Volume Title: Patterns of Farm Financial Structure: A Cross-Section View of Economic and Physical Determinants

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CHAPTER 1

PURPOSE AND SCOPE OF THE STUDY

WHEN viewed as individual economic units, farms differ widely in the amount and kinds of assets they use, the nature of their operations and production, the extent to which nonfarm activities are combined with farming, and many other economic characteristics. They also differ widely in the manner of their financing. For example, an owner-operated, debt-free farm presents a pattern of financial organization quite different from that of a farm in which interests are held by the operator, by one or more landlords, and by creditors. Farms also differ significantly in the sources from which they draw their capital, depending on whether these are predominantly local in character—as for example, the farm operator, local landlords, and commercial banks —or are absentee landlords, and institutions such as large insurance companies that are part of a more impersonal, outside capital market. Finally, farms differ in the extent of their relative dependence on short-term and long-term credit, and in the degree to which each of these types of credit is obtained from federal or federally sponsored agencies, from private lending institutions, or from individuals.

The different patterns of financial organization that are found in different sectors of agriculture doubtless reflect a large number of influences, some of which are difficult to identify and evaluate. Many of these influences can probably be identified with the nature of the farm assets and farm operations that require financing. For example, the characteristic size of total assets per farm varies widely among different regions and types of farming. This alone might be expected to influence both the extent to which equity capital can be furnished by farm operators and the interest that absentee investors may have in owning such assets or lending on them. Aside from size of farm enterprise, the kind of assets involved and the nature of the operations probably influence the attractiveness of different types of agriculture for different classes of investors. Farm assets doubtless vary widely with respect to their salability: some may have a fairly broad market and others a rather narrow local market. Extremes in this respect are easily cited: for example, an Iowa cash grain farm in contrast to an Appalachian hill farm. Farms on which success or failure depends heavily on the managerial skill of the operator

may require that a relatively large share of the financing be carried by the operator and by local creditors, whereas farms in which success or failure depends more on weather and prices, rather than on day-to-day management, may be better suited to impersonal, absentee equity or debt financing. Such differences in farm assets and operations may go far to explain differences in farm financial organization between general farming and specialized cash grain farming areas. It is with the identification and analysis of influences of this character that this study is concerned.

Certain relationships between the economic nature of agriculture and the financial organization of farms are systematically examined for evidence bearing on the adaptations farm financial organization tends to make to the nature of the agriculture involved. How do size of farm business, nature of assets employed, nature of products produced, and other economic characteristics of the agriculture influence the pattern of farm financial organization? What kinds of agriculture are able to draw both equity and debt capital from a relatively broad capital market? What kinds of agriculture either have little need for, or are unable to attract, investment funds from a broad capital market? What sources of capital are competitive and what sources complementary in different agricultural situations?

Answers to such questions not only will increase our general knowledge of interrelationships between farm financing and the financial system as a whole, but also will contribute to the evaluation of public and private policies in relation to agricultural finance. For example, differences in the nature of agriculture may influence the extent to which equity financing by farm operators is preferable to similar financing by nonoperators. Debt capital requirements may differ among kinds of agriculture to such a degree both in amounts and in the terms and conditions needed that considerable lender specialization may be appropriate in the credit phase of agricultural finance. Some kinds of agriculture may be poorly suited to attract debt capital from institutional credit sources, whereas in other types of agriculture keen competition for loans among a number of institutional lenders may provide abundant credit. Any light that can be thrown on the structure and operations of the agricultural sector of the capital market should contribute indirectly to the solution of a number of specific problems in the field of agricultural finance.

Tracing Relationships between Economic and Financial Characteristics of Agriculture: An Illustration

Before undertaking a description of the data and methods of analysis to be employed, it may be useful to illustrate in broad terms the general character of our analytical problem. This can be done most simply, perhaps, by use of statewide estimates giving, for the year 1940, an approximate percentage distribution of the interests of operators, landlords, and creditors in farm real estate.

These data are given in Table 1, in which states are grouped by broad type-of-farming regions. Because the 1940 distribution of interests in farm real estate doubtless was influenced by financial experience during the 1930's, the percentage reduction in the value of farm real estate from 1930 to 1940 is given for each state. It ranged from less than 10 per cent to more than 60 per cent. In general, severe deflation might be expected to depress operator interests and increase creditor interests, but the effect on landlord interests is less clear. Reduced equities of indebted landlords may have been offset by a larger number of farms becoming landlord-owned as a result of distress transfer of farms of owner-operators to former creditors.

The statewide data reveal certain general relationships between the financial organization of agriculture and the type of farming involved. For example, the eleven northeastern states contrast sharply, in their high operator and low landlord interests in 1940, with the four Great Plains states. A part of the difference in operator interest may reflect the sharp asset deflation in the Great Plains states during the 1930's. Yet Maine and Kansas, which experienced about the same farm asset deflation, reveal sharply contrasting operator and landlord interests in farm real estate. Specific comparisons such as these suggest strongly that regional differences in farm financial organization can be explained in many cases largely by differences in the nature of the assets and production processes characterizing the agriculture in the several regions.

