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Prospects for Credit Supplies to Agriculture Under Continued Economic Growth

IT IS ASSUMED that the basic trends evident in the agricultural sector during the 1950's will continue in the 1960's, viz., declining agricultural labor force and farm population, declining number of small commercial farms, increasing average size of commercial farms, increasing investment (in real terms) and output per agricultural worker, and increasing income of the farm population from nonagricultural sources (cf. Chapter 6). Also, the authors assume that the total supply of credit in the economy will be tailored to the appropriate over-all requirements for continued economic growth, and that the availability and cost will vary in response to changes in the aggregate demand for credit.

The prospective supply of credit to agriculture under these conditions will depend upon (1) the intensity of demand for agricultural credit as compared with demands from other sectors in the economy (basically, the productivity of credit in agricultural uses as compared with productivity in other uses) and (2) the efficiency with which the demand is transmitted to all the major sources of credit supply—that is, the effectiveness of the “credit machinery” available to farmers for obtaining credit.

PROSPECTIVE DEMAND FOR AGRICULTURAL CREDIT

The demand for farm credit is affected by many factors. One important factor is the supply of equity capital. Although total farm debt has increased rapidly and persistently since the end of World War II, the major portion of the capital (including land) used in agriculture is represented by equity—not creditor—claims. Total farm debt was equal to about 12 percent of the physical farm assets in 1950 and 14 percent in 1959. While creditor claims probably will increase further relative to the value of agricultural assets (if for no other reason, because of a slower rise or possibly a decline, in price of farm real estate), there appears to be no reason to expect large or revolutionary changes in the sources of capital used in agriculture.

¹ Views expressed in this chapter are those of the authors and do not necessarily represent those of the Federal Reserve System.

While the average size of commercial farms is expected to increase further, possibly at a faster pace than during the 1950's, most farms will probably continue to be described as "small businesses." Typically, small businesses have shown relatively high rates of births and deaths of firms, with inadequacies of management and the difficult problem of providing continuity of management ranking high as causes of failures. Equity, therefore, will probably continue to constitute the major portion of capital for small firms, supplemented with limited amounts of credit. The rather intensive study of problems of small business has indicated that, while credit availability was a problem, it was not a major cause of failures or slow rates of growth.²

Furthermore, the total capital in agriculture appears to be in excess of the optimum amount, as compared with alternative uses of capital in the economy. Hence, the prospective need is not that of attracting additional capital to the industry in the adjustment process, but rather of providing for effective and efficient transfers of ownership of assets to fewer but larger units and conversions of capital among various kinds of assets. The return to capital used in agriculture is estimated to have averaged 6.6 percent during the first half of the 1950's but only 4.6 percent during the second half (3.5 percent in 1959).³ At the end of 1959 the typical interest rate on new long-term mortgages was 6 percent or more, loans to prime business borrowers were being made at 5 percent, and government bonds in the intermediate sector were priced to yield in excess of 4 percent. Common stocks, however, were showing average yields of about 3-1/4 percent, somewhat comparable to the return on farm capital.

A situation in which market prices of agricultural assets are rising and rates of return to farm capital are declining is not likely to continue indefinitely. In fact, these trends appeared to be undergoing modification in 1960. Since supplies of agricultural commodities appear likely to continue to be superabundant for the foreseeable future, there is not much prospect that aggregate return to capital in agriculture will rise. Thus, any increase in the average rate of return would likely be associated with a decline in the aggregate amount of capital in agriculture and in price of one or more of the agricultural assets. This, in turn, would probably affect the flow of capital into the industry.

The current level of farm debt relative to value of farm assets would permit a further significant rise in debt, even in the face of stable or falling farm income, if the owners of farm assets desire to use additional credit. However, at some level the flow of capital into agriculture from both equity and credit sources would probably be retarded as debt rose further relative to both value of assets and income. Any slowing of the flow of capital into the industry would probably reflect

² Financing Small Business, Report to the Committees on Banking and Currency and the Select Committees on Small Business of the United States Congress by the Federal Reserve System, April 11, 1958, p. 132.

³ Current Developments in the Farm Real Estate Market, July-November 1959, ARS, USDA, Washington, D. C., Feb., 1960, p. 23.

reduced demand for new capital due to low returns on capital and reduced willingness of agricultural credit agencies to supply additional credit as repayment prospects deteriorated. Thus, the prospective trend of farm income and supply of equity capital is likely to have an important effect on both the demand for and supply of agricultural credit.

