

Public Policy Toward Agricultural Credit

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The primary focus of this symposium is on future sources of loanable funds¹ for agricultural banks, an important and timely topic. This paper focuses somewhat more broadly on public policy toward agricultural credit, with emphasis on Federal lending programs. We believe that Federal policies toward farm credit will be an important determinant of the role of various lenders in financing agriculture in the 1980s. The paper reviews the general farm credit situation and prospects and examines the rationale for public, especially Federal, involvement in farm credit. It concludes with a review of the role and status of the major public lenders, especially the Farmers Home Administration.

Summary

Credit has been an important tool of agricultural policy for more than 50 years. Federal credit policies have assured abundant loan funds and competitive interest rates for agriculture and were a major factor in the technological transformation of agriculture to the highly industrialized, productive, capital-intensive sector it is today. Today, farmers depend heavily on borrowed funds to finance annual production and to acquire ownership of land and other capital goods. Projections for the next 10 years suggest sharp increases in farmers' use of debt as production expenses rise, primarily because of inflation

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and expanded production.

A number of policy issues arise out of concerns about the ability of credit institutions to meet the future financial needs of agriculture and about how credit policies may be contributing to increases in land prices and concentration of farm ownership and production. The changed structure and financial characteristics of the farm sector also suggest a need to reevaluate the role of public agencies which lend to farmers.

Historical Background

Modern credit programs specifically directed to agriculture began to evolve out of the depressed conditions in U.S. agriculture following World War I. Farm incomes were low and uncertain, and farm lending was considered risky by both lender and borrower. Under such circumstances, farmers had difficulty obtaining funds. When they did, interest rates were usually higher than for other borrowers, and the terms were often unfavorable and increased the farmer's vulnerability.

The establishment and gradual strengthening of the Farm Credit System (Federal Land Banks, Federal Intermediate Credit Banks, Production Credit Associations, and Banks for Cooperatives) and the predecessor agencies of the Farmers Home Administration, as well as improvements in the management and security of commercial banks, greatly improved the flow of funds to the farm sector. At the same time, the development of income-enhancing and price stabilization programs helped reduce risk and uncertainty in farming, making farm lending more attractive. The resulting ready availability of loan funds, at relatively favorable rates and terms, financed the industrialization of agriculture and transformed it into the highly productive, highly capital-intensive sector it is today.

Today, borrowed funds are considered the lifeblood of production agriculture. Some reasons for the dramatic increase in dependence on credit include:

- Loan funds have been relatively plentiful and inexpensive until recently.
- Farm production expenses have increased sharply (from \$19 billion in 1950 to \$131 billion in 1980) as input prices have risen, production has expanded, and the share of production

- inputs purchased rather than provided on the farm has increased.
- As a result, cash expenses have increased as a percentage of gross farm receipts (from about 60 per cent in 1950 to over 80 per cent today).
- Following from the above developments, net farm income has been a declining share of farm receipts, thus reducing the capability of farmers to fund cash expenses with internal savings. At the same time, farmers now purchase most of their consumption needs, just as nonfarmers do, further reducing internal cash flows available for covering production costs.

Thus, farmers are heavily addicted to a steady flow of borrowed funds to finance their production activities. Ownership costs have also risen as land prices and the cost of machinery and other capital items have increased dramatically. Many farmers have borrowed heavily to increase the size of their farming operations to realize economies of size or simply to increase income.

Farm sector debt increased from \$12 billion in 1950 to an estimated \$158 billion on January 1, 1980. The aggregate value of farm assets has also grown dramatically, especially in the last decade. The ratio of debts to assets doubled between the late 1940s and the 1960s and stabilized in the 16-17 per cent range in the 1970s. On small farms (sales of \$2,500 or less) that ratio is only about 5 per cent, but it increases for larger farms and is more than 20 per cent for farms with sales of more than \$100,000. Of course, for many larger, growth-oriented farms the debt-to-asset ratio is much larger. The operators of these largest farms are most sensitive to costs of debt servicing, changes in interest rates, and fluctuations of cash flow.

The fact that the use of borrowed funds has grown more rapidly than net farm income implies an increasing debt burden. The ratio of debt outstanding to net farm income rose considerably during the past two decades. During the 1960s and early 1970s, debt outstanding was two to three times higher than net farm income. In the late 1970s, that ratio was in the four-to-one and five-to-one range.

In recent years, debt repayment burdens, interest costs, and access to loan funds have become sensitive public policy issues. Farmers will pay over \$16 billion in interest charges in 1980, a figure that represents 12 per cent of all farm production expenses. Increases in interest charges have contributed significantly to rising costs of production in recent years. Agriculture has just come through a year

of record high interest rates. In a number of states, concentrated along the northern and western edges of the Corn Belt, commercial banks, especially country banks, have come through two years of high loan-to-deposit ratios, culminating in severe liquidity problems last winter and spring. In districts where commercial banks were unable to meet farm lending needs, the banks of the Farm Credit System grew at phenomenal rates. In 1979, the Farmers Home Administration, the lender of last resort, loaned farmers a record \$7.7 billion. These developments occurred despite the fact that 1979 was the second best farm income year on record.

