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## CHAPTER 4

# FARM PRODUCT CHARACTERISTICS IN RELATION TO THE FINANCIAL ORGANIZATION OF THE AGRICULTURE

THIS chapter presents a number of comparisons based on the types of output produced on the farms of the sample counties. In order to bring out the salient features of farm financial organization as they are related to different product-component patterns of agriculture, we have classified the 108 counties first into three primary groups—"high," "middle," and "low"—according to the percentage of the total value of farm output represented by product sales and by farm-home consumption. Second, within "high" groups, we have made further classifications designed to reveal relationships that are concealed in the group averages.

As has already been noted, the process of grouping counties according to specific asset characteristics tends to classify them also according to product characteristics. For this reason, some of the primary tabulations in the present chapter are discussed only briefly, and more attention is given to supplemental tabulations in which high "thirds" of the sample are analyzed in some detail.

### *Crop and Livestock Sales*

In most significant respects, the evident differences between the counties that are "high," "middle," and "low" with regard to sales of crops and livestock resemble closely the differences revealed when counties are classified into three groups according to the land-to-asset ratio (Table 11).<sup>1</sup> The "high" 36 counties again include a large proportion of those with the biggest asset-size farms and those in which land is most important among all assets. On the financial side they are characterized by relatively low operator and relatively high landlord interests in assets. They have, moreover, a somewhat higher-than-average percentage of farms under mortgage and a somewhat lower-than-average ratio of mortgage debt to the value of mortgaged farms, although no sharp differentiation emerges on these points with either of the two bases of selection. Similarly, the counties that are found to be

<sup>1</sup> As indicated by previous tabulations, many of the counties that rank high on the one basis of classification rank high on the other as well.

## PRODUCTS AND FINANCIAL ORGANIZATION

high on the basis of crop and livestock sales draw relatively heavily on insurance companies for mortgage credit and use relatively more non-real-estate credit from commercial banks and PCA's.

It is apparent in Table 11 that substantial differences in financial organization are observable among farm counties that differ but little in the average asset size of their farms. The disparity between the "middle" and "low" counties in this respect may be due to the fact that these two groups differ sharply from one another in asset as well as in product composition. The "low" group has a substantially higher proportion of its farm assets in buildings and non-real-estate assets than the "middle" group, and a relatively higher proportion of the output of its farms in dairy, poultry, and miscellaneous products. These economic characteristics are associated with relatively high operator interest in assets and a high proportion of mortgage credit drawn from local sources.

When the 36 counties with the highest percentage of farm product value in crops and livestock are divided into two groups of 18 each according to the percentage of acreage in cropland, comparison can be made between the financial structures of predominantly large crop farm counties and those of predominantly large range livestock counties (Table 12). It will be observed that while the number of days of off-farm work per farm operator is twice as high in one group as in the other, differences are minor with respect to general indicators of asset size and composition of assets and products.

The principal contrast revealed by this table is to be noted in the financial characteristics. The "high-cropland" counties have relatively high landlord interests, high debt frequency, high debt-to-value ratios, and a heavy reliance on insurance companies as a source of long-term credit. The "low-cropland" counties, despite a farm asset size 50 per cent larger than that of the average for the entire sample (\$8.3 thousand), obtained 37 per cent of all real estate credit from individuals and miscellaneous lenders as compared with 31 per cent for the entire 108 counties and 16 per cent for the high-cropland group of 18 counties. These low-cropland counties obtained relatively little real estate credit from insurance companies. Little difference is found, however, between the two groups of eighteen counties with respect to percentage of mortgage loans from commercial and savings banks and from the federally sponsored mortgage lenders; nor is there much dif-

PRODUCTS AND FINANCIAL ORGANIZATION

TABLE 11

ECONOMIC AND FINANCIAL CHARACTERISTICS IN RELATION TO:  
*Percentage of Farm Product in Crop and Livestock, 108 Counties*  
*(dollar figures in thousands)*

	COUNTIES GROUPED BY PERCENT- AGE OF PRODUCT VALUE IN CROP AND LIVESTOCK SALES <sup>a</sup>			RATIO (%) OF HIGH 36 COUNTIES TO ALL COUNTIES
	High 36	Middle 36	Low 36	
<i>Economic Characteristics</i>				
Physical assets per farm	\$12.4	\$6.9	\$6.6	149%
Physical assets in:				
Land	63%	51%	43%	121%
Buildings	14	24	31	61
Non-real-estate	23	25	26	92
Cropland/total acreage <sup>b</sup>	38	45	37	95
Dwellings/farm real estate, 1930	10	17	22	62
Farm product value, 1939:				
Crops and livestock	83	63	43	132
Dairy products	4	12	23	31
Poultry and prod. and misc.	3	6	10	50
Used by farm household	10	19	24	56
Off-farm work in days, 1939 <sup>c</sup>	30	32	44	86
Change in phys. asset value, 1930-1940 <sup>d</sup>	-21%	-23%	-23%	95%
<i>Financial Characteristics</i>				
Interest in physical assets of:				
Operators	38%	48%	60%	79%
Landlords	39	27	20	134
Creditors	23	24	20	100
Mtgd. farms/all farms	45	43	40	105
Mtg. debt/value of mtgd. farms	37	42	41	92
Mtg. debt/value of all farms	19	18	18	100
Farm mtg. debt held by:				
FLB'S and FFMC	48	55	38	102
Ins. and mtg. investment companies	19	10	8	158
Commercial and savings banks	6	9	14	60
Individuals and miscellaneous	27	26	40	87
Non-real-estate loans, as % of total non-real-estate farm assets, of:				
Banks and PCA's	17	13	9	131
FSA and ECFL Division of FCA	6	11	6	75

