for new businesses. Research at the University of Wisconsin in the 1980’s identified weaknesses of rural banks that suggest startup capital could be a problem in rural areas. Rural banks often lacked experience in putting together complex loans or in making use of government programs to help potential business customers (Taff, Pulver, and Staniforth, 1984). Furthermore, when rural bankers were unable to provide startup capital, they were less likely to refer the applicant to alternative sources of risk capital than were urban bankers (Pulver and Hustedde, 1988). It is difficult to know whether these patterns were pervasive outside of Wisconsin and the upper Midwest in the 1980’s (the area and time period covered in the study), or whether they persist today. Much has happened since these studies were completed. Bank trade organizations are more active at helping their members expand their range of financial services. Large banks, which continue to acquire offices in more rural markets, lack the inhibitions found in small rural banks. State and Federal governments now have more programs to promote business formation.

But even though bank markets have changed, the early-stage financing needed to get a new business started is extremely difficult for regulated financial institutions, like banks, to provide. The risk that the firm will fail before repaying its loan is simply too high. Most early-stage financing comes from the personal savings and credit of the entrepreneur and his or her family and from informal investors (Gaston, 1990). Venture capital firms are often discussed in the media but anecdotal evidence suggests they are not very active in rural America. It seems

¹² Calem theorizes that relaxing in-state branching restrictions decreased the number of small independent banks due to the inability of these banks to reach efficient size under previous restrictions. He further concludes that the majority of small banks have reached their efficient operating size and therefore, the ability to branch between States will not significantly decrease the number of small banks (Calem, 1994).

Table B-7—Characteristics of SBA-guaranteed small business loans, 1995*Interest rates on rural small business loans are lower, on average, than urban rates.*

| Item | Number of loans | Average... | | Gross loan amount | Proportion guaranteed | Number of employees |
|------------|-----------------|----------------|---------------|-------------------|-----------------------|---------------------|
| | | Interest rate | Loan maturity | | | |
| | <i>Number</i> | <i>Percent</i> | <i>Months</i> | <i>Dollars</i> | <i>Percent</i> | <i>Number</i> |
| All firms: | | | | | | |
| Rural | 11,171 | 10.78* | 118 | 126,824* | 85.9* | 11.4* |
| Urban | 35,159 | 10.93* | 118 | 154,464* | 84.7* | 9.0* |
| New firms: | | | | | | |
| Rural | 3,979 | 10.84* | 110* | 113,455 | 87.1 | 5.1 |
| Urban | 11,268 | 11.00* | 100* | 116,623 | 87.1 | 6.4 |

* Indicates that the rural and urban means are significantly different at the 99-percent level of confidence.

Source: Calculated by ERS from data supplied by the U.S. Small Business Administration.

likely that rural entrepreneurs continue to have a more difficult time attracting external investment capital than urban entrepreneurs. The information and managerial networks that informal investors rely upon to identify, evaluate, and manage startups are much harder to maintain in rural settings. And in many rural communities, the pool of informal investors is too small to support much activity.

Rural/Urban Differences in Small Business Loan Interest Rates

Data on the characteristics of business loans and the firms taking them out is not generally available. The National Survey of Small Business Finance collects information on the financial characteristics of a sample of small businesses and their use of financial services, including credit. Results from the 1988 survey indicated that rural and urban small businesses paid nearly identical interest rates on their loans, on average, and faced similar security requirements on all types of business loans.¹³

In an attempt to update these results, data on loans guaranteed by the SBA have been analyzed to determine whether rural and urban business borrowers still pay similar interest rates on their business loans. This section analyzes 46,330 loans, totaling \$6.85 billion, guaranteed by the SBA during fiscal 1995

through the Section 7(a) guaranteed loan program (see box for a description of the program). The SBA database includes the following loan terms and borrower characteristics: the loan's interest rate, the spread between the prime (base) rate and the loan's interest rate, loan maturity, the gross amount of the loan, SBA's guaranteed portion, the loan's approval date, the borrowing firm's employment size, two-digit SIC code, ownership structure (sole-proprietor, partnership, or corporation), and whether the business was new.

