

Rethinking the Rural Credit Gap

A decade-long slowdown in the rural economy has often been blamed on overcautious lending institutions. To rectify that, legislators, both State and national, have proposed government programs to make rural credit more easily available. Such a solution, besides being expensive, may be based on faulty premises. Most of the slowdown, in fact, seems due more to weak business conditions rather than to reluctance by lenders. As a result, other less expensive programs may have more success. Alternative programs include establishing secondary markets for business loans and providing technical assistance to rural entrepreneurs.

The 101st Congress gave considerable attention to rural development policy, although it passed no specific rural legislation. In addition, many rural States are implementing a variety of programs aimed at rural development. Relying on new government credit programs to spur the rural economy may be premised on misperceptions of the rural credit market. Many legislators believe that the relatively weak economy of the past few years is the result of a lack of credit available to rural borrowers. These legislators accordingly propose that Federal and State programs ought to make more credit available.

Therein lies a trap for policymakers. While rural credit markets underwent much change in the 1980's, there is no strong evidence that rural credit supplies have dried up. To the contrary, a weak rural economy appears to be the real cause of a marked slowdown in rural lending. Thus, implementing new public credit programs to subsidize loans to rural borrowers may not achieve the

desired goal of rural revitalization. And if other public credit programs are any guide, direct lending ultimately proves to be quite expensive to taxpayers.

Instead of creating new rural credit programs, rural policymakers may find more success in new programs that overcome a few problems in rural capital markets. Improved secondary markets, better technical assistance programs, and venture capital programs appear to offer greater promise in spurring rural business activity.

While the Senate, the House, and State governments are all taking different approaches to rural development, new rural credit programs are prominent in a number of legislative proposals. For example, financial programs were the biggest piece of the Senate bill in 1990, the Rural Partnerships Act (S. 1036, not enacted). Government credit programs are being advocated on grounds that rural financial markets do not supply the capital that rural businesses need, an argument long made in defense of farm loan programs. Past farm loan

programs, however, have been expensive. Nonetheless, many advocates of rural loan programs justify the expense of new programs by pointing to recent declines in rural lending.

Recent Trends in Rural Lending

Rural bank loans grew more slowly in the 1980's than in the 1970's (table 1). Total loans at rural banks grew an average of 5.3 percent a year in the decade, less than half the average growth in the 1970's. Loans at urban banks, on the other hand, maintained steady growth of nearly 10 percent throughout the 1970's and 1980's.

Moreover, uneven performance in the rural economy translated into wide variation in rural lending. The rural economy in the 1980's was a mix of strength and weakness, in contrast with the more general prosperity of the 1970's. Real incomes in rural areas grew an average of 1.5 percent a year in the 1980's, but ranged from a 0.5-percent drop in mining counties to a 3.5-percent rise in retirement counties. Rural loan growth likewise varied widely in the 1980's, depending on county type. Loan growth in rural counties ranged from 2.7 percent in farming counties to 8.8 percent in retirement counties, a sharp contrast with the 1970's, when bank loans in every type of rural county grew faster than at urban banks.

Table 1—Real income and loan growth in U.S. counties

Rural loan growth during the 1980's varied widely depending on county type

County type	Counties ¹	Average growth of real personal income ²		Average growth of total loans ²	
		1972-79	1980-87	1972-79	1980-87
	Number	----- Percent -----			
Metropolitan	729	3.1	2.6	9.9	9.9
Nonmetropolitan	2,238	4.3	1.4	12.7	5.3
Manufacturing	562	3.7	1.3	11.2	6.3
Mining	161	5.8	-.5	15.0	4.9
Farming	555	3.8	.6	13.8	2.7
Retirement	203	6.1	3.5	14.4	8.8
Government	214	4.1	2.4	12.0	6.7
Mixed	104	4.1	1.4	13.2	5.3
Trade	362	4.2	1.0	12.9	3.8
Other	77	5.3	1.0	15.5	4.2

¹The total number of counties differs from that in Drabenstott and Gibson (1988) primarily because there are no banks in some counties.