(footnotes on next page)

## PRODUCTS AND FINANCIAL ORGANIZATION

### Footnotes to Table 11

<sup>a</sup> Group averages are unweighted, except for physical assets per farm, which is weighted by the number of farms in the several counties.

<sup>b</sup> Cropland excludes plowable pasture.

<sup>c</sup> Per farm operator.

<sup>d</sup> Regrouping the counties to equalize average asset deflation in the 1930's serves mainly to place the "middle" and "low" groups on a more comparable basis with respect to financial indicators. The following data based on a straight array are included for purposes of comparison:

	<i>High</i>	<i>Middle</i>	<i>Low</i>
Per cent of product in crop and livestock sales	83	64	42
Percentage change in physical assets, 1930-1940	21	27	18

ference with respect to the importance of non-real-estate loans from banks and PCA's as compared with loans from direct federal lenders in the non-real-estate credit field.

The high-cropland counties in Table 12 thus represent a combination of characteristics which appears to attract equity investment by nonoperators and mortgage loans by private, centralized lenders such as insurance companies. High-cropland agriculture apparently can draw on a broader capital market for its financing than can the low-cropland group, which is heavily weighted with range livestock agriculture.<sup>2</sup>

### *Dairy Product Sales*

We shall now seek to determine whether there are distinctive financial characteristics of agriculture in counties in which dairy product sales amount to a relatively high percentage of value of product. For this purpose we may group the 108 counties according to the percentage ratio of dairy product sales to total product value as of 1939 (Table 13). The fact that the 36 counties that are high in this respect include a number of small-scale dairy and general farm counties explains the somewhat lower-than-average asset size of farms in this group; but previous tabulations suggest that the difference in asset size cannot alone account for the marked differences in farm financial structure as between this and the other two groups. Outstanding among the financial char-

<sup>2</sup> Although landlord investment in farms does not necessarily mean that capital is drawn from long distances, high landlord interest in assets appears unlikely unless a substantial number of the owners are of the absentee type. Moreover, ownership by landlords who live in nearby towns or cities represents a broadening of capital sources as compared with equity financing by farm operators. This is a type of financing in which the provision of capital is at least partially divorced from day-to-day management, thus permitting investment by persons who are not interested in direct farm operation; these constitute a broader group than do persons who are interested in the operation of farms.

PRODUCTS AND FINANCIAL ORGANIZATION

TABLE 12

ECONOMIC AND FINANCIAL CHARACTERISTICS:

*Thirty-Six Counties with the Most Farm Product in Crops  
and Livestock, Grouped by Cropland Component  
of Acreage*

(dollar figures in thousands)

	36 COUNTIES WITH HIGHEST PERCENTAGE OF CROP AND LIVESTOCK SALES, GROUPED BY THE CROPLAND COMPONENT OF ACREAGE <sup>a</sup>	
	High 18	Low 18
<i>Economic Characteristics</i>		
Physical assets per farm	\$12.5	\$12.3
Physical assets in:		
Land	66%	60%
Buildings	15	13
Non-real-estate	19	27
Cropland/total acreage <sup>b</sup>	62	15
Dwellings/farm real estate, 1930	11	9
Farm product value, 1939:		
Crops and livestock	83	82
Dairy products	4	5
Poultry and prod. and misc.	3	3
Used by farm household	11	10
Off-farm work in days, 1939 <sup>c</sup>	20	40
Change in phys. asset value, 1930-1940	-18%	-23%
<i>Financial Characteristics</i>		
Interest in physical assets of:		
Operators	34%	43%
Landlords	42	35
Creditors	24	22
Mtgd. farms/all farms	50	40
Mtg. debt/value of mtgd. farms	39	35
Mtg. debt/value of all farms	20	17
Farm mtg. debt held by:		
FLB's and FFMC	47	50
Ins. and mtg. investment companies	31	7
Commercial and savings banks	6	6
Individuals and miscellaneous	16	37
Non-real-estate loans, as % of total non-real-estate farm assets, of:		
Banks and PCA's	17	17
FSA and ECFL Division of FCA	6	7

<sup>a</sup> Group averages are unweighted, except for physical assets, which is weighted by the number of farms in the several counties.

<sup>b</sup> Cropland excludes plowable pasture.

<sup>c</sup> Per farm operator.