Loans made to rural firms, on average, carried an interest rate that was 15 basis points lower than that charged to urban firms (table B-7). Rural loans, on average, were \$27,640 smaller than their urban counterparts. And the SBA guaranteed, on average, 1.2 percent more of the loans taken out by rural firms. These rural/urban differences were all statistically significant, though the absolute differences in the average interest rate and guarantee ratio are not very large. Loan maturity averaged just under 10 years for both rural and urban loans. Startup capital for new firms may be a special problem in rural America, but SBA data show the same interest rate pattern for new businesses as for all businesses—rural businesses pay 16 basis points less, on average, than urban businesses.

SBA data contradict the usual hypothesis that rural interest rates are probably higher than, or at best equal to, rates on similar urban loans. This may be due to peculiarities of the SBA's program, variations

¹³ Preliminary results are being published by the Federal Reserve Board from the most recent NSSBF, conducted in 1993, but as yet no interest rate information has been released.

SBA's Section 7(a) Guaranteed Loan Program

SBA's general business guaranteed loan program relies on private lenders to identify prospective candidates and to originate loans. SBA's guarantee makes it possible for banks to lend to businesses that would not otherwise qualify, but because loans are only partially guaranteed, banks have an incentive to screen out risky loan applications.

SBA encourages longer term small business financing, with maturities based on the applicant's ability to repay, the loan purpose, and the useful life of the assets being financed. Maximum loan maturities are 25 years for real estate and equipment, and 7 years (up to 10 years to ensure repayment) for working capital.

The borrower and lender negotiate loan interest rates, but rates are subject to SBA maximums, which are pegged to the prime rate. Interest rates may be fixed or variable. Rates on loans over \$50,000 must not exceed the prime rate plus 2.25 percent for maturities under 7 years (2.75 percent for maturities of 7 years or more). For loans between \$25,000 and \$50,000, the maximum spreads over prime increase to 3.25 percent and 3.75 percent, and reach 4.25 percent and 4.75 percent for loans below \$25,000.

SBA funds part of its program by charging borrowers a one-time guarantee fee when the loan is approved. This fee is 2 percent of the first \$80,000 guaranteed, and increases in several steps to 3.875 percent of guaranteed amounts greater than \$500,000. Loans are also subject to a 50 basis-point annualized servicing fee, which is applied to the outstanding balance of the portion guaranteed by SBA.

As of January 31, 1996, lenders may collect service and packaging fees (SBA reserves the right to refuse the collection of fees it considers unreasonable), extraordinary servicing (up to 2 percent of the part requiring special servicing if preapproved by the SBA), out-of-pocket expenses, and a late payment fee (up to 5 percent of the regular loan payment). The lender may not charge a prepayment fee, processing fees, origination fees, application fees, points, brokerage fees, or bonus points.

SBA currently guarantees 80 percent of loans in amounts below \$100,000 and 75 percent of loans above \$100,000. Average guarantee ratios reported in table B-7 exceed 80 percent because higher ratios applied in the past. The maximum amount guaranteed generally cannot exceed \$750,000.

in the way the program is used by different lenders, or other economic variables not currently available, such as income, employment, and the bank's cost of funds. One cannot generalize from SBA loans to all loans made to rural businesses, but this added evidence further suggests that rural businesses are reasonably well served by their credit providers. This is not to say that all rural communities are equally served, or that rural financial markets are the same as urban markets. Furthermore, cost of credit may be less important to a small business's survival than access to credit—an attribute that is very difficult to measure accurately. But with that said, the limited evidence available suggests that credit problems are neither endemic to, nor epidemic among, rural businesses.

Community Development

The speed and direction of rural economic development are determined, in large part, by public organi-

zations, such as local governments and nonprofit community organizations. Like businesses and households, community organizations rely on credit for working and investment capital. Local governments use credit to finance public infrastructure, such as schools, hospitals, highways, sewers, utilities, police and fire stations, hospitals, parks, prisons, and courts.¹⁴ Local governments also borrow funds for private-purpose facilities, such as industrial parks, to foster greater private development. Nongovernmental institutions, such as churches and other nonprofits, also provide essential services in rural communities, directly and indirectly spurring development.

Local government credit. Studies suggest that rural governments, with the help of Federal and State credit assistance programs, have obtained credit at com-

¹⁴ Although some governments issue short-term bonds to finance short-term credit needs, most small local government borrowing is for long-term investments (U.S. Dept. of Commerce, 1987).

parable cost to that obtained by urban governments. However, rural government credit conditions vary considerably, depending on the size of local government, local economic conditions, local bank structure, and the availability of Federal and State intergovernmental assistance. Conventional wisdom suggests that many rural governments, especially those serving smaller and poorer communities, have difficulty obtaining credit. These communities also tend to have the greatest need for additional public facilities and services.