²Growth of real personal income is calculated using annual averages. The growth of total loans is calculated using end-of-year data from the bank call and income reports.

Sources: Board of Governors of the Federal Reserve System (bank data); U.S. Department of Commerce, Bureau of Economic Analysis (income data); U.S. Department of Agriculture, Economic Research Service (county types).

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The slowdown in rural credit availability seems due more to weak economic conditions than to a reluctance by banks to lend to rural borrowers.

Overall rural financial activity in the 1980's reflected the slowdown in the rural economy. The lending activity of the 1970's proved as unsustainable as the high rural incomes of the 1970's. Rural lending in the 1980's became quite variable, with the steady growth of lending in retirement counties far ahead of that in farm and other more traditional rural counties.

Government Credit Programs: Pros and Cons

The Senate's proposed Rural Partnerships Act had two key loan provisions, both aimed at making more loans available to rural businesses. First, \$300 million would be given over 4 years to rural development groups, such as State and local government agencies, that lend to rural businesses. Federal funds would be matched by participating financial institutions, in effect serving as seed capital for revolving loan funds. Second, the bill would have created a Rural Capital Access Program in the U.S. Depart-

ment of Agriculture. That program would have spent \$165 million over 4 years to guarantee certain rural business loans.

Government credit programs to spur rural development are also popular in many State legislatures. Policymakers in rural States believe that Federal programs may have limited scope due to Federal budget constraints; thus States are considering further loan programs of their own. Already, 26 States have direct loan programs for small businesses, and 14 have loan guarantee programs, most open to both rural and urban businesses. Many States are considering new programs or changes to existing programs to channel more funds to rural businesses.

Two justifications for government credit programs can be advanced. First, rural financial markets may be imperfect, impeding credit flows to rural borrowers. But financial market developments in the 1980's appear to

have corrected many imperfections of the past. Advancing technology, financial innovation, and deregulation have broken down many rural financial market imperfections. Rural savers, for example, now have access to a wide array of financial instruments, while rural borrowers have access to a greater number of credit sources.