Other comparisons, however, suggest that similarities and differences in the financial organization of agriculture may result from causes other than those assignable to type of farming. For example, relatively high operator interests are found in states that represent rather sharply contrasting types of farming. The sixteen states with highest operator interests in 1940 include not

TABLE 1

Operator, Landlord, and Creditor Interests in Farm Real Estate, 1940, and Deflation in Value of Farm Real Estate Assets, 1930-1940, for States Grouped by Region

	INTEREST IN FARM REAL ESTATE, 1940, OF:			ASSET DEFLATION 1930-1940
	Operator	*Landlord*	*Creditor*	
Northeast				
Maine	71.8%	8.2%	20.0%	36.1%
New Hampshire	70.9	11.1	18.0	19.6
Vermont	62.3	12.7	25.0	23.9
Massachusetts	61.8	16.6	21.6	18.8
Rhode Island	61.0	23.4	15.6	23.7
Connecticut	60.7	21.4	17.9	10.0
New York	61.0	18.7	20.3	28.0
New Jersey	56.6	22.0	21.4	23.8
Pennsylvania	61.2	23.6	15.2	28.2
Delaware	52.5	33.0	14.5	18.0
Maryland	52.8	30.5	16.7	23.1
Corn Belt				
Ohio	50.2	33.2	16.6	14.7
Indiana	43.5	37.6	18.9	11.6
Illinois	29.9	53.6	16.5	23.9
Iowa	28.5	45.3	26.2	36.3
Missouri	41.4	37.9	20.7	38.4
Lake States				
Michigan	58.4	22.5	19.1	21.4
Wisconsin	46.2	23.8	30.0	31.4
Minnesota	38.7	35.2	26.1	32.1
Great Plains				
North Dakota	27.5	43.7	28.8	48.5
South Dakota	22.3	52.4	25.2	60.7
Nebraska	25.8	47.0	27.2	54.4
Kansas	31.5	48.5	20.0	37.7
Appalachian				
West Virginia	71.5	20.4	8.1	21.1
Kentucky	58.2	27.7	14.1	10.9
Tennessee	55.3	30.8	13.9	10.6
Virginia	64.6	24.7	10.7	21.1
North Carolina	49.5	38.3	12.2	12.7
Southeast				
South Carolina	46.4%	40.0%	13.6%	10.7%
Georgia	39.7	43.2	17.1	16.8
Florida	56.4	31.9	11.7	23.4
Alabama	40.5	39.5	20.0	18.6
Delta				
Mississippi	37.6	41.3	21.1	16.4
Louisiana	40.0	44.4	15.6	15.4
Arkansas	40.8	43.3	15.9	16.6

(concluded on next page)

TABLE 1 (concluded)

	INTEREST IN FARM REAL ESTATE, 1940, OF:			ASSET DEFLATION 1930-1940
	Operator	*Landlord*	*Creditor*	
Oklahoma-Texas				
Oklahoma	33.4	48.1	18.5	33.1
Texas	38.3	45.0	16.7	28.0
Mountain				
Montana	42.1	39.0	18.9	33.6
Idaho	45.1	31.7	23.2	18.7
Wyoming	42.1	36.5	21.4	23.1
Colorado	36.7	44.0	19.3	38.3
New Mexico	49.3	36.0	14.7	9.8
Arizona	43.9	37.3	18.8	16.6
Utah	55.6	20.7	23.7	30.2
Nevada	51.2	27.3	21.5	25.8
Pacific				
Washington	50.2	31.8	18.0	23.3
Oregon	53.2	27.8	19.0	24.4
California	47.0	34.2	18.8	36.6

Source: Computed from records of the Department of Agriculture, Agricultural Research Administration, and the 1930 and 1940 Censuses of Agriculture.

only nine of the eleven northeastern states but also West Virginia, Virginia, Michigan, Kentucky, Utah, Tennessee, and Florida. And the sixteen states with lowest operator interests include, in addition to the four Great Plains states, twelve others that are rather widely distributed—Iowa, Illinois, and Missouri in the Corn Belt, Minnesota in the Lake states, Georgia and Alabama in the Southeast, all three of the Delta states, Colorado in the Mountain states, and both Oklahoma and Texas. To find reasons for similarities of farm financial organization among these states may require a type of analysis that goes beyond comparisons of type-of-farming regions to similarities in more basic economic characteristics of the agriculture that have a direct bearing on farm capital needs and investor attitudes.