Local government (county, city, town, township, special district, and school district) borrowing patterns vary by size of jurisdiction. Larger governments normally sell bonds to investors nationwide. Small governments neither need nor can they support a large market for their debt; like small businesses, they rely on local sources of credit, primarily commercial banks and wealthy resident investors.¹⁵ Many rural governments rely heavily on accumulated surplus revenues and intergovernmental assistance to pay for capital investments.¹⁶ This avoids borrowing costs but it is impractical for large projects, can delay capital spending, and, with Federal and State grants, it may involve mandated spending and other costly requirements.

Local governments generally pay relatively low interest rates on their debt since interest earnings on their securities are exempt from Federal (and often State) income taxation. This increases investor returns and reduces the interest rate governments pay relative to rates on similar taxable securities. However, the market faced by rural and other small units of government is highly segmented and localized. As a result, interest rates can vary widely. As with small borrowers generally, economic theory suggests that

borrowing costs should be higher for small governments.

- The high fixed costs of issuing tax-exempt bonds can increase the per-dollar cost for small bond issues.
- Imperfect information can reduce demand for, and increase perceived risk on, small rural government bond issues, increasing required bond yields.
- Rural communities, particularly smaller ones, have less diverse economies than urban areas and are more susceptible to an economic downturn in one or two industries, which can increase default risk and corresponding interest costs.
- Rural communities are likely to suffer from less competition among underwriting firms to handle their bond issues, increasing underwriting costs.

The few studies that have empirically documented rural government borrowing costs have failed to find an appreciable premium on rural bond issues overall. These studies have focused on the bond market, ignoring direct borrowing from banks. Sullivan (1983) examined data on individual bond sales collected by the Public Securities Association (PSA) during 1977. Despite the rural market's higher incidence of lower rated and unrated bonds, small issue size, revenue bonds (which are more risky than general obligations and have higher interest costs), and noncompetitive negotiated bond sales, interest rates on rural bond issues were roughly the same as those on urban issues.¹⁷ Demand for rural government bonds, particularly among rural banks, was evidently high enough to keep interest rates down.¹⁸

Palumbo and Sacks (1987) examined 1982 PSA data, finding a U-shaped pattern in interest costs as the rural percentage of population (using Census's defini-

¹⁵ The Tax Reform Act of 1986 eliminated the Federal income tax deductions that banks previously applied to local government borrowing, but banks are still allowed to claim tax deductions for loans to governments with less than \$10 million in public-purpose tax-exempt debt annually, allowing rural governments to continue to benefit from reduced interest rates associated with favorable tax treatment of government borrowing from banks (Durst and Reeder, 1987).

¹⁶ For example, a survey in the 1980's found that about half of the rural communities financed some or all of their water system improvements through "internal financing," whereas bonds and bank loans were used by one-fifth and one-tenth of rural communities, respectively (Stinson et al., 1989).

¹⁷ There are two broad classes of tax-exempt securities. General obligation bonds are backed unconditionally by the issuing government's general revenues or, if these prove insufficient, by the full taxing power of the jurisdiction. Revenue bonds depend on a specific and limited revenue source, such as water service payments, for the funds needed to repay principal and interest.

¹⁸ One possible explanation for the higher demand for rural bonds may be the contrasting economic and fiscal conditions in urban and rural areas in 1977, when many big cities were probably still suffering from the scare over the New York City fiscal crisis of 1975, while rural areas were generally experiencing boom conditions during the 1970's.

tion of rural—less than 2,500 population in a community) varied from 100 percent to 0 percent. The lowest interest costs were in suburban communities. Palumbo and Sacks noted that the high costs observed in the most urban category could be attributable to the large number of small communities that are entirely urban (none living outside of incorporated areas) and face high borrowing costs for their small-issue bonds. They also noted that the costs in the most rural category, though higher than in the suburban areas, would probably have been even higher if not for the prevalence of USDA-subsidized loans in these areas, which tend to lower interest costs.