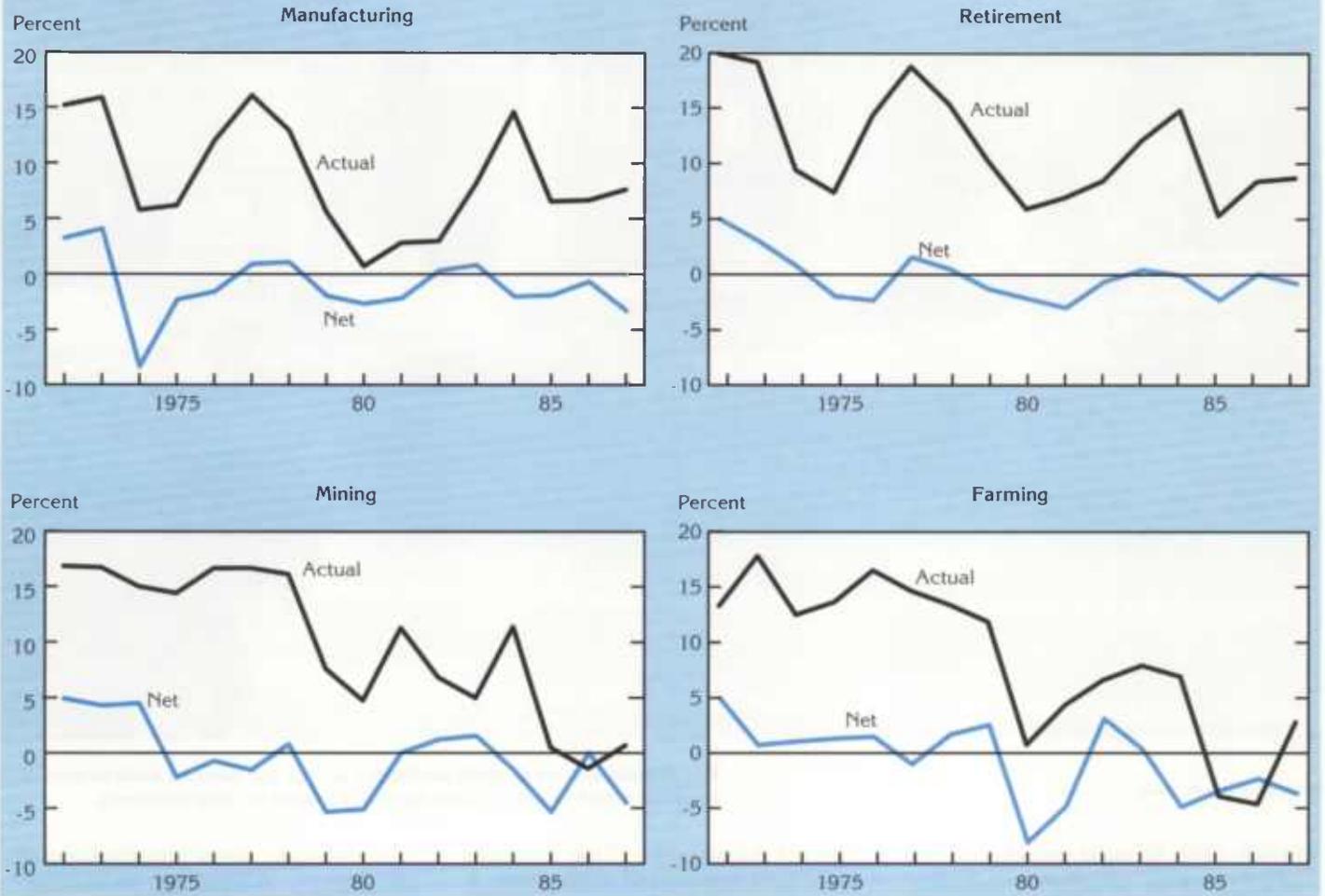
Second, some proponents of government credit programs may also suggest that a downturn in the rural economy in the 1980's left many rural lenders too cautious, thus reducing the supply of credit to rural businesses. Recent data verify that rural bank lending did slow in the 1980's. The slowdown, however, seems due to fundamental economic factors.

Current proposals for greater public involvement in rural lending are in keeping with a long history of government intervention in rural credit markets. For decades, farmers have argued that rural credit is too scarce.

Figure 1.

Loan growth in selected county types

In the four types of rural counties shown here, the 1980-87 decline in net loan growth was less than the decline in actual loan growth, suggesting that general economic factors are to blame more than a reluctance by lenders to lend.



In response, the Federal Government and some State governments created public institutions to make more credit available to farmers, institutions like the Farmers Home Administration (FmHA) and the Farm Credit System.

One basic lesson from these farm loan programs is that they can become very expensive. Loan delinquencies in the FmHA farm loan program, for example, currently top \$10 billion, about 40 percent of the loans outstanding. While some special factors have led to the FmHA problem, the fact remains that public loan programs can lead to considerable direct cost to taxpayers.

For these reasons, new government credit programs need to be evaluated carefully. The size of the proposed 1990 Federal program is small relative to current farm loan programs. Nevertheless, rural loan programs, like farm

loan programs before them, could become much larger once enacted.

The Slowdown in Rural Bank Lending: Cautious Bankers or Economic Environment?

Rural policymakers may point to the slowdown in rural bank lending in the 1980's as grounds for adopting new programs to make more financing available to rural businesses. Such programs might make sense if loan growth slowed because banks were overly cautious, but not if slower loan growth were due simply to weak business conditions and changing demographic trends.

Our analysis was based on data for manufacturing, retirement, mining, and farming counties. These four county types were chosen because of their special place among rural coun-

ties. Manufacturing counties account for the largest share of rural income. Retirement counties have been the strongest performers since the early 1970's. Mining counties are relatively important to the heartland economy. And farming counties are the traditional rural county. These four county types accounted for two-thirds of rural population and real income in 1987. Results for the remaining four rural county types (government, trade, mixed, and other) were broadly consistent with the four county types discussed here.