PRODUCTS AND FINANCIAL ORGANIZATION

TABLE 13

ECONOMIC AND FINANCIAL CHARACTERISTICS IN RELATION TO:  
*Percentage of Farm Product in Dairy Products, 108 Counties*  
 (dollar figures in thousands)

	COUNTIES GROUPED BY PERCENT- AGE OF PRODUCT VALUE IN DAIRY PRODUCT SALES <sup>a</sup>			RATIO (%) OF HIGH 36 COUNTIES TO ALL COUNTIES
	High 36	Middle 36	Low 36	
<i>Economic Characteristics</i>				
Physical assets per farm	\$7.6	\$8.3	\$9.3	92%
Physical assets in:				
Land	41%	55%	60%	79%
Buildings	32	21	17	139
Non-real-estate	27	24	23	108
Cropland/total acreage <sup>b</sup>	42	40	39	105
Dwellings/farm real estate, 1930	22	15	13	137
Farm product value, 1939:				
Crops and livestock	46	65	78	73
Dairy products	27	10	3	208
Poultry and prod. and misc.	8	7	3	133
Used by farm household	19	18	16	106
Off-farm work in days, 1939 <sup>c</sup>	41	34	29	117
Change in phys. asset value, 1930-1940 <sup>d</sup>	-22%	-24%	-20%	100%
<i>Financial Characteristics</i>				
Interest in physical assets of:				
Operators	59%	48%	40%	123%
Landlords	20	29	37	69
Creditors	21	23	23	91
Mtg. farms/all farms	44	41	44	102
Mtg. debt/value of mtgd. farms	43	40	37	107
Mtg. debt/value of all farms	19	18	18	100
Farm mtg. debt held by:				
FLB's and FFMC	44	50	48	94
Ins. and mtg. investment companies	7	11	20	58
Commercial and savings banks	12	9	7	120
Individuals and miscellaneous	37	30	25	119
Non-real-estate loans, as % of total non-real-estate farm assets, of:				
Banks and PCA's	9	15	15	69
FSA and ECFL Division of FCA	6	9	8	75

(footnotes on next page)

## PRODUCTS AND FINANCIAL ORGANIZATION

### Footnotes to Table 13

<sup>a</sup> Group averages are unweighted, except for physical assets per farm, which is weighted by the number of farms in the several counties.

<sup>b</sup> Cropland excludes plowable pasture.

<sup>c</sup> Per farm operator.

<sup>d</sup> A comparison of groups of counties based on a straight array with those shown in the table can be made from the following tabulation:

	<i>High</i>	<i>Middle</i>	<i>Low</i>
Dairy sales as per cent of total product value	28	9	3
Percentage change in physical assets, 1930-1940	-21	-31	-14

acteristics of these "high" counties are the relatively heavy dependence on operator investment, the relatively low dependence on landlord investment, and, where long-term mortgage credit is used, a relatively greater reliance on banks, individuals, and miscellaneous lenders and a relatively lesser reliance on insurance and mortgage investment companies.

The table indicates also that mortgaged farms in the "high" dairy product group tended to be somewhat more heavily mortgaged than those in the "low" group, but that the first group made relatively slight use of non-real-estate credit. The explanation may lie partly in the necessity for substantial investment in dairy herd and other working capital in these counties; such non-real-estate assets would perhaps tend to be financed by loans secured by real estate. It is pertinent to note, in this connection, that almost 50 per cent of the mortgage credit used by these farms was supplied by local lenders.<sup>3</sup>

Broadly speaking, similar patterns of association between high dairy product output and farm financial organization are evident even when the high counties are compared, in groups as small as nine, with the average for the entire 27 counties in each asset-deflation quartile (Table 14). Greater consistency is found among the four groups with respect to operator and landlord interests and ratio of mortgage debt to the value of mortgaged farms than with respect to sources of mortgage credit. Likewise the relative level of combined bank and PCA loans is more consistent among the four quartiles than the relative level of emergency non-real-estate loans. However, the nine high dairy counties

<sup>3</sup> In general, such lenders might be expected to hold more loans secured by real estate that were made for purposes other than the purchase of real estate than would be held by lenders such as insurance companies and the federally sponsored lending agencies. Moreover, centralized lenders operating according to fairly uniform loan standards would be expected to relate their loans more directly to value of real estate than would local lenders, who are in closer contact with the farmer's operations.



PRODUCTS AND FINANCIAL ORGANIZATION

TABLE 14

ECONOMIC AND FINANCIAL CHARACTERISTICS:

*Nine Counties with the Most Farm Product in Dairy Products  
Compared with Quartile Groups of Counties Ranked  
by Asset Deflation*