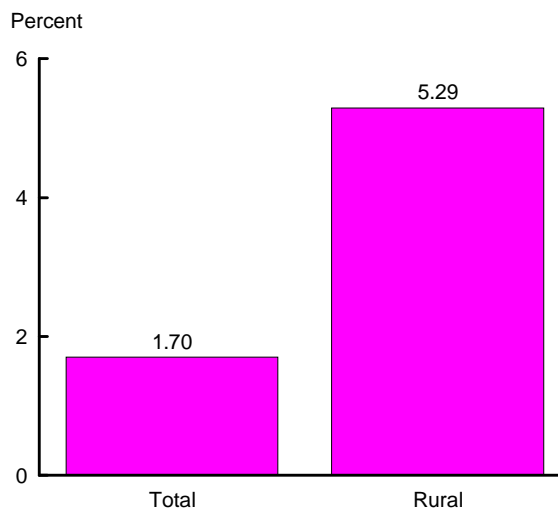
Much change has occurred in municipal bond markets since these studies took place, including the growth in importance of school bonds and insured bonds, the growth of State bond banks and bond pools, and new arbitrage rules required by the 1986 Tax Reform Act. It remains an open question if the relative cost of borrowing for rural and urban governments has changed much. One encouraging sign is the continued strong support rural banks provide to the municipal bond market. While the banking industry's holdings of tax-exempt securities dropped precipitously following the 1986 Act, rural headquartered banks continue to hold over 5 percent of their assets in tax-exempts (fig. B-7). Furthermore, the 1986 Act continued favorable tax treatment of bank-held municipal bonds from governments that did not issue debt exceeding \$10 million in any given year. As a result, it is likely that a sizeable proportion of rural bank holdings of tax-exempts are bonds issued by small rural governments.

As with rural businesses, available research addresses only the market conditions experienced by governments that successfully borrowed. Further research is needed to identify communities that have not borrowed money and their reasons for not doing so. Some communities will have a more difficult time finding credit than other communities. Efficient financial markets discriminate among borrowers based on creditworthiness. But when markets are highly segmented, as they are for small rural bond issues, creditworthiness may not be the only factor influencing access to credit.

Figure B-7

Tax-exempt securities held by commercial banks, 1995

Compared with all banks, rural banks held about three times as much State and local securities relative to their assets.



Note: Average quarterly holdings of tax-exempt securities as a percentage of average assets. Weighted averages used.

Source: Computed by ERS from the Report of Condition and Report of Income, Dec. 31, 1995, Board of Governors of the Federal Reserve System.

Federal and State assistance can help level the playing field for poor communities, small governments facing diseconomies in bond transaction costs, and governments facing uncompetitive credit market conditions. For example, the recently enacted EPA water supply revolving loan program enables States to loan funds at subsidized rates to disadvantaged communities, many of which are rural. USDA's water and wastewater loan and grant programs also help. Grants are important for communities with very low incomes that are incapable of repaying loans. More than 80 percent of high-poverty rural communities that applied for the Federal Empowerment Zone/Enterprise Community program reported a lack of grant money as an obstacle to their development.¹⁹ High interest rates and credit avail-

¹⁹ This group may be somewhat unrepresentative of poor rural communities in general. Having recently applied for Federal grant assistance, they might be expected to have greater than normal needs for grants. However, the fact that they were able to marshal the resources to apply for this complex program suggests that these communities were probably better off than some other poor rural communities in even greater need for grant assistance. Thus, it is impossible to say how the survey results are unrepresentative.

ability were perceived to be a lesser problem (North Central Regional Center for Rural Development, 1996). Nonfinancial assistance—such as planning and technical assistance—can also be helpful, especially to communities that must find more affordable ways of building infrastructure.²⁰

Nongovernmental institutions. Nonprofit organizations, including churches, hospitals, universities, foundations, and community-based economic development organizations, carry out many important developmental functions in rural areas. For example, nonprofits may operate developmental loan funds or provide health services, day care, education, and other services that promote an environment conducive to development.

Nonprofits encounter much the same market as local governments in borrowing funds to pay for their capital projects. Like local governments, nonprofits generally benefit from lower borrowing costs due to the Federal tax exemption received by those who loan them funds. Large nonprofits, such as national foundations or charitable organizations, universities, and hospitals, borrow in much the same way that larger local governments do—through the issuance of tax-exempt bonds that are marketed nationally (Bryce, 1992). However, the transaction costs of issuing these bonds are prohibitive for most smaller nonprofits. Nonprofits may also borrow from banks or from local investors, but such borrowing must be carefully structured to take advantage of the tax exemption.