The institutional arrangements through which equity capital is provided to individual farms may change more than the institutional arrangements through which credit is made available. One of the major needs in agriculture is for the consolidation of holdings into larger operating units (cf. Chapters 6 and 7). This adjustment has been retarded because of the strong desire of the owners of farm real estate to retain assets in that form, reflecting concern about inflation and the use of farm real estate as a good "inflation hedge." This attitude is likely to continue into the 1960's and possibly much longer. Such attitudes are not easily reversed. Hence, if the consolidation of holdings is to be accelerated, arrangements which would achieve consolidation for operating purposes without the necessity of transferring ownership could prove very helpful. Raup developed this point in Chapter 9. The institutional arrangements which would appear to merit additional attention in this respect include the joint ownership of farms, possibly through the corporate form of organization, leases, rental contracts, and labor-share agreements. An expanded role for these kinds of arrangements would tend to reduce the need for credit to finance transfers of ownership. Thus, the expansion of farm real estate debt, based upon transfers of land which in 1959 was priced so high as to yield a return of only about 3 percent, would be held to a minimum.⁴

It is possible also that institutional arrangements which would facilitate the provision of nonreal estate capital to farm businesses from equity sources other than that of the farm operator may see a significant growth. Both farm machinery and livestock—two of the important forms of capital for many farm operators—would be candidates for such arrangements. In some areas leasing or rental arrangements are provided on farm machinery, usually for specialized types of machines, not unlike those which are relatively common for transportation and construction equipment. Livestock—both breeding herds and feeder stock—can be provided to individual farms by owners other than the farm operator. If these kinds of arrangements should come into widespread usage as the average size of farm continues to increase and the capital invested per farm worker continues to rise, the aggregate demand for agricultural credit by farmers might be reduced.⁵ However, in order to attract this kind of equity capital, the return must be high enough to compete with alternative investments. The rate of return to suppliers of such capital possibly would be greater than the return on equity

⁴ Current Developments in the Farm Real Estate Market, July-November 1959, ARS, USDA, Washington, D. C., Feb., 1960, p. 24.

⁵ The demand for credit by suppliers of farm machinery, materials, and services, and by other participants in the provision of capital to agriculture, probably would increase.

capital of the average farm operator. This would be true if the suppliers are able to achieve economies in processing or distribution operations because of the nature of investment, or if they can bring superior management skills into the farm operation.

CREDIT MACHINERY AVAILABLE TO FARMERS

The credit machinery available to serve agriculture appears to be adequate as to both the number and kinds of facilities, and gives evidence of being fairly good with respect to quality of service (cf. Chapters 15-18). Commercial banks, through branch and correspondent banking, have the potential to tap credit supplies available anywhere in the commercial banking system.⁶ The kinds of agricultural activities which utilize the largest amounts of credit tend also to be those in which the participation of correspondent banks has shown the greatest development. Feeder cattle and ranch loans, and loans to help finance relatively large-scale production of fruits, vegetables, and field crops, as well as the processing and marketing of such crops, frequently are provided directly from large banks located far from the producing areas or through participation in loans made by local banks (cf. Chapter 16).

However, agriculture is by no means dependent entirely upon commercial banks for access to the national credit market. Nonreal estate credit is provided also through the Production Credit Associations. The Production Credit Associations have access to the national credit market through the Intermediate Credit Banks and can channel into any agricultural community almost any amount of nonreal estate credit that is desired by farmers who qualify for such credit and are willing to pay interest rates which cover the cost of obtaining the funds. The cost of such credit includes the interest rate on the debentures issued by the Intermediate Credit Banks, plus the cost of "retailing" such credit to farmer borrowers. Thus, the Production Credit Associations and Intermediate Credit Banks provide a means of assuring that credit is always available to qualified borrowers at a "competitive" price.

As to credit secured by farm real estate, a significant amount is provided by commercial banks, but larger amounts are provided by life insurance companies and the Federal Land Banks. Murray presents data on this subject in Chapter 11.