	NINE COUNTIES WITH HIGHEST PERCENTAGE OF TOTAL VALUE OF PRODUCT IN DAIRY PRODUCT SALES (AVG. FOR RESPECTIVE QUARTILE GROUP = 100)				AVERAGE OF QUARTILES
	<i>Asset-Deflation Quartiles<sup>a</sup></i>				
	<i>1st</i>	<i>2nd</i>	<i>3rd</i>	<i>4th</i>	
Dairy product sales/total value of product, 1939	188	212	200	219	205
Physical assets per farm	84	76	106	79	86
Land/total assets	88	74	68	86	79
Cropland/total acreage <sup>b</sup>	111	113	93	100	106
Interest in physical assets of:					
Operators	119	109	124	127	120
Landlords	78	85	55	62	70
Creditors	93	96	96	91	94
Mtgd. farms/all farms	108	100	106	97	103
Mtg. debt/value of mtgd. farms	105	112	111	108	109
Farm mtg. debt held by:					
FLB's and FFMC	105	97	71	113	96
Ins. and mtg. investment companies	88	50	36	68	60
Commercial and savings banks	113	144	137	86	120
Individuals and miscellaneous	92	103	144	104	111
Non-real-estate loans, as % of total non-real-estate farm assets:					
Banks and PCA's	63	66	64	82	69
FSA and ECFL Division of FCA	105	77	34	81	75

<sup>a</sup> The 108 counties were arrayed by degree of asset deflation in the 1930's, from greatest to least, and divided into quartiles.

<sup>b</sup> Cropland excludes plowable pasture.

in each instance ranked higher with respect to per cent of mortgage loans held by banks, individuals, and miscellaneous lenders than with respect to per cent held by insurance and mortgage investment companies.

It will be useful to refer to the classification by product composition as presented in Table 13 to examine further the generalization, suggested by earlier tabulations, that while asset size of farm is firmly associated with the use of outside capital, it is

## PRODUCTS AND FINANCIAL ORGANIZATION

a combination of asset and product composition that most strongly influences the sources from which this capital will be drawn. For this analysis the 36 counties with high dairy product sales have been divided into two groups of 18 each, according to their average farm asset size (Table 15). It will be observed that the large dairy farm counties depend more heavily than the small on outside funds, that is, on landlord and creditor investment, and that they show a distinctly higher frequency of mortgage indebtedness and a relatively high mortgage debt-to-value ratio.<sup>4</sup>

While large-scale and small-scale dairy farm counties differ sharply in the degree of their dependence on mortgage credit, the distribution of their mortgage debt among the principal lender groups shows no comparable divergence. In other words, the economic characteristics of dairy farming may condition the attitudes of different real estate lenders even with respect to farms of comparatively large asset size. Moreover, non-real-estate loans by both types of lenders tend to be low in relation to non-real-estate assets, regardless of differences in farm size. The somewhat greater dependence on emergency loan agencies on the part of the group characterized by large dairy farms probably reflects the relatively more unfavorable financial experience of these counties in the 1930's.

Although assets per farm doubtless affect the proportion of total capital supplied by operators, it seems probable that the nature of the farming operations also exerts an influence. This is suggested by the fact that operator interest in the 18 large-scale dairy counties in Table 15 is greater than the average for the entire sample, despite the substantially larger average size of farms in these 18 counties. This greater operator interest may reflect a reluctance on the part of landlords to invest in such farm enterprises; it may also indicate an awareness, on the part of owner operators, of the advantages of holding title to a farm even though it may be subject to heavy mortgage.

The two groups of 18 counties in Table 12 which represent large-crop farms and range livestock farms, respectively, may be compared with the 18 counties in Table 15 representing large-scale dairy farms. Selected items are assembled for ready comparison in the tabulation on the following page.

<sup>4</sup> The relatively high landlord and creditor interest in the group of large dairy farm counties may be due in part to the fact that they suffered a somewhat greater asset devaluation in the 1930's than the group of counties with smaller farms. These 36 counties have not been regrouped to equalize asset deflation for the two 18-county groups.

## PRODUCTS AND FINANCIAL ORGANIZATION

We have here three groups of 18 counties each that differ little with respect to average asset size of farm, but greatly with respect to asset and product composition and the general nature of their farming operations. Differences in operator and landlord

<i>Economic and Financial Characteristics</i>	<i>Crop Farming<sup>a</sup> (18)</i>	<i>Range Livestock Farming<sup>b</sup> (18)</i>	<i>Large- Scale Dairy Farming<sup>c</sup> (18)</i>
Physical assets per farm	\$12.5	\$12.3	\$10.7
Interest in physical assets of:			
Operators	34%	43%	52%
Landlords	42	35	24
Creditors	24	22	24
Mtgd. farms/all farms	50	40	55
Mtg. debt/value of mtgd. farms	39	35	52
Farm mtg. debt held by:			
FLB's and FFMC	47	50	44
Ins. and mtg. investment companies	31	7	8
Commercial and savings banks	6	6	12
Individuals and miscellaneous	16	37	36
Non-real-estate loans as % total non-real-estate farm assets, of:			
Banks and PCA's	17	17	9
FSA and ECFL Division of FCA	6	7	7

<sup>a</sup> "High 18" counties in Table 12.

<sup>b</sup> "Low 18" counties in Table 12.