No research is available on credit conditions for nonprofits. However, creditworthiness may be a problem for small or newly formed nonprofits with little credit history, and for nonprofits in low-income areas that lack a significant and demonstrable income stream. Unlike local governments, which often have legal tax bases that effectively guarantee future income streams, nonprofits often depend on uncertain

revenues from various activities or on the good will of those who contribute funds.²¹

Conclusion

Sufficient data and analysis are not available to fully evaluate the performance of rural financial markets, but the limited information available suggests that they work reasonably well for most successful borrowers, based on urban standards. Survey results and administrative records suggest that, on average, rural borrowers pay interest rates and face loan terms close to those on similar urban loans. Existing differences, while statistically significant in some cases, are not large and do not support claims that rural America is experiencing a “credit gap” that hampers economic development.

The market faced by farmers and rural homebuyers, businesses, and community organizations is typically limited, both geographically and with respect to the types of lenders that participate. While virtually all of these groups borrow from commercial banks, each group of borrowers has alternative sources of credit, which vary in importance. Farmers rely on the Farm Credit System, the life insurance industry, USDA, and a number of “nontraditional” lenders. Homebuyers rely on mortgage brokers and the thrift industry for much of their credit, with assistance from HUD, VA, and USDA loan guarantee/insurance programs and the secondary market activities of the housing GSE’s. In contrast, the small business sector and community development organizations have far fewer alternative sources of finance. While “nontraditional” lenders—such as nonprofit revolving loan funds and governmental grant and loan programs—serve these sectors, commercial banks remain the source of most of the credit used by rural businesses and community organizations.

By encouraging increased competition in rural financial markets, the Federal Government’s sponsorship of the agricultural and housing sector GSE’s helped reduce rural financial market inefficiencies that plagued these sectors in the past. Therefore it is encouraging, but not surprising, that we failed to find evidence of large-scale inefficiencies in the rural

²⁰ For example, regional solutions may reduce infrastructure costs, but such solutions require careful study and collaboration of local leaders before they can be initiated. Similarly, new technologies can reduce costs, but rural communities need to be informed of these before they can adopt them. In addition, communities may employ local volunteers to help construct infrastructure, thereby lowering costs, but this also usually requires technical assistance to help organize and inform these “self-help” activities.

²¹ Community associations may be an exception, since some have virtual taxing powers over members.

financial markets facing farmers and rural homebuyers in 1995. More surprising is the lack of evidence of financial market inefficiencies for rural small businesses, which do not benefit from GSE activities. Heavily dependent on local banking markets, which are far less competitive in rural communities, rural businesses are susceptible to the credit market problems associated with noncompetitive markets. Nonetheless, rural business owners reported being as (or more) satisfied with their access to credit as urban business owners did in 1995. Community organizations are likely to experience financial market conditions similar to those faced by small businesses, but we do not have any recent empirical evidence on the cost or availability of credit for these entities.

While encouraging, our review of the data and the literature leaves many questions unanswered. First, all of the empirical evidence pertains to successful borrowers. Data on the qualifications of unsuccessful rural loan applicants are unavailable, so we do not know whether access to credit is similar for similarly qualified borrowers in urban and rural locations.²² Second, because of data and time constraints, no attempt has been made to examine variation in the performance of rural financial markets over space or time. Rural America is not homogeneous, and neither is the performance of financial markets among rural communities. While we find no evidence of widespread financial market failure in rural America, the economic literature clearly suggests that problems exist in specific communities and submarkets. Furthermore, little is known about how rural financial markets perform over the business cycle so we do not know if financial markets affect rural and urban borrowers differently during economic downturns or in the initial recovery stages, for example. While the economic consequences of such market failures are not likely to be large from a national perspective, they can be very serious for affected borrowers. Finally, the limited information available on how risk capital (equity investments and other forms of high-risk financing) is allocated suggests that rural entrepreneurs may be at a disadvantage vis-a-vis

urban entrepreneurs. The information and transaction costs of high-risk financing are sensitive to economic distances, making it likely that capital for business startups is less available in isolated communities.

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²² Limited data are available on unsuccessful home mortgage loan applicants from major lenders, as required by the Home Mortgage Disclosure Act (HMDA). However, the creditworthiness of these borrowers cannot be determined from the data, and many rural lenders are not subject to HMDA's reporting requirements because they are too small.

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