A number of life insurance companies invest a portion of their funds in farm real estate mortgage loans and, in the aggregate, are an important source of long-term agricultural credit. The investment officers

⁶ The results of a survey of loans of commercial banks in 1956 indicated that the number and total amount of agricultural loans in which two or more banks participated jointly were of importance at that time in only a few areas. This study was reported in *Farm Loans at Commercial Banks*, Board of Governors, Federal Reserve System, 1957. However, there appears to have been a large increase in the amount of such loans, especially in livestock areas, in 1958 and 1959 (cf. Chapter 13).

of these firms have available a variety of alternative outlets for their funds and will be strongly inclined to place the funds where the net return is believed to be most attractive, allowing, of course, for diversification, utilization of staff, and the like. Here, too, the credit available to agriculture must meet the competition from other borrowers, and the availability and cost will show some sensitivity to changes in the national credit picture.

These sources of private and cooperative credit are supplemented by the Farmers Home Administration which provides a variety of credit services to marginal borrowers, utilizing funds appropriated by the Congress and funds obtained from private investors on a guaranteed or insured basis (cf. Chapters 5, 11, and 14).

"Nonreporting" creditors, including dealers, merchants, finance companies, and others, are also important, accounting for more than one-third of nonreal estate farm credit.⁷ Some of these creditors, such as large manufacturers and distributors of farm equipment and supplies and large processors and distributors of agricultural commodities, have access to national credit markets. Increasing numbers of these firms have organized credit subsidiaries to help boost sales of their products (cf. Chapter 13). Others have combined credit, managerial advice, and marketing services for the production of individual commodities into an integrated package and have made it available to farmers, as discussed in Chapter 8. Thus, credit from nonfinancial institutions is important in local areas in the financing of specific capital items or farm products, and could easily become more important if the traditional sources do not provide adequate credit service.

The quality of credit service, although improved significantly, can be expected to show further adaptation to the specific needs of individual farmers. Engberg discusses this important development in Chapter 15. Modifications in the institutional arrangements through which credit service is provided to agriculture may well be in response to opportunities to improve quality of service rather than any change in the over-all supply of farm credit. One trend which has been a source of some concern is the tendency for individual farms to draw upon credit from several sources. This largely precludes any individual lender from appraising, in cooperation with the farmer, the over-all credit requirements of the farm business and the schedule of relative productivity of additional capital in the various farm enterprises and the optimum scheduling of credit extension and debt repayment. However, if individual farmers were to rely upon one "station" for all their credit, and if these stations were organized and staffed in such a way as to be able to provide comprehensive credit service, these problems would be alleviated. Existing institutions, with some change in organization and viewpoint, appear to have the capacity to provide this kind of credit service. A similar view is expressed by Diesslin in Chapter 13.

⁷ "The balance sheet of agriculture, 1959," Federal Reserve Bulletin, Board of Governors, Federal Reserve System, July, 1959.

POSTWAR CREDIT POSITION OF AGRICULTURE

In the postwar period the amount of agricultural credit outstanding has increased rapidly, reflecting both strong demand for and ample supplies of credit. From 1946 to 1950, debt secured by farm real estate increased by a relatively small amount (15 percent) while nonreal estate farm loans held by principal lending institutions (excluding loans guaranteed by the Commodity Credit Corporation) increased more than two-thirds and loans extended by nonreporting creditors more than doubled (Table 12.1). In the decade 1950 to 1959, debt outstanding to

Table 12.1. Farm Debt Has Increased Relatively More Than the Value of Farm Physical Assets While Farm Income Declined

	1946	1950	1959	Percent change	
				1946- 1950	1950- 1959
				<u>billion dollars</u>	
Real estate debt	4.8	5.6	11.3	17	102
Nonreal estate debt to:					
Major lending institutions	1.7	2.8	5.8	65	107
Nonreporting institutions	1.2	2.4	3.7	100	54
Commodity Credit Corporation	0.3	1.7	2.5	467	47
Total farm debt	8.0	12.5	23.3	56	86
Proprietors' equity	94.0	118.3	179.8	26	52
Total farm physical assets	82.2	107.1	171.0	30	60
Income of farm population from agricultural sources	17.0	15.7	13.6	-8	-13

Source: Economic Report of the President, Jan., 1960, pp. 166, 210, 229, 236;
Agricultural Outlook Charts, 1960, AMS, USDA, Washington, D. C., p. 55.

the first two groups of lenders more than doubled while loans by nonreporting creditors have increased about 50 percent.⁸

Commercial banks are by far the largest sources of nonreal estate farm loans (cf. Chapter 11). During most of the period since the end of World War II, banks in rural areas have held small proportions of loans relative to total assets. However, this proportion has increased gradually and, in most areas, consistently. During 1960 the term "loaned up" was heard increasingly in some agricultural areas, especially in those areas in which cattle feeding is an important activity. In most agricultural areas, however, commercial banks still have had much "elbow room" to expand agricultural loans if the quality of the credit appears to justify such action.