Figure 1 shows actual loan growth and net loan growth for manufacturing, retirement, mining, and farming counties. Net loan growth is actual loan growth less loan growth predicted from the economic and demographic factors. That is, net loan growth is the residual loan growth not explained by the regression analysis. For each

year, net loan growth is a weighted average of net loan growth across all counties of a particular type. The weights are the county's lagged share of total loans.

For manufacturing, retirement, and mining counties, declining economic and demographic factors account for a significant part of the decline in actual loan growth. There is little downward trend in net loan growth in these three county types. To help see this, it is useful to look at the change in average actual loan growth from the first 8 years (1972-79) to the last 8 years (1980-87) and compare it with the change in net loan growth. In manufacturing counties, actual loan growth fell 4.9 percentage points, while net loan growth fell only 0.9 percentage point. In retirement counties, actual loan growth fell 5.6 percentage points, while net loan growth fell only 1.7 percentage points. In mining counties, actual loan growth fell 10.1 percentage points, while net loan growth fell just 2.3 percentage points. Thus, the evidence casts doubt on the view that slower loan growth in these counties is due to a reduced willingness to lend on the part of commercial banks.

In farming counties, the downward trend in net loan growth is slightly larger. For example, net loan growth is positive in 7 of the first 8 years and negative in 6 of the last 8 years. As a result, from the first 8 years to the second 8 years, average net loan growth in farming counties fell 5.2 percentage points. Actual loan growth, however, fell 11.1 percentage points. Thus, while economic factors explain some of the decline in farming-county loan growth, other factors not included in the equation appear to be a more important source of slow loan growth in farming counties than in manufacturing, retirement, and mining counties.

When other factors appear to explain a large part of the slowdown in loan growth, as in farming counties, the effects of economic factors, such as risk, cannot be separated from the noneconomic factors. Part of the decline in net loan growth in farming counties could be due to excess caution on the part of farm lenders. But part of the decline could also be a rational response on the part of lenders

to economic factors, such as a riskier farm economy. In any event, economic factors still appear to be an important source of slower loan growth in farming counties.

Overall, the evidence suggests that weak business conditions and changing demographics are an important cause of slower loan growth in manufacturing, retirement, mining, and farming counties in recent years. There is no strong evidence that banks are withdrawing from rural lending. Much of the variation in lending across rural counties can be explained by variation in economic and demographic factors. Loan growth is fairly rapid in rural counties with strong economies, such as retirement counties, but much slower in lagging counties, notably farming counties. The evidence presented here, therefore, suggests that much more research is necessary to show that new credit programs are in fact needed before the government implements them.

What Policy Alternatives Are There?

Since lending patterns in most rural areas are largely consistent with fundamental economic factors, what role remains for public policy in rural financial markets? Rural capital market programs are promising alternatives to government credit programs. These programs would improve rural financial flows by overcoming some unique rural capital market imperfections that still exist. The capital programs are advantageous because they are inexpensive and because they generally allow the rural economy to be guided by market trends. Three capital market improvements appear most promising: secondary markets, technical and management assistance, and venture capital markets.

Secondary markets for rural business loans may be an attractive way to increase rural capital formation while allowing market forces to operate. Secondary markets for rural business loans would allow commercial banks and other rural financial institutions to reduce the credit risk of expanding their lending into new business lines. The bank could initiate and service loans, while the risk would be borne by investors who purchased the packaged securities.

How such rural loan secondary markets could be formed is unclear. The Federal Agricultural Mortgage Corporation (Farmer Mac), created by the Agricultural Credit Act of 1987, will provide a good experiment on the overall likelihood of success of secondary markets in rural America. It seems unlikely that packages of general rural business loans could be marketed if Farmer Mac fails to attract sufficient business. Governors in rural States might take the lead in promoting a new secondary market for rural loans. Such markets would do more to help rural lending than many State-sponsored direct loan programs, and at a fraction of the cost. To be successful, a secondary market for rural business loans would need wide geographic diversification and common underwriting standards. This suggests an important Federal role in establishing a truly national market for such securities.