Credit in the 1980s

A recent USDA study [2] focused on likely credit needs and problems in the 1980s. The detailed results of this study will soon be available in a separate report. Highlights include:

Farm production expenses will more than double. Funds needed to finance annual farm production expenses could increase by more than \$200 billion over the next 10 years, compared with about \$134 billion in total farm production expenses in 1980. Most of the additional funds will have to be borrowed, although there are expected to be some innovations in equity financing. Farm sector debt, which increased from \$12 billion in 1950 to an estimated \$158 billion in 1980, could be about \$600 billion by the end of the decade. However, asset values in farm businesses are expected to rise to over \$3 trillion, and the ratio of debts to asset values will not be significantly higher than the 16-17 per cent range of recent years.

Competition for loan funds will remain strong, but agriculture will remain competitive and will be able to attract its fair share of funds. Farm prices and incomes should begin to rise strongly by the middle of the decade, increasing the ability of farmers to compete for production and investment funds.

- Land prices will likely increase rapidly, especially in the latter half of the decade. This will increase the wealth of landowners but will also increase the difficulty of getting started in farming, especially for those having no other sources of income to subsidize the beginning years. The added wealth of existing landowners, combined with tax advantages, will enable them to

outbid other would-be land buyers and thus continue the trend to fewer and larger farms. Higher land prices also greatly increase the flow of debt funds needed simply to refinance the ownership of land, generally into the hands of fewer and fewer owners.

Public Credit Policies for Agriculture

Role of Public Credit Policy for Agriculture

The Department of Agriculture is interested in credit policy primarily as a means of achieving the multiple goals of food and agricultural policy. This means assuring that credit policies 1) are such that farmers have money for producing the food and fiber we need, 2) assure an economically healthy and viable farm sector, 3) promote efficient use of resources, and 4) enhance the equitable distribution of economic rewards and opportunities. Public credit policies operate through the establishment of rules, regulations, and facilitating institutions for private lenders and by the operation of public lending programs.

There is no specific, articulated national policy on farm credit. Moreover, borrowed funds are still allocated within agriculture and between agriculture and the rest of the economy primarily by the workings of private capital markets. Past initiatives in farm credit policy have generally come from those interested in making more funds available to farmers and rural people at more favorable terms and lower costs. These initiatives have taken the form of improving the performance of private credit markets and lenders serving agriculture, and directly intervening with public lending programs to address needs not being met by private lenders.

The initiatives noted above have generally been successful. The farm sector has enjoyed plentiful supplies of loan funds at competitive costs and terms. These have contributed to the rapid substitution of capital for labor, adoption of capital-intensive technology, increased specialization, increased use of purchased inputs, and, in turn, increased reliance on borrowed funds. Unfortunately, the distortions in credit markets resulting from the many forms of subsidies have had some unintended side effects: misallocation of capital between agriculture and the rest of the economy, overuse of capital in agriculture, overproduction, land price appreciation, and a growing trend to fewer and larger farms.

Does Agriculture Need Special Treatment?

In view of the essential nature of credit to finance production, prospective sharp increases in production costs and land prices, and recent experience with scarce supplies of funds and high interest rates, it is not surprising that farmers and their spokesmen are concerned and press for policies which assure them adequate supplies of loan funds at reasonable costs. Indeed, some argue that this is the most important credit issue of the '80s.

Analysts suggest, however, that the economic health of agriculture is sufficiently sound that farmers will be able to compete with other borrowers and obtain funds at competitive rates. Some even argue that for several reasons farmers may be getting more than their fair share of credit funds, especially when funds are scarce and interest rates rise to ration those scarce funds. This possibility arises for several reasons.

- The banks of the Farm Credit System have unlimited access to the central money markets and thus can continue to lend when banks (especially small banks) may be loaned up relative to their reserves. Moreover, because their interest rates are based on average money costs rather than current costs, interest rates charged by Farm Credit System banks tend to lag private bank rates in rising markets. This tends to insulate FCS borrowers somewhat from market rates and encourage more credit use than market conditions would warrant.
- Country banks historically have loaned from reserves deposited in savings and checking accounts. These were low-cost funds and usually enabled these smaller banks, in turn, to lend to farmers and local businesses below prime rates charged in larger money centers. Thus, farmers were somewhat insulated from the effects of credit crunches and restrictive money policies. This insulation has largely eroded during the last two years as banking regulations have changed and as competitive pressures have forced smaller banks to offer certificates of deposit and other instruments which, in effect, now tie their cost of money more directly to the central money markets. Nevertheless, even during the scarce credit period last year (winter and spring of 1980) farmers continued to borrow from rural banks at rates below those charged by large city banks.

- Public lending institutions lend to farmers at rates or terms usually involving some element of subsidy. These institutions frequently are not responsive to interest rates or money supply signals of markets; consequently, farm borrowers see that money as being cheaper than competitive conditions suggest it should be, and they use more than they would if they had to pay the true market costs.

The net result of these and other factors is that the farm sector likely uses more loan funds and at lower rates than would be suggested by private market conditions. This may lead to more capital investment and increase the capital intensity and productive capacity of agriculture more than otherwise would have been the case in recent decades. This, in turn, may have exacerbated the problem of overproduction and depressed prices, as well as increasing pressure for income support programs and more liberal credit policies.