<sup>c</sup> "Large-scale" dairy counties in Table 15.

interests in assets are of the same order as those found between groups of counties arranged according to asset-size differences, but the three groups vary but slightly in total creditor interest. Both the "crop-farming" counties and the large-scale dairy counties show a greater use of mortgage credit than the range livestock counties. The low-cropland base may explain in part the lesser use of mortgage credit in the latter counties. Moreover, the higher incidence of mortgage credit in the dairy group, as compared with the crop-farming group, may reflect the financing practices characteristic of dairying, in which owner operation tends to prevail. Owner operators may do more of their financing with mortgage credit, even for non-real-estate assets, because they own the real estate that they operate. In the crop-farming counties the operator is less likely to own the real estate and would have to borrow on some other basis. Furthermore, landlords who do not also own the livestock and equipment could offer only the real estate as security for loans. For these reasons, differences in the

PRODUCTS AND FINANCIAL ORGANIZATION

TABLE 15

ECONOMIC AND FINANCIAL CHARACTERISTICS:

*Thirty-six Counties with the Most Farm Product in Dairy Products, Grouped by Farm Asset Size*

(dollar figures in thousands)

	36 COUNTIES WITH HIGHEST PER CENT OF TOTAL VALUE OF PRODUCT IN DAIRY PRODUCT SALES, GROUPED BY FARM ASSET SIZE <sup>a</sup>	
	Large-Scale (18)	Small-Scale (18)
<i>Economic Characteristics</i>		
Physical assets per farm	\$10.7	\$4.6
Physical assets in:		
Land	42%	41%
Buildings	31	32
Non-real-estate	27	27
Cropland/total acreage <sup>b</sup>	51	34
Dwellings/ farm real estate, 1930	19	24
Farm product value, 1939:		
Crops and livestock	51	41
Dairy products	29	25
Poultry and prod. and misc.	8	9
Used by farm household	12	25
Off-farm work in days, 1939 <sup>c</sup>	36	46
Change in phys. asset value, 1930-1940	-28%	-17%
<i>Financial Characteristics</i>		
Interest in physical assets of:		
Operators	52%	65%
Landlords	24	17
Creditors	24	18
Mtgd. farms/all farms	55	32
Mtg. debt/value of mtgd. farms	52	34
Mtg. debt/value of all farms	25	14
Farm mtg. debt held by:		
FLB's and FFMC	44	43
Ins. and mtg. investment companies	8	6
Commercial and savings banks	12	12
Individuals and miscellaneous	36	39
Non-real-estate loans, as % of total non-real-estate farm assets, of:		
Banks and PCA's	9	9
FSA and ECFL Division of FCA	7	5

<sup>a</sup> Group averages are unweighted, except for physical assets per farm, which is weighted by the number of farms in the several counties.

<sup>b</sup> Cropland excludes plowable pasture.

<sup>c</sup> Per farm operator.

*PRODUCTS AND FINANCIAL ORGANIZATION*

use of real estate credit may also reflect underlying asset ownership patterns.

The data presented in Tables 10 to 15 enable us to compare the financial characteristics of large-scale crop farms and small-scale dairy farms, the former represented by the "high" 18 counties of Table 12 and the latter by the "low" 18 of Table 15. Selected indicators of financial organization for these two groups of counties are shown in the following tabulation.

<i>Financial Characteristics</i>	<i>Large-Scale Crop Farm Counties (18)</i>	<i>Small-Scale Dairy Farm Counties (18)</i>
Interests in physical assets of:		
Operators	34%	65%
Landlords	42	17
Creditors	24	18
Mtg. farms/all farms	50	32
Mtg. debt/value of mtgd. farms	39	34
Mtg. debt/value of all farms	20	14
Mtg. debt held by lender groups:		
FLB's and FFMC	47	43
Ins. and mtg. investment companies	31	6
Commercial and savings banks	6	12
Individuals and miscellaneous	16	39
Non-real-estate loans, as % of total non-real-estate farm assets, of:		
Banks and PCA's	17	9
FSA and ECFL loans	6	5

It is clear from this comparison that the large-scale crop farms are financed heavily with outside equity funds, and by real estate creditors who lend over a broad area, while the small-scale dairy farms are financed to a much greater extent with the operator's own funds and by local sources of real estate credit. In contrast to most of the comparisons presented thus far, these two groups show a substantial difference in the creditor as well as the landlord interest in assets. Two factors probably contribute to the moderate use of credit of both types in the small-scale dairy farm counties. First, many of these counties maintain an agriculture which provides a very poor base for ordinary business credit. In such counties the scale of operations is small and the proportion of total product available for sale is also small. Here, too, lending costs are likely to be high per \$1,000 of loan value. Second, capital probably is of less importance in the total production process, as compared with labor, than in other kinds of agriculture. The

## PRODUCTS AND FINANCIAL ORGANIZATION

average small-farm operator needs less capital to conduct his enterprise, with the result that a reduced demand for credit probably combines with high lending costs to cut down total credit use.

### *Farm-Home Consumption of Products*

Because so-called "subsistence farming" is in some respects a distinct type of agriculture, it is relevant to consider whether it exhibits any distinctive financial characteristics. To this end the 108 counties are grouped in Table 16 according to the proportion of total farm product represented by home consumption. It will be noted that the counties in which home consumption is highest contain farms that are small in asset size and have a relatively low proportion of acreage in cropland. Further, the farm dwellings in these counties account for a relatively large proportion of farm real estate value, and the number of days of off-farm work is somewhat higher than that in other counties.