Technical and management assistance programs serve a simple purpose: to supply the missing technical or management skills that new businesses need to succeed. As rural communities try to diversify into new industries, two potential problems arise. The local bank may have little experience with the new business, or the owner of the firm may have a sound business plan but lack complete technical expertise. Because the community bank plays a leadership role in financing new businesses, technical assistance programs that work through bankers may solve both problems.

Several technical assistance programs are emerging. The Federal Government provides small business assistance through Small Business Development Centers, administered by the Small Business Association in each State. State bankers' associations are beginning to view technical assistance as an important and possibly necessary tool to encourage local development. The Cooperative Extension System is reevaluating its role in assisting rural businesses and probably will initiate more business development programs, possibly emphasizing leadership development.

With so many possible providers of technical assistance, State governments can play a useful role in coor-

Technical Specifications

To determine whether the rural lending slowdown of the 1980s was caused by reluctant lenders or sluggish economic conditions, statistical analysis was conducted to compare loan growth with several economic factors. The regression technique employed enabled the portion of loan growth due to economic factors to be isolated, leaving a residual amount that, by inference, is due to banker decisions and other factors. When the amount of the loan growth explained by economic factors was a large portion of total loan growth, we concluded that banker decisions were a small factor in the lending slowdown.

The data for the analysis were gathered from a variety of sources. The loan growth data came from commercial bank call reports from 1970 to 1987. Growth in loans was based on year-end figures. Rural county classifications were based on standard Economic Research Service definitions.

The following regression equation was used to estimate loan growth. The variables on the right side of the equation are economic factors that should affect loan growth. These factors—population growth, real in-

come growth, inflation, and the change in interest rates—affect loan growth primarily through the demand for loans.

$$LOAN_{i,t} = \alpha_i + \sum_{s=0}^2 \beta_{1,s} POP_{i,t-s} + \sum_{s=0}^2 \beta_{2,s} RPI_{i,t-s} + \sum_{s=0}^2 \beta_{3,s} INF_{i,t-s} + \sum_{s=0}^2 \beta_{4,s} TBILL_{i,t-s} + \epsilon_{i,t}$$

$LOAN_{i,t}$ = the growth rate of total loans in county i at time t

α_i = the constant term for county i

$POP_{i,t}$ = the growth rate of population in county i at time t

$RPI_{i,t}$ = the growth rate of real personal income in county i at time t

$INF_{i,t}$ = the inflation rate measured by the personal consumption expenditures implicit price deflator at time t

$TBILL_{i,t}$ = the change in the 3-month Treasury bill rate at time t

$\epsilon_{i,t}$ = the residual that represents the growth of loans purged of the economic factors.

The equation was estimated using time-series cross-section methods because a time series is available for each county. A regression was run for each county type to allow the slope coefficients to differ across county types. To account for county-specific factors, the intercept was

also allowed to differ across each individual county. Because there is no reason to expect county-specific effects to be independent and identically distributed random variables, a fixed effects model was estimated instead of a variance components model. Thus, county-specific effects were accounted for by including a dummy variable for every county. All of the sums of coefficients have the signs that would be expected from a simple model of loan growth in small rural credit markets.

The equation fits the data fairly well (see table below). The explanatory power is typical of regression equations using data that vary both across economic units, such as counties, and over time. The percentage of variation in loan growth explained by the equation, as measured by the R^2 s, ranges from 0.148 in manufacturing counties to 0.241 in farming counties. Further evidence that the equation fits fairly well is that the residuals from the regression equations are small relative to the dependent variables. Overall, the relatively good fit suggests that the equation is reasonable for estimating net loan growth. For a more detailed discussion of the empirical method employed, readers should consult the Morris and Drabenstott article cited in the readings.