If excess production capacity is no longer a dominant concern in the future, the overproduction impact of the conditions just described may no longer be a problem. But the question remains whether agriculture needs special credit considerations today. That question is especially relevant if the profile of the farm sector outlined in a number of recent studies — a sector of large-scale firms realizing competitive financial rewards — is accurate. Certainly lending institutions serving farmers must recognize the unique requirements of agriculture: the seasonal nature of production, the critical importance of timing, the year-to-year volatility of prices and incomes, etc.

But the farm sector is no longer characterized by millions of small, relatively poor family farms, all facing inequitable treatment in money markets. Smaller farms today generally have sufficient off-farm income that their total incomes compare favorably with nonfarm family incomes. They are not considered risky borrowers, and they finance most of their needs with internal savings. Their debts are small relative to asset values and repayment capacity. Larger commercial farms are large, capital-intensive businesses earning competitive returns. In view of this emerging reality, is there continuing justification for public credit policies and programs which provide favored treatment for agriculture? If so, under what circumstances and for whom are such policies needed? Answering these questions requires some examination of the implications of alternative credit policies, and especially the implications for future control and struc-

ture of the food system.

There is growing evidence that past and present credit policies, in conjunction with farm policies and especially tax policies, have contributed to increases in land prices. Studies have shown that subsidized interest rates, lower down payments, and longer repayment periods translate into higher prices than one can afford to pay for land. The higher the tax bracket of the purchaser, the greater the benefits of the more liberal credit provisions. Specifically, some have suggested that the liberalization of Federal Land Bank credit in 1971 (reduced down payments and longer repayment periods) contributed significantly to land price inflation thereafter, although research by Baker and Dunn [1] does not support such arguments.

Who is Not Served by Private Money Markets?

In view of the economic and financial prospects for agriculture in the 1980s and the emerging structure of agriculture, what legitimate farm credit needs will not be met by the private markets? The answer depends heavily on what is considered "legitimate." The place to start is to examine who will likely not be funded if the money markets work reasonably well.

One group that will have difficulty obtaining and repaying borrowed funds are the so-called "marginal," or more appropriately "submarginal," farmers, who often lack farming skills or whose access to productive resources is limited. But who is included in the submarginal farm group varies depending on farm product prices, interest rates, and other considerations. In the winter of 1980, when interest rates were unusually high and farm commodity prices were low, many farmers who would normally qualify for credit were temporarily considered submarginal. The situation was made worse by the actual shortage of loan funds in banks. Since that time, however, commodity prices have improved substantially. Consequently, many farmers then considered submarginal became creditworthy again. Thus, there is a continuum of farmers ranging from those with sufficient financial strength and resources to weather the hardest of times to those who could not be expected to borrow and repay funds under any reasonable set of conditions.

Should the fortunes of all farmers be left to the ups and downs of economic conditions — i.e., survival of the fittest? Or are there economic and social reasons for providing some or all of them assistance? The question can only be answered via the political

process. But it may be useful to categorize those would-be farm borrowers who would not be served by a reasonably efficient and competitive farm credit market, and examine some pros and cons of serving them with public lending or with changes in public policies to facilitate their being served by private credit institutions. This examination should take place in the context of the commonly cited goals of agricultural policy outlined in an earlier section of this report.

Those likely to have difficulty in private farm credit markets include:

1. Existing farmers who are submarginal because of economic factors.
 - a. Submarginal only under atypical adverse conditions.
 - Efficient-size family farms or smaller.
 - Larger than efficient family farms.
 - b. Submarginal under typical conditions.
2. Existing farmers who are temporarily submarginal because of natural disasters.
3. New or would-be farmers who are submarginal in the beginning but who with specialized credit help can graduate to being above marginal under normal conditions.
 - a. Beginning farmers.
 - Tenant farmers.
 - Owner-operators.
 - b. Limited resource farmers.
 - c. Farmers lacking skills or training.

Providing public credit to preserve the normally healthy moderate-size farm temporarily caught in adverse conditions could be consistent with the long-term goals of agricultural policy. Present trends suggest that about two-thirds of the land sold each year is bought by farmers and consolidated into existing farm units. This is the primary source of increasing concentration in the farm sector. If the normally-healthy-but-temporarily-in-trouble farms are allowed to go out of business, it is reasonable to assume that some portion of them will be consolidated into other existing units. Thus, assuring that such farms obtain the funds needed to stay viable would be consistent with the goals of efficiency, preserving a pluralistic agriculture for resiliency and future flexibility, providing economic opportunity for more people, and ultimately assuring food security.

As discussed earlier, there are some risks to the public sector. This problem can be minimized by reducing the subsidy as much as possible, thus reducing the attractiveness of the emergency credit.

If, instead of a moderate-size family farm, the farm in temporary trouble is very large, it is not clear that the same arguments for public credit assistance hold. If the farm was much larger than necessary to achieve efficiency, and if the odds favored some or all of the land being sold in smaller tracts to new farmers or moderate-size existing farmers, there would be no particular public interest in saving the larger farm.