The interest rates on agricultural loans made by commercial banks have not been as flexible as rates on securities or the rates on large loans to prime business borrowers. In part, this results from costs other than the "true interest" which are a relatively large part of the

⁸ Agricultural Finance Review, ARS, USDA, Washington, D. C., July, 1959, pp. 144-45.

total cost of making agricultural loans. However, it is a reflection of the low loan ratios and a resulting partial insulation of agricultural credit from the swings in "credit ease and tightness" which have been most evident in the large financial centers. Thus, there has been a ready availability of credit to agriculture in most areas during most of the period since World War II, and at favorable interest rates compared with other sectors of the economy during periods of strong aggregate credit demand.

The apparent credit tightness for some would-be farm borrowers has been related more to their low equity position or lack of evidence of management skill than to the over-all credit supply. Woodworth and Fanning discuss this problem in Chapter 23. Not only has the interest rate at banks in rural areas been less flexible than elsewhere in the economy, but also banks in all sectors of the economy have had little inclination to vary rates on loans according to the risk involved. Since the safety of bank depositors' funds rests largely on the quality of a bank's loans and investments and the rates are geared to low loss ratios, there is little or no room in bank portfolios for high-risk loans. The experience with bank failures in the 1920's and the 1930's, the policies of the supervisory agencies, and the desire of individual bankers to protect their personal capital and the deposits of their customers restrict most bankers from intentionally making high-risk loans even if there were a strong demand for such loans from borrowers in low-equity positions.

Interest rates of PCA's and the FLB's have been possibly more flexible than those of rural banks, though limited by competition with the banks and other lenders. Yet even in this case agriculture has had ready access to credit since securities of the Farm Credit Administration have enjoyed favorable reception in the capital markets with only small premiums over rates for government securities. In addition, there has been strong competition among lenders for farm real estate loans, with the result that upward adjustments in rates have been limited and deferred during periods of rising rates in the national market.

All these credit agencies restrict their lending, by and large, on the basis of the amount of equity capital of the borrower, modified somewhat by other factors, including prospective earning capacity and character. But agriculture has again been in a favored position because the Farmers Home Administration makes a limited amount of loans at favorable terms to selected borrowers who lack equity capital and cannot obtain credit elsewhere. It is questionable whether this type of additional credit supply to agriculture should be expanded, in the present context of agricultural surpluses.

A review of the experience in the postwar years indicates that agriculture has been in a sheltered and relatively favorable position with respect to both availability and cost of credit, especially during periods of monetary restraint. The major factors have been the abundance of credit resources at country banks and the favorable institutional provisions for financing agriculture.

PROSPECTIVE CREDIT SUPPLIES TO AGRICULTURE

The thesis advanced in this chapter is that the prospective credit supplies to agriculture are likely to be adequate for the expected demand. This conclusion is reached even though the preferential position of agriculture's access to credit has diminished and, under conditions of continued economic growth, probably will diminish further in the 1960's. The basic reason behind this preferential position has been insulation of commercial banks in rural areas from changes in credit conditions in the large financial centers. However, as loans at rural banks reach a large proportion of total assets, the need for tapping credit supplies elsewhere leads to a much greater sensitivity to credit conditions in the rest of the economy. If trends continue in agriculture and commercial banks continue to provide effective credit service, especially for the larger farms, branch banking and correspondent banking arrangements probably will see further development, as suggested by Hopkin in Chapter 16. This may be necessary to enable small banks in rural areas to serve relatively large customers and to assure that pools of credit stringency and credit abundance do not exist simultaneously in different areas. If the need for additional supplies of credit causes commercial banks in rural areas to become more flexible in their interest rate policy, the restraints on interest policy of other agricultural lenders in competition with banks would be lessened.