As would be expected, the financial characteristics of farms in the 36 counties that are highest with respect to home consumption of product are much like those of the counties that are low with respect to farm asset size: that is, they exhibit high operator and low landlord and creditor interest, accompanied by somewhat lower average frequency of mortgage debt and ratio of debt to value of mortgaged farms.<sup>5</sup> Compared with the counties most remote from them in character, the subsistence farming counties depend somewhat more heavily on commercial and savings banks and individuals for mortgage credit and draw on insurance company sources to a lesser extent. Little difference is to be observed, however, in the proportion of total loans held by the federally sponsored mortgage credit agencies; the percentage is about the same for counties where home consumption of farm products is high as for those in which it is least characteristic.

Although subsistence farming does, as we have seen, account for certain differences in financial characteristics, some of these differences are less marked than when other bases of classification are employed. For example, landlord and operator interests differ little as between the "high" and "middle" groups. It will be noted also that differences between these two groups with respect to asset patterns and product composition (other than farm-home consumption) are not especially pronounced. This suggests that the financial organization of agriculture may be related more

<sup>5</sup> Both 36-county groups contain a large proportion of the same counties.

PRODUCTS AND FINANCIAL ORGANIZATION

TABLE 16

ECONOMIC AND FINANCIAL CHARACTERISTICS IN RELATION TO:  
*Percentage of Farm Product Consumed in Farm Homes,  
 108 Counties*  
 (dollar figures in thousands)

	COUNTIES GROUPED BY PERCENT- AGE OF FARM-HOME CONSUMP- TION OF FARM PRODUCT <sup>a</sup>			RATIO (%) OF HIGH 36 COUNTIES TO ALL COUNTIES
	High 36	Middle 36	Low 36	
<i>Economic Characteristics</i>				
Physical assets per farm	\$4.5	\$7.4	\$14.5	54%
Physical assets in:				
Land	50%	48%	58%	96%
Buildings	25	26	18	109
Non-real-estate	24	26	24	96
Cropland/total acreage <sup>b</sup>	34	44	44	85
Dwellings/farm real estate, 1930	20	18	12	125
Farm product value, 1939:				
Crops and livestock	52	60	78	82
Dairy products	13	17	10	100
Poultry and prod. and misc.	6	7	4	100
Used by farm household	29	16	8	161
Off-farm work in days, 1939 <sup>c</sup>	41	34	31	117
Change in phys. asset value, 1930-1940 <sup>d</sup>	-22%	-23%	-22%	100%
<i>Financial Characteristics</i>				
Interest in physical assets of:				
Operators	54%	49%	42%	113%
Landlords	26	27	34	90
Creditors	20	24	24	87
Mtg. farms/all farms	37	43	49	86
Mtg. debt/value of mtgd. farms	38	42	40	95
Mtg. debt/value of all farms	16	19	20	84
Farm mtg. debt held by:				
FLB's and FFMC	48	44	47	102
Ins. and mtg. investment companies	9	12	17	75
Commercial and savings banks	12	10	7	120
Individuals and miscellaneous	31	34	29	100
Non-real-estate loans, as % of total non-real-estate farm assets, of:				
Banks and PCA's	12	12	15	92
FSA and ECFL Division of FCA	9	9	6	113

(footnotes on next page)

## PRODUCTS AND FINANCIAL ORGANIZATION

### Footnotes to Table 16

<sup>a</sup> Group averages are unweighted, except for physical assets per farm, which is weighted by the number of farms in the several counties.

<sup>b</sup> Cropland excludes plowable pasture.

<sup>c</sup> Per farm operator.

<sup>d</sup> For comparison with data presented in the table, the percentage of total value of product represented by farm-home consumption and the change in physical assets, 1930-1940, are shown below for three groups of counties based on a straight array without reference to asset change in the 1930's.

Home consumption as per cent of value of product	<i>High</i>	<i>Middle</i>	<i>Low</i>
	30	15	8
Percentage change in physical assets, 1930-1940	-14	-27	-25

directly to asset composition and product-sale patterns than to the home use of a farm's products.

When the "high" 36 subsistence farming counties are divided into two groups according to the importance of dairy products in total sales, the "high" 18 tend to consist mainly of small-scale general farm counties of the North, and the "low" 18 mainly of small-scale crop-farming counties of the South (Table 17). The two groups of counties probably are more nearly comparable with respect to average asset-size of farm unit than the difference between \$5,100 and \$3,800 would suggest. The "low" 18 are heavily weighted with southern counties in which all tenant-operated farms (but not cropper farms) are included in the computation of average asset-size of farm. Since one landlord may have several tenant-operated farms in a tract of land that is financed as one unit, the number of "agricultural units" from the viewpoint of financing tends to be less than the number of "farms" from the viewpoint of operations. The two groups of counties do, however, show differences in operator and landlord interests that are consistent with the variations in kinds of agriculture.

Aside from the financial indicators mentioned above, we find little difference in most of them. Although the data in Table 17 are inadequate for the purpose, it probably would be found that below a given size of farm, differences in nature of assets and production exert less influence on financial organization than among larger farms. As capital needs per farm fall, financing becomes less of a commercial operation and the impact of general capital market influences may not be so pronounced. But this is a hypothesis that cannot be tested adequately with the present data.