There would appear to be no direct economic reason for offering subsidized public credit to preserve those farms that are submarginal even under normal economic conditions and for whom that does not appear to be a temporary phenomenon. Both the subsidy in the credit program and the inefficient use of resources implied by the farm being submarginal are social costs. However, perhaps one more question should be asked: Is the social cost ultimately greater if the farmer goes out of business? This is not likely if there is alternative gainful employment. But if the displaced farmers or workers end up as a public liability anyway, social costs may be minimized by extension of public credit to keep them in business, at least until better opportunities are available.

The same general comments apply to the farmers in trouble because of natural disasters. That is, it would be consistent with goals of efficiency, competitiveness, and future flexibility to provide public credit assistance to efficient-size family farms. For larger farms the question is how far the public should go in sharing the risks and protecting the interests of the wealthy.

For the third group, those who need specialized help or terms, the appropriateness of public credit assistance depends on the likelihood that they will successfully graduate to private credit and eventually repay the public investment through taxes, efficient use of resources, and contribution to pluralism in the farm sector. It is in these programs, more than any other, that social objectives and economic objectives of policy come face to face.

The issue of assistance to beginning farmers is a difficult one. If there are not resources enough to assist all would-be farmers, who are the lucky ones? How will the selection process affect those who will be farmers in the future? The complexity of trying to assist beginning farmers can be illustrated with the problem created by increases in

land prices. The issue is sometimes put in terms of new credit arrangements needed for beginning farmers who wish to purchase land.

Several economists have shown rather convincingly that the high land prices of recent years are quite rational. In other words, in terms of long-term returns on investment (from farming and from land value appreciation) land is a good buy even at today's high prices. But studies have also shown that if that land is purchased with borrowed funds, the income flow from farming will not cover principal and interest payments during the early years of the loan. This is especially true if the farmer has to draw his own livelihood from those earnings. A USDA study [5] of irrigated lands in the Western Federal Irrigation Districts shows that irrigated land purchased at today's prices would generate adequate returns to begin to cover amortization costs somewhere between the tenth and fifteenth year of a 30- or 40-year mortgage. Emil Melichar [4] uses the analogy of land as a growth stock, an asset which might be an excellent long-term investment but which one could not expect to pay for from the earnings in the early years.

This poses a dilemma. Only those who inherit land or those who can cover payments from other sources of income can begin farming as an owner-operator. Thus, there is a selecting out process, strengthened by the distributional impact of the tax laws, of those individuals and firms who can outbid others for land (and thereby further bid up land values). Not surprisingly, those favored by the selection process tend to be those with high incomes, including operators of large farms with high equity in land already owned. In fact, existing farmers buy around two-thirds of the land sold each year, and thus are the primary entrepreneurs of increased concentration.

The implication is for increased tenant farming unless loans for beginning farmers could be arranged such that repayment schedules are matched with income flows; i.e., postpone more of the amortization to the later years of the mortgage.

But there are dangers. Unless such loans are restricted to those unable to afford early payments and who intend to farm the land over a long period of time, the loans could increase the returns to owner's equity in early years, thus enabling one to bid up the price of land, hold it for a few years while ownership costs are low, and then sell it at a higher price when repayment costs begin to rise. Such a program

could thus worsen land price appreciation unless some safeguards were built into the loan program.

Federal Lending Programs

The Farmers Home Administration

To most people, public credit in agriculture means the Farmers Home Administration. The FmHA program has undergone dramatic change in recent years. In 1960, FmHA administered eight programs, of which farm operating loans accounted for 64 per cent and farm ownership loans accounted for 14 per cent. In 1979, FmHA operated at least 23 programs, with farm operating loans accounting for 6 per cent and farm ownership loans accounting for 5 per cent. Emergency disaster, economic emergency, individual housing, rural rental housing, water and waste loans and grants, and business and industrial development loans each accounted for larger shares of FmHA activity.

This does not necessarily mean that FmHA has neglected its traditional role. The absolute level (as opposed to percentage share) of farm operating and farm ownership loans was record high. What the current situation does point up is that the FmHA has become a giant, many-faceted agency that perhaps has been absorbing programs and mandates (many unrequested) faster than it can maintain a clear sense of purpose and direction. The addition of large loan and grant authorities this year to support the Alcohol Fuels Program merely exacerbates the situation. More than \$14 billion in loan and grant obligations were made by FmHA in 1979. This year, FmHA made obligations totaling nearly fifty times that of 1960.

Who is served by FmHA's programs? By design, the agency is a lender of last resort. That is, its borrowers are supposed to be those unable to obtain funding elsewhere. A recent study [2] of borrower characteristics suggests that in 1979 the farm operating and farm ownership loans were heavily directed to young farmers and those with small net worth and low incomes. Over 68 per cent of the money loaned in the farm ownership program that year went to farmers with less than \$12,000 in net cash income and less than \$120,000 in net worth. Over 74 per cent of farm operating loan money went to farmers in the same category. In the same year, 50 per cent of the money loaned in each of these programs went to people under the age of 30.

However, the economic emergency loans were distributed a bit differently. The borrowers tended to have low incomes (presumably that is what put them in an "emergency" situation), but over a third of the money loaned in 1979 went to farmers with more than half a million dollars in assets. Farms with gross value sales of over \$40,000 represent one-fifth of all farms but received more than two-thirds of the money loaned under the Economic Emergency Program in 1979.