The volume of agricultural loans at rural banks is limited by (1) the amount of deposits these banks can attract and retain, (2) the ability to increase loans as a proportion of the total assets of the banks, and (3) the alternative demands for credit at these banks. In the postwar period (1948-59), deposits of rural banks have not risen proportionately as much as have farm loans, though in absolute terms the increase in deposits has been much greater.⁹

Perhaps of greater importance is the faster rate of growth of bank loans other than agricultural loans in this period. In all but four states, agricultural loans declined as a proportion of total loans. This may be due in part to the relative decline in importance of the farm population and agriculture within the economy, a higher rate of return on alternative types of loans (e.g., consumer installment loans) and the diffusion of nonagricultural activity into areas served by "agricultural banks" as

⁹The available data do not provide a classification of banks which can properly be called rural or agricultural banks for purposes of analysis of deposits and ratios of loans to assets. Possible groupings include state banks insured by the Federal Deposit Insurance Corporation which are not members of the Federal Reserve System, all state banks, or all operating banks. None of these groupings of banks have uniformly high ratios of agricultural loans to total loans in all states. No grouping in the New England, mid-Atlantic, Florida, or the West Coast regions had a high proportion of agricultural loans to total loans, so those states were not included in the analysis. In each of the remaining regions, those groupings which had sizable proportions of agricultural loans to total loans were included in the analysis. All groupings had proportions of 15 percent or more in each region, though proportions in individual states fell short. These also included a relatively large proportion of all bank loans to farmers in each region, 40 percent or more, though proportions in individual states fell short of this level.

June 30 or nearest call report date for banks; June 30 for Production Credit Associations.

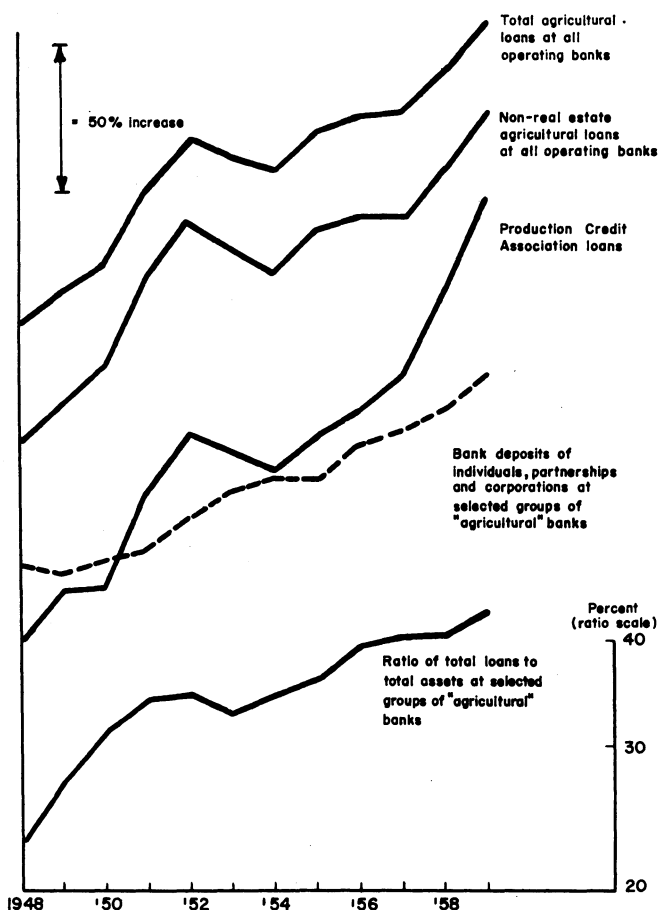


Fig. 12.1. Agricultural loans outstanding, bank deposits, and bank loan ratios in 31 agricultural states.

defined in the study cited in footnote 9. It appears that the diffusion of activity is merely a corollary to the relative decline of the agricultural sector of the economy.

Throughout the postwar period, the faster rate of increase in loans than in deposits at the agricultural banks included in this analysis has resulted in an increase in the ratio of loans to assets (Figure 12.1). In 1948 the ratio was below 23 percent, and by 1959 it was more than 42 percent. While this is not a high ratio compared with periods such as the 1920's, if this trend were to continue, it would have important implications for the prospective supply of agricultural credit.