Estimates of empirical loan growth equation

Nonmetro county type	Sum of coefficients on:				R^2
	Growth in population	Growth in real personal income	Inflation	Change in 3-month Treasury bill rate	
Manufacturing	0.983 (4.10)	0.916 (9.16)	2.322 (10.53)	-4.945 (11.91)	0.148
Mining	.262 (1.44)	.827 (9.01)	3.735 (10.20)	-6.582 (9.68)	.226
Farming	.903 (7.24)	.458 (15.67)	5.289 (30.40)	-7.367 (22.90)	.241
Retirement	.300 (1.18)	1.408 (9.80)	2.348 (7.00)	-3.287 (5.18)	.228

Note: Absolute value of t-statistic is in parentheses. Except for the coefficient on the growth 2in population in mining and retirement counties, the marginal significance level of all coefficients is less than 1 percent. The coefficient on the growth in population has a marginal significance level of 15 percent in mining counties and 24 percent in retirement counties.

dinating the programs. Public-private partnership could be especially effective in coordinating assistance. Minnesota, for example, has chartered the Greater Minnesota Corporation to encourage applied research and technology transfer for rural areas and to coordinate startup and operating financing for new rural businesses.

Even though technical assistance programs address a basic need of rural businesses, they have generally not received much funding from rural policymakers. The 1990 Senate rural development bill, for example, would have spent \$15 million for technical assistance, compared with a combined \$465 million on two key loan programs. Researchers have not verified it, but technical assistance programs could pay big dividends. The cost of the programs is relatively low, yet in many cases they may be the difference between the success or failure of a firm.

Venture capital programs are considered by many to be the key element in the future of rural development policy. While debt markets generally work well in rural America, equity markets, and especially venture capital markets, are much less developed. Recent studies suggest that rural businesses generally find sufficient debt financing, but equity funds are sometimes lacking. Data on rural venture capital are, unfortunately, extremely limited.

The private sector may provide more venture capital to rural America in the future, but public initiatives, possibly in partnership with the private sector, may be needed for the initial development of a well-functioning rural venture capital market. As with government lending programs, much of the impetus for that development will probably rest with State governments.

Several States already have venture capital programs of one type or another, but only Minnesota's Greater Minnesota Corporation has a strong rural orientation. The Kansas program, Kansas Venture Capital Inc., represents a partnership between the public and private sectors. The corporation was chartered with matching \$10 million funds from the State and Kansas bankers, including many rural banks.

The success of these State programs is difficult to assess so far. Most of them started only recently, and results are limited. The relatively long-running program in Massachusetts (Massachusetts Community Development Finance Corporation) has been quite successful in spurring business activity in depressed parts of that State. Overall, State efforts to increase venture capital have had some success, but little of the improvement has occurred in rural areas.

States have two choices if they want to increase rural venture capital. They can devise new State-funded programs aimed specifically at rural businesses. Teaming with private investors or banks, as in Kansas, would reduce the initial capitalization and the ongoing risk. Or, they can offer tax concessions to encourage private funds for rural venture capital. Indiana has followed this approach with its general venture capital corporation. In either case, the programs should be available to businesses in all industries, since rural development experts agree that diversification will be an important ingredient in spurring rural business activity.

Capital Programs Work With, Not Against, Economic Forces

Public interest in rural credit programs currently is high, as illustrated by the prominent role of public loan guarantee programs in S. 1036. But the economic basis for new rural loan programs may be flawed. Empirical analysis suggests much of the rural lending slowdown of the 1980's resulted from weak business conditions and changing demographics rather than from less willingness to lend on the part of rural banks.

Although justification for government credit programs may be limited, rural policymakers do have some attractive alternatives. Rural capital programs would overcome a few unique problems in rural capital markets. Improving secondary markets for business loans would allow rural financial institutions to manage the credit risk of lending to new types of rural businesses. Technical assistance programs would supply the missing technical and financial expertise necessary for new businesses to succeed. And more fully developed rural

venture capital markets would allow rural businesses to better manage their financial needs.

A strong advantage of the rural capital market programs is that they work with, not against, current rural economic forces. The underlying premise of government credit programs is that rural economic decline should be reversed, and more government loans will achieve that goal. The problem is that the United States currently has no rural economic policy that identifies the public's objective for economic activity in rural areas. In the absence of such policy, programs that run counter to fundamental economic trends, like government credit programs, are especially difficult to justify. Rural capital market programs, which improve rural financial services but allow economic forces to operate, can be justified on their own merit.

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For Additional Reading...

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