Figures 1 and 2 summarize the distribution of program money loaned to farmers in specified net worth and net farm income groups in 1979. As expected, the targeted operating loan and farm ownership loans are concentrated in quadrant II (low income and low net worth) under two specifications of income and net worth. A larger proportion of Economic Emergency Program money loaned went to farmers with higher farm income and net worth.

The Commodity Credit Corporation

The lending activity of the CCC is important but is secondary to the objectives of the stabilization programs. That probably should continue to be the case so as not to compromise flexibility to achieve fundamental program objectives. Nevertheless, for farmers who use the loan and reserve programs, the nonrecourse loans are an important source of funding. Moreover, the program provides farmers with flexibility to develop their own marketing strategies without having to sell crops at harvest-time to pay off production loans or to obtain operating funds. The CCC also provides loan funds for farm commodity storage and drying facilities.

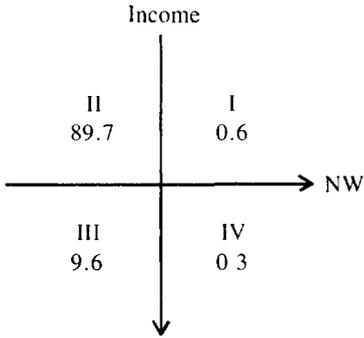
CCC had \$4.5 billion in debt outstanding to farmers on January 1, 1980, accounting for 3 per cent of all farm debt. CCC debt for the most part substitutes for debt by other lenders (as opposed to FmHA loans, which are supposed to supplement private lending to farmers). A recurring issue pertains to what interest rates should be charged on CCC loans.

The Small Business Administration

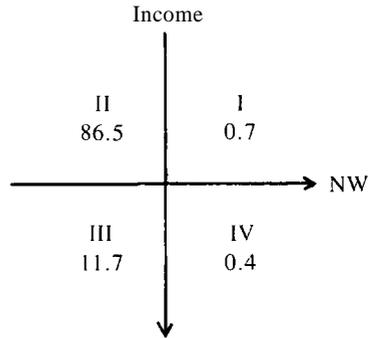
The Small Business Administration, an independent agency, is designed to provide credit to small businesses unable to obtain credit in the private sector. It has authority to provide direct and guaranteed loans to farm firms, although SBA is not primarily a farm lender (farmers began receiving assistance only after a congressional man-

FIGURE 1

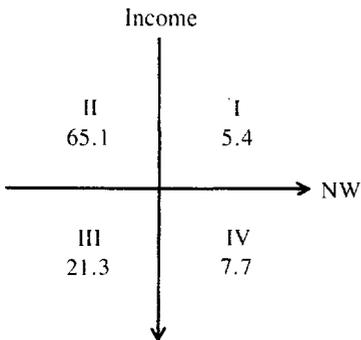
A High Net Worth-Net Operating Farm Income Profile of FmHA Borrowers in Terms of Percent of Program Money Loaned to Each Class of Farmer, 1979*



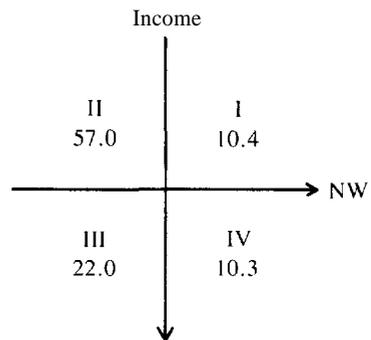
Panel A. Operating Loans



Panel B. Farm Ownership Loans



Panel C. Soil and Water Loans

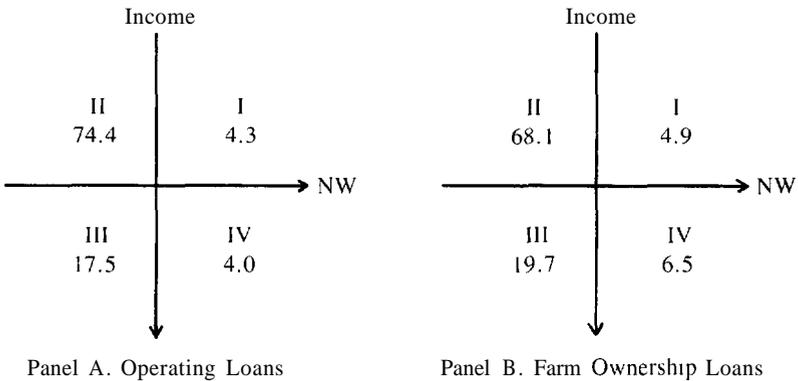


Panel D. Economic Emergency Loans

*The coordinates of the points of intersection for each panel are net worth equals \$300,000 and net operating farm income equals \$22,000.

Quadrants I, II, III, and IV consist of low income-high net worth, low income-low net worth, high income-low net worth, and high income-high net worth farmers, respectively.

FIGURE 2
 A Low Net Worth-Net Operating Farm Income Profile of FmHA
 Borrowers in Terms of Percent of Program Money Loaned to Each
 Class of Farmer, 1979*



*The coordinates of the points of intersection for each panel are net worth equals \$120,000 and net operating farm income equals \$12,000.