Deposits at agricultural banks have increased steadily in most regions since 1949. Only in the Great Northern Plains was there a small decline in the mid-1950's, though in Texas, Oklahoma, and the Mountain states the rate of increase slowed noticeably. It is important to note that these regions were affected by drought at that time and also experienced a sharp reduction in cattle prices. Yet, total deposits were affected only modestly. If continued economic growth is assumed, it would be reasonable to expect continued growth of deposits in these banks though perhaps at a slower rate than in the country as a whole.¹⁰

While total agricultural loans of both banks and the PCA's have shown a strong general uptrend in the postwar years, the period from 1953 to 1957 was marked by a downturn and slow recovery. The same pattern was in evidence in all areas of the country with the exception of the Lake states, where there was almost no change from 1952 to 1954. The late 1950's have been marked by a rapid increase in agricultural loans in all areas, with the largest increases in the Corn Belt and Great Plains regions. These fluctuations in loan volume have been closely related to changes in net farm income and, especially in the Corn Belt and western range areas, to changes in cattle prices.¹¹

With the prospect of farm income continuing at low levels under the heavy pressure of surpluses, any prospective increase in demand for farm credit would seem to be limited.¹² The rise in agricultural loan demand during the late 1950's has been in response to the unusual increase of farm income in 1958 (which in turn brought optimistic expectations and enlarged purchases of farm capital items) and the increase in cattle prices and numbers during the upswing in the current cattle cycle. These phenomena are not likely to be repeated soon, and therefore the strong demand for farm loans cannot be expected to continue. In view of the dim outlook for farm income, it is unlikely that farm loans can maintain a rate of increase even as high as the trend in the postwar period.

It is recognized, of course, that the impact of modern agricultural technology means capital requirements of individual farms will continue to increase. This, together with increasing mechanization and larger amounts of nonfarm inputs, will expand credit needs of individual

¹⁰ A study of the relation of deposits of rural banks to cash receipts from farm marketings in the Seventh Federal Reserve District, 1924-40, indicated a relatively high sensitivity of deposits to changes in farm income; Business Conditions, Federal Reserve Bank of Chicago, Aug., 1948. This relationship is still evident for selected agricultural banks, but for the same groups of banks used in 1924-40 it had largely disappeared for the period 1946-58 — a further indication, no doubt, of the diffusion of nonagricultural activity into rural areas.

¹¹ Both farm income and cattle prices reached peaks in the early 1950's. A major break in cattle prices came in the winter of 1952-53 and brought a decline in farm loans in the areas where cattle financing is important. The rise in cattle prices and the expansion in cattle numbers in 1957-59 were accompanied by a rapid rise in loans in these same areas.

¹² It is assumed that the demand for farm products will not be increased by war or natural catastrophe, and also that public expenditures for support of farm prices and incomes will not increase materially. The adoption of strict and comprehensive production controls is not anticipated. Under these conditions, farm incomes can hardly be expected to rise significantly in view of the vast production potential of our agricultural plant and the inelastic nature of demand for farm commodities.

farmers (cf. Chapter 6). Furthermore, a rise in aggregate demand for agricultural credit can be expected whenever a rise in farm income improves expectations and brings increased purchases of capital items. But this would only modify the tendency for a slower trend in the growth of total agricultural loans.

Even though the deposits of agricultural banks will not be affected by farm income as much as will demand for agricultural loans, non-agricultural loans may be expected to continue expanding. Thus, the loan ratios of rural banks, even with the prospect of a slower growth of agricultural loans, are likely to continue upward under the assumption of continued economic growth. As agricultural banks reach the point where they need to tap outside sources of credit, the closer contact with financial centers will tend to make their lending policies more sensitive to developments in the money market.

In many agricultural areas, the cooperative agencies and other private lenders will continue to provide strong competition with the commercial banks. In addition, these banks will have an increasing number of investment alternatives available and, for most of them, the yield will be sensitive to the national credit market. Thus, it would appear that the availability and cost of agricultural credit in general will become increasingly sensitive to changes in monetary and fiscal policy and to shifts in supply and cost conditions in the national credit market. This should be the result if the credit machinery to which farmers have access is adequate and functions effectively, and that appears to be the situation. Under these circumstances, the availability and terms of agricultural credit should be quite comparable to the availability and terms in other sectors of the economy, allowing, of course, for investors' judgments as to relative risk and the retailing cost.

The important factors in the prospective regional demand for credit seem to be the income elasticity for different agricultural products, the shifts in population, and the shifts in agricultural production to those areas with the greatest comparative advantage under the impact of technological change. Livestock products and fruits and vegetables are expected to have the greatest consumer preference under the assumption of high and rising consumer income. These factors, together with the prospect of further westward migration of population, would indicate in the future a stronger demand for agricultural credit in the Corn Belt and the West than in other regions.