### *Off-Farm Work*

When the 108-county sample is broken down into "thirds" according to the amount of off-farm work, it is found that the



PRODUCTS AND FINANCIAL ORGANIZATION

TABLE 17

ECONOMIC AND FINANCIAL CHARACTERISTICS:

*Thirty-six Counties with the Most Farm Product Consumed  
in Farm Homes, Grouped by Percentage of Farm Product  
in Dairy Products*

(dollar figures in thousands)

	36 COUNTIES WITH THE HIGHEST PER- CENTAGE OF FARM-HOME CONSUMPTION OF FARM PRODUCT GROUPED BY THE PERCENTAGE OF FARM PRODUCT VALUE IN DAIRY PRODUCT SALES <sup>a</sup>	
	High 18	Low 18
<i>Economic Characteristics</i>		
Physical assets per farm	\$5.1	\$3.8
Physical assets in:		
Land	48%	54%
Buildings	28	22
Non-real-estate	24	24
Cropland/total acreage <sup>b</sup>	36	31
Dwellings/farm real estate, 1930	20	19
Farm product value, 1939:		
Crops and livestock	46	59
Dairy products	20	5
Poultry and prod. and misc.	8	4
Used by farm household	26	32
Off-farm work in days, 1939 <sup>c</sup>	44	38
Change in phys. asset value, 1939-1940	-25%	-18%
<i>Financial Characteristics</i>		
Interest in physical assets of:		
Operators	59%	49%
Landlords	21	30
Creditors	20	21
Mtgd. farms/all farms	39	36
Mtg. debt/value of mtgd. farms	39	37
Mtg. debt/value of all farms	17	16
Farm mtg. debt held by:		
FLB's and FFMC	47	49
Ins. and mtg. investment companies	10	9
Commercial and savings banks	10	13
Individuals and miscellaneous	33	29
Non-real-estate loans, as % of total non-real-estate farm assets, of:		
Banks and PCA's	11	13
FSA and ECFL Division of FCA	7	8

<sup>a</sup> Group averages are unweighted, except for physical assets per farm, which is weighted by the number of farms in the several counties.

<sup>b</sup> Cropland excludes plowable pasture.

<sup>c</sup> Per farm operator.

## PRODUCTS AND FINANCIAL ORGANIZATION

counties that are relatively high in this respect do not differ greatly from those that are low as regards average assets per farm or the distribution of assets and products (Table 18). They do, however, exhibit a relatively low cropland component in total acreage. On the financial side, operator interests are relatively high, in marked contrast to the investment levels of both landlords and creditors. The interests of the latter in real estate as well as non-real-estate assets appear to be low. This last observation probably reflects the relative unattractiveness of such farm properties as loan security when compared with commercial farms and distinctly urban residences. The fact that in the counties "high" in incidence of off-farm work a larger-than-average percentage of mortgage loans was held by individuals and miscellaneous investors also suggests that these properties fail to conform readily to the standards of large-scale private institutional lenders.<sup>6</sup>

A still closer approximation to a type of agriculture that is on the borderline of the agricultural economy is achieved when the counties with the highest proportion of off-farm work are divided according to the percentage of assets represented by the farm dwelling (Table 19). The counties that are highest in this last respect may be called small-scale, part-time farming counties, and may be compared with the "low" 18 in Table 17, which have been characterized as small-scale, crop-farming counties.

The small-scale, part-time farming counties again exhibit a predominance of operator financing, supplemented by credit from local sources and only moderate use of non-real-estate credit. As might be expected, landlord interests are higher in the small-scale crop-farming counties than they are in the part-time farming group. Small-scale crop-farming counties tended to draw more heavily than the part-time farming counties on public financing facilities for both long- and short-term credit, while the part-time farming counties were distinctly more dependent on local private credit sources.

The 18 "low" counties in Table 19, characterized by high off-farm work but a low residential component of real estate assets, includes a substantial number of range livestock counties. The group as a whole, therefore, has average economic and financial

<sup>6</sup> A low cropland component of assets may help to explain this lender distribution, since other tabulations reveal a tendency for centralized, institutional lenders to be most active where the proportion of cropland to acreage is high.

PRODUCTS AND FINANCIAL ORGANIZATION

TABLE 18

ECONOMIC AND FINANCIAL CHARACTERISTICS IN RELATION TO:  
*Number of Days of Off-Farm Work per Farm Operator,*  
*108 Counties*  
*(dollar figures in thousands)*