Quadrants I, II, III, and IV consist of low income-high net worth, low income-low net worth, high income-low net worth, and high income-high net worth farmers, respectively.

date in 1976).

The stated intent has been to provide funds to farm operators with limited resources and to operators adversely affected by economic and natural disasters. At present, farms with gross annual receipts under \$1 million may be eligible for SBA loans. The loans generally contain a subsidy either in the form of below-market interest rates or in lenient terms of repayment. SBA's role has been and will likely continue to be small relative to other agricultural lenders. On January 1, 1981, SBA is expected to hold about 1 per cent of total farm debt outstanding. In addition, Congress recently imposed a requirement that farmers attempt to obtain an FmHA emergency disaster loan before applying for an SBA disaster loan, the SBA loan program which accounts for most of its loans to farmers.

Public Lending: Some Issues

Most public credit programs involve some degree of subsidy, either direct or indirect. They involve some transfer payments from the taxpayers at large to the targeted constituents of the loan programs. It has been suggested that such transfers are justified if they improve the overall performance of the food system and the resulting benefits are eventually captured by the public, or if the target constituency is one that is vulnerable, has suffered past inequities, or for some reasons is considered by the body politic to deserve special help.

The primary issues related to public lending stem from the subsidies involved. The subsidies (lower interest rates, lower down payment, and favorable loans) have the effects of reducing or shifting risks, reducing apparent costs, and supplementing income.

Risk Sharing. Often the issue is how risks in farming will be split between farmers and the government—that is, the public. These risks can be shared in such devices as CCC nonrecourse loans (meaning that if prices fall below loan levels, the crop under loan will always be accepted as full collateral), disaster provisions of support programs, and loans from the FmHA or SBA, to name three. The extent of risk sharing is managed by the degree of subsidy provided. If the subsidies are large, budget costs can be high and there may be undesirable side effects. For example, private investment decisions may be made with false signals of true risk and thus of true cost, leading to overinvestment, misuse of resources, increases in land values, and an ultimate flow of benefits to landowners. Again, public sharing of private risk

is a transfer payment from taxpayers at large to those whose risks are reduced.

There are several issues related to the risk-sharing aspect of public lending programs:

- Is risk-sharing through public credit programs achieving the stated objective? Is that objective clear? If so, are credit programs the most efficient means of achieving the objective (for example, what is the comparative efficiency and effectiveness of disaster loans vs. crop insurance, both of which can be subsidized and the risks shared to any degree desired)?
- Loan guarantees stimulate flows of funds to specific target groups by shifting the risk from private lenders to the public. Ultimately this means more funds at lower costs to the borrower than would otherwise be the case, and thus causes a reallocation of funds in the marketplace from what would otherwise be the case.

Recent research [2] suggests that the very fact that FmHA is a lender of last resort tends to expand farmers' perceptions of their borrowing capacity, allowing adjustments in the production and financial organization of farm firms. Increased borrowing capacity may encourage farmers to adopt riskier production and marketing strategies as well as more aggressive financial plans.

The emergency lending programs tend to reduce the overall risks which farmers face. These risk-reducing effects tend to encourage greater production as well as consolidation and growth. Hence, the emergency lending programs of FmHA and SBA have contributed to the recent trend toward fewer and larger farms in the U.S. The magnitude of the impact may be suggested by the growth in importance of emergency loans. Currently, total public (SBA and FmHA) emergency loans outstanding constitute almost 10 per cent of total farm debt outstanding.

The emergency lending programs have been referred to as free or relatively low-cost insurance programs, with the attendant overuse of any such free goods. The implication is that these programs substitute for actuarially sound insurance programs and discourage the development of other risk management strategies.

Interest Rate Determination. With the current extreme volatility of interest rates in capital and money markets, inflexibly priced FmHA

and CCC debt funds can sell alternately at a subsidy or a premium within a relatively short period of time. This situation compromises greatly the orderly marketing of debt capital. Improved reporting systems are needed to be able to determine market interest rates on farm debt more readily. Policy makers could then adjust government rates to more accurately reflect the cost of alternative source of debt funds.

Insured Loans vs. Guarantees. If the public sector is to augment the amount of funds available to farmers, should it do so through insured loans or by providing a guarantee to encourage private sector lenders to service a particular segment of the industry? Insured loans can more easily be targeted to specific groups or individuals, but they typically involve higher public sector administrative costs. Loan guarantee programs can exploit the expertise of the private sector to initiate the loan request and determine the credit worthiness of the customer; in this fashion the government agency is less restricted in terms of its ability to extend funds and implement a program by personnel limits or availability, since the private sector is performing a number of the loan administration and servicing functions. Some concern has been expressed recently, however, that private lenders can earn very high rates of return on guaranteed FmHA loans by selling the guaranteed portion in secondary markets.

Consequently, these lenders have a great incentive to declare a prospective borrower as not credit worthy and then suggest that they consider taking out an FmHA guaranteed loan. Although the higher rate of return may be justified by the risk borne by the lender, this situation should be considered carefully when analyzing the future role of FmHA loan guarantees.