The possible influence of a widely different financial experience in the 1930's on the financial organization of agriculture in 1940 can be illustrated by reference to two Corn Belt states, Ohio and Missouri. It seems probable that the differences between these two states in operator, landlord, and creditor interests in 1940 would have been less if Missouri farms had not experienced much the greater asset deflation. The fact that farm real estate values in Missouri fell by 38 per cent from 1930 to 1940, as compared

with 15 per cent in Ohio, suggests that more operator interests were shifted to landlords through distress transfers during the 1930's in Missouri than in Ohio, and also that in Missouri there was a greater increase in creditor interests at the expense of both classes of owners. A similar problem is raised when the distribution of operator, landlord, and creditor interests in 1940 is found to be much the same in Alabama as in Missouri. Alabama's substantially better financial experience in the 1930's may invalidate direct comparison of financial data for these two states. We cannot make valid comparisons of financial organization of agriculture among states in 1940 without taking into account divergences in financial experience during the preceding decade.

Whereas among states in the same general region the proportions of operator and landlord interests in farm real estate in 1940 show a fair degree of similarity, the importance of the creditor interest often varies considerably. For example, creditor interest was much higher in Vermont than in Pennsylvania, in Iowa than in Illinois, in Wisconsin than in Michigan, in Nebraska than in Kansas, in Alabama than in Florida, and in Idaho than in New Mexico. Again, a part of the explanation may be found in divergent financial experience in the 1930's, but it seems improbable that this would be the full explanation.

The foregoing comparisons based on the distribution of interests in farm real estate are perhaps sufficient to illustrate the kinds of analytical problem with which this study is concerned. Although financial data on a statewide basis, such as those presented in Table 1, suggest certain general relationships between type of farming and the financial organization of agriculture, they also indicate that differences in farm financial organization between one area and another reflect specific influences that cannot readily be associated with differences in type of farming. One such influence is the financial experience of an area in the years immediately preceding the date for which data are analyzed. Still others may be discernible by further analysis. If pertinent factors influencing the financial organization of agriculture are not to be bypassed, the study must be developed within a frame of reference broad enough not only to permit recognition of a number of additional interrelated factors but also to permit an analysis of their interrelationships in terms of the operations of the agricultural sector of the capital market.

General Plan of the Study

It is obvious that attainment of the study's objective requires a much more detailed analysis than is possible with statewide data. For lack of adequate information on individual farms, county data have been used.

Within the limits set by the relevancy and availability of information, a sample of 108 counties was selected to insure representation of widely different kinds of agriculture. The data refer mainly to 1940, the only year for which adequate information by counties was available, and have been developed largely from the agricultural census, from materials compiled by lending agencies, and from special surveys. Major differences and similarities in the economic aspects of the agriculture of the sample counties are indicated, and estimates introduced to bring out county differences and similarities in the financial characteristics and capital structure of farming.

The use of county data, which refer, of course, to groups of farms, calls for a word of caution as to the interpretation of the results of the study. Conclusions necessarily refer to sectors of agriculture rather than to individual farms. Averages often are expressed in terms of farms but have meaning mainly as indexes of differences among types of agriculture. Thus, the financial structure of an average farm in almost any county would fit the census definition of a mortgaged part-owner farm—that is, a farm in which interests are held by operators, landlords, and creditors—whereas, in fact, farms with such a financial structure constitute but a small proportion of all farms. Such indexes, however, are believed appropriate for an over-all analysis of how the economic nature of the agriculture of an area influences the pattern of its farm financial structure.

Criteria for analyzing the economic characteristics of agriculture had to be selected for their validity in comparisons of counties with different types of agriculture and in widely separated regions. This imposed rather severe limitations on the kinds of measures to be used, so that of the large amount of information available by counties, much had to be rejected as too specialized. Even more limited are the means for developing financial criteria, but here the principal obstacle is the paucity of financial information.

The agricultural census, lending agency data, and survey estimates referring to county aggregates of farms are examined, in the pages that follow, to determine whether particular patterns of financial organization are consistently associated with particular patterns of farm economic organization. However, no attempt is made to classify counties directly according to predetermined general classifications of farm financial and economic organization designed for the present analysis. Instead, the counties are first classified according to rather specific indicators of the nature of their agriculture and of the financial characteristics of their farms. For an examination of classifications based on these specific criteria, and from general background information on capital sources available to agriculture, an attempt is made to appraise the influence exerted by the economic nature of agriculture on the over-all pattern of farm financial arrangements.

It should be noted, finally, that the attempt to relate these two aspects of agriculture, each so complex in its own right, precludes separate consideration of factors determining the structures of the agricultural economy and of the financial system. For example, it is not feasible to consider here such questions as what determines the amount of assets per farm, why particular kinds of assets are of greater importance in dairy farming than in cash grain farming, and why one type of agriculture is found in one county and a different kind in another. Nor is it feasible to consider the reasons why banks prefer different kinds of earning assets from those preferred by insurance companies. For the most part it is necessary to take such differences as given, in seeking to determine the relationship of the economic nature of agriculture to its financial organization.