One will note, however, that FmHA loan guarantees for farmers constitute a low percentage of total farmer program obligations. In 1980, for example, guaranteed loans were only 3 per cent of both total Operating and Farm Ownership loans and 5 per cent of all Economic Emergency loans. Reasons suggested for such a low volume of guaranteed loans include a lack of interest on the part of lenders, since the relatively small loan sizes make it difficult to market such loans in the secondary market, and the relatively high negotiated interest rate on guaranteed loans compared with FmHA insured loans, which discourages farmers from participating. These impediments to the expansion of the use of FmHA loan guarantees should be investigated if it is determined that such an expansion is desirable.

Terms. The interest rate, repayment schedule, and loan-to-value ratio are important aspects of implementing a public sector credit program. Historically, public sector direct loans have included an interest rate subsidy which reflected, in part, the "income supplement" dimension of these programs. More recently, attempts have been made to charge interest rates that more nearly reflect market rates to most borrowers but still subsidize the rate for certain individuals. A key concern with the subsidized rate is the incentive the subsidy provides to borrow and utilize more funds than would occur if market rates were charged. Furthermore, it is difficult to encourage public sector borrowers to move to private sector lenders when they can qualify if there is a dramatic differential in the interest rates they must pay. In addition, it is not clear how much benefit is obtained from subsidized interest rates in terms of improved loan performance. A better procedure for reducing the cash flow and repayment pressures may be to lengthen the term of the loan, thus reducing the annual principal payment, rather than lowering the rate of interest. Deferred or variable repayment programs are also proposed to assist beginning farmers. However, a recent study at Iowa State University [3] suggests that deferred principal payment programs may not be as important as other strategies, such as enterprise diversification and off-farm employment, in improving the beginning farmer's chances of success or his financial progress in terms of income or net worth generation.

The size of the loan to be made must also be carefully evaluated. Changing economic conditions in agriculture as well as general inflationary trends require periodic updating of maximum loan limits. In addition, it would be desirable to evaluate the implications and impacts of 100 per cent financing—i.e., lending the borrower all the funds necessary to purchase the asset. The repayment implications of such financing terms as well as their impact on probabilities of success and/or failure should be evaluated. It is not clear that 100 per cent financing, particularly to purchase assets like real estate that at current market values generate low cash returns, is a desirable strategy from either a private or a social perspective. Such a high loan-to-value ratio for an asset that generates a low cash income certainly increases the probability of encountering cash flow difficulties and delinquencies or defaults.

Qualification criteria. If one expects to target the benefits of a particular program to a certain group of people, it is essential that the

qualification criteria match the characteristics of this group. For example, it is not clear that past Farmers Home Administration programs, particularly in the economic emergency area, have systematically used sufficiently restrictive criteria to target the benefits to those that the programs, according to legislative intent, were to serve. The "credit elsewhere test" needs further elaboration and a more explicit operational definition if it is to be used as the criterion for eligibility for certain loan programs.¹ More objective measures of financial performance and characteristics (debt-to-asset ratios, coverage ratios, etc.) might possibly be investigated as a means of determining eligibility to reduce the subjective nature of the credit elsewhere test. However, it is clear that subjective judgement will still be needed to implement any selection criteria as to qualification for various loans. More explicit information on the characteristics of the borrowers from public agencies, particularly the Farmers Home Administration, would be extremely useful in evaluating the effectiveness of targeting the benefits of various programs to individuals with particular characteristics.

Program Staffing and Breadth. For a program to be effectively administered and implemented, it must have a focus as well as adequate personnel resources. Current criticisms of the Farmers Home Administration as to program implementation would appear to focus on symptoms rather than the root problem. One of the Possible causes of inconsistency in the program implementation is the diversity of programs offered by the agency, including farmer programs, community development programs, housing programs, and now energy programs. Implementing such a diverse set of programs, periodically adding new lending authorities, without the funds to add adequate staff, quite predictably would result in problems in implementation.

Performance Evaluation. To adequately evaluate the performance of government loan programs, a system to monitor successes and failures must be developed. Documentation of the default rate on government loans is not adequate in assessing performance. The personal and financial characteristics of those who default must be determined and compared to borrowers who have exhibited loan performance and financial progress. Furthermore, an accurate evalu-

¹On June 2, 1980, legislation was passed which tightens the "credit elsewhere test" for economic emergency loans.

ation of the contribution of a government loan program would include an assessment of the likely success rate if such a program did not exist.

For example, a comparison of beginning farmers who obtain funds from commercial lenders and those who utilized Farmers Home Administration programs in terms of financial performance, default or delinquency rate, etc. would be useful to assess differences, if any, in performance of similar borrowers from the private sector compared to the public sector. This assessment must also recognize that default and delinquency ratios probably overstate success rates, since periodic and perpetual refinancing of delinquent accounts does occur.

Public Policy and Private Sector Lenders

Rural Commercial Banks

The problems of small country banks may be such that their importance as agricultural lenders may decline in the future. This may be especially the case in those regions which had serious bank liquidity problems during 1979 and 1980. Will these banks gradually become more specialized lenders, focusing on that part of the market serving small, part-time farmers and local merchants and dealers? If, to overcome their loan size limits, country banks develop major relationships with large banks, will they lose some of their traditional independence and operating freedom and become increasingly the local service outlet for the larger banks? In a sense, small country banks may face some of the same threats as the family farm. To minimize that possibility, should public policy be directed to giving special attention to the regulatory problems of small banks, including giving them assured access to money markets through FICB's and other means?

Role of the Farm Credit System

The banks of the Farm Credit System, with virtually unlimited access to funds in the central money markets and unconstrained by usury laws and banking regulations, have been the most aggressive gainers in recent years in shares of farm lending. There is no question that the Farm Credit System has been progressive and innovative in developing new approaches to meeting farmers' unique needs. The policy questions are twofold: Have the banks of the Farm Credit

System been too liberal in extending credit, thereby contributing to land price increases and to further concentration in farming? And is it consistent with sound national monetary policy to have what has become a large second banking system operate outside the purview of the monetary authorities. If the system continues to grow at the expense of other lenders and if monetary authorities continue to give high priority to fighting inflation, these issues could become more visible and sensitive in the 1980s.

Secondary Markets for FmHA Paper

Only a small portion of loans are made directly by FmHA. Funds for direct loans come from the U.S. Treasury via FmHA budget appropriations. The majority of FmHA loans are insured loans. FmHA uses revolving funds for the accumulation and distribution of insured loan funds, financing them primarily through payments of outstanding FmHA loans, congressional appropriations, and the sale of certificates of beneficial ownership (CBO's).

FmHA initiated its guaranteed loan program in 1973 to allow private lenders to make loans to less credit worthy borrowers. These private lenders make and service the loans, with FmHA guaranteeing up to 90% of the loan amount. Guaranteed loans accounted for 10 per cent of the total loans and 2 per cent of the farmer program loans obligated in 1979, with the majority made under the business and industry program.

The guaranteed loan program can be attractive to banks and other private lenders. The lenders can resell the guaranteed portion of the loan, often at a discount. Thus, returns can be quite high on the portion retained. The private lender must also service the loan. If the accounts of guaranteed loans handled by a bank are sufficient (currently \$1 million or more) the paper can be sold through Fannie Mae. Again, this can be very attractive for banks, but only if the value of guaranteed paper for resale is great enough.

The relative emphasis is that FmHA should give to guaranteed loans compared to insured or direct loans is an important issue. If there is an interest rate subsidy intended, there is little incentive to FmHA to move toward more guaranteed loans. FmHA can always borrow more cheaply from the Treasury than most lenders' going rates. To move to more guaranteed loans would mean eliminating the direct subsidies on loans, but there would still be indirect subsidies in the form of the risk shifted from private lenders to the public. This

usually means that the borrower gets the money at something less than the true cost represented by the risks involved. If this is not the case, it is questionable whether the loan should have been made through FmHA in the first place.

A Look to the Future

Most analysts seem to agree that while credit needs and demands will be large in the 1980s, the funds markets and private lenders will be able to serve commercial agriculture well. Moreover, the prospects for a robust, growth-oriented farm sector suggest that farmers will be able to borrow, use, and repay those funds without undue difficulty. The key to this scenario, of course, is that inflation be brought under control. This is not to say that farmers will always be happy. There will be periods of very high interest rates, and farmers (and perhaps their bankers) will be back in Washington seeking relief. There will also be the adjustment problem for small banks and questions about the appropriate policies of Farm Credit System banks.

But perhaps the more fundamental farm credit issues of the next several years will be those dealing with the role of public lenders to agriculture and what to do about minimizing undesirable side effects of credit policies, especially the structural and resource-misuse impacts of subsidized credit. If the concerns are taken seriously, one could envision proposals for such actions as scaling back FmHA programs and targeting them more precisely on those potentially viable small, beginning, and minority farms that genuinely need help, shifting some of the risk-sharing function from emergency loans to sound insurance schemes, and taking a variety of steps to minimize land price increases. Steps consistent with this latter objective could include reducing subsidized credit generally, eliminating subsidized credit to larger-than-efficient farms, apply more credible "credit-elsewhere tests," and shifting more to guaranteed loans with no interest rate subsidy.

Will any of these things happen? At this point, the crystal ball is not very clear.

References

- [1] Baker, C. B., and D. J. Dunn, "Risks in Farm Mortgage Lending," paper presented at the Second International Conference on Research Issues in Rural Finance, Calgary, Alberta, 1979.
- [2] Hughes, Dean W., Stephen Gabriel, et al. *Financing the Farm Sector in the 1980s: Aggregate Needs and the Roles of Public and Private Institutions*, report prepared for the Office of the Secretary, U.S. Department of Agriculture, December 1980.
- [3] Kaiser, Eddie, "An Economic Evaluation of Alternative Financial Strategies Used by Beginning Farmers to Enter Agriculture," Ph.D., Thesis. Iowa State University, Ames, 1979.
- [4] Melichar, Emanuel, "Capital Gains Versus Current Income in the Farming Sector," *American Journal of Agricultural Economics*, No. 61 {1979:1985-92.
- [5] Moore, Charles, "The U.S. Department of the Interior's Proposed Rules for Enforcement of the Reclamation Act of 1902: An Economic Impact Analysis," Staff Report, ESCS-04, February 1980.