	COUNTIES GROUPED BY NUMBER OF DAYS OF OFF-FARM WORK PER FARM OPERATOR <sup>a</sup>			RATIO (%) OF HIGH 36 COUNTIES TO ALL COUNTIES
	High 36	Middle 36	Low 36	
<i>Economic Characteristics</i>				
Physical assets per farm	\$7.6	\$7.1	\$10.0	92%
Physical assets in:				
Land	50%	51%	55%	96%
Buildings	25	24	21	109
Non-real-estate	25	25	24	100
Cropland/total acreage <sup>b</sup>	27	38	56	68
Dwellings/farm real estate, 1930	17	18	14	106
Farm product value, 1939:				
Crops and livestock	59	60	70	94
Dairy products	15	14	11	115
Poultry and prod. and misc.	8	6	5	133
Used by farm household	18	20	14	100
Off-farm work in days, 1939 <sup>c</sup>	56	32	16	160
Change in phys. asset value, 1930-1940 <sup>d</sup>	-21%	-23%	-22%	95%
<i>Financial Characteristics</i>				
Interest in physical assets of:				
Operators	56%	49%	40%	117%
Landlords	25	28	34	86
Creditors	19	23	26	83
Mtg. farms/all farms	40	42	47	93
Mtg. debt/value of mtgd. farms	36	40	42	90
Mtg. debt/value of all farms	16	18	21	84
Farm mtg. debt held by:				
FLB's and FFMC	43	50	46	92
Ins. and mtg. investment companies	7	10	20	58
Commercial and savings banks	12	11	7	120
Individuals and miscellaneous	38	29	27	123
Non-real-estate loans, as % of total non-real-estate farm assets, of:				
Banks and PCA's	11	13	15	85
FSA and ECFL Division of FCA	5	11	7	63

(footnotes on next page)

## PRODUCTS AND FINANCIAL ORGANIZATION

### Footnotes to Table 18

<sup>a</sup> Group averages are unweighted, except for physical assets per farm, which is weighted by the number of farms in the several counties.

<sup>b</sup> Cropland excludes plowable pasture.

<sup>c</sup> Per farm operator.

<sup>d</sup> Comparable data for number of days of off-farm work in 1939 and asset change, 1930-1940, based on a straight array of the counties, are given below:

	<i>High</i>	<i>Middle</i>	<i>Low</i>
Off-farm work per farm operator (in days), 1939	58	33	16
Percentage change in physical assets, 1930-1940	-19	-26	-22

characteristics similar to those of the 18 "low" counties of Table 12, which are still more heavily weighted with this type of agriculture. The composition of these 18 counties indicates that off-farm work is not sufficiently well correlated with other economic characteristics of agriculture to provide a clear-cut differentiation of patterns of farm financing.

### *General Observations*

The comparisons presented thus far serve mainly to identify broad patterns of relationships between the financial organization of agriculture and its economic characteristics. The data set forth in this and the preceding chapter suggest fairly clear patterns of association between asset and product characteristics, on the one hand, and the extent of dependence on operator and landlord investment, on the other. They do not, however, indicate that the use of farm credit varies consistently with differences in farm assets and products. The lack of correspondence among groups of counties with respect to the relative importance of real estate and non-real-estate credit suggests that variations in farm credit use and in the terms on which credit is acquired by farms may be very great—so great, indeed, that creditor interest may be too heterogeneous to be meaningful.

The classifications in this and in earlier chapters indicate that certain characteristics of agriculture are associated with varying levels of activity on the part of particular lender groups. Such evidence as has been adduced, however, is largely a by-product of the grouping of counties by major asset and product classifications. This indirect method of analysis does not appear to be best adapted to a study of those agricultural patterns that are associated with high and low creditor interests as such, or of those in which different kinds of credit appear to be used more or less

PRODUCTS AND FINANCIAL ORGANIZATION

TABLE 19

ECONOMIC AND FINANCIAL CHARACTERISTICS:

*Thirty-six Counties with Most Off-Farm Work per Farm Operator, Grouped by Importance of Farm Dwelling in Total Farm Real Estate Value*

*(dollar figures in thousands)*

	36 COUNTIES WITH MOST OFF-FARM WORK PER FARM OPERATOR, GROUPED BY IMPORTANCE OF FARM DWELLING IN TOTAL FARM REAL ESTATE VALUE <sup>a</sup>	
	High 18	Low 18
<i>Economic Characteristics</i>		
Physical assets per farm	\$6.4	\$10.1
Physical assets in:		
Land	38%	61%
Buildings	36	14
Non-real-estate	26	25
Cropland/total acreage <sup>b</sup>	35	19
Dwellings/farm real estate, 1930	25	9
Farm product value, 1939:		
Crops and livestock	55	72
Dairy products	23	9
Poultry and prod. and misc.	11	5
Used by farm household	21	14
Off-farm work in days, 1939 <sup>c</sup>	62	52
Change in phys. asset value, 1930-1940	-18%	-24%
<i>Financial Characteristics</i>		
Interest in physical assets of:		
Operators	64%	50%
Landlords	18	30
Creditors	18	20
Mtgd. farms/all farms	41	39
Mtg. debt/value of mtgd. farms	36	36
Mtg. debt/value of all farms	16	16
Farm mtg. debt held by:		
FLB's and FFMC	34	49
Ins. and mtg. investment companies	6	8
Commercial and savings banks	18	6
Individuals and miscellaneous	42	37
Non-real-estate loans, as % of total non-real-estate farm assets, of:		
Banks and PCA's	9	13
FSA and ECFL Division of FCA	4	7

<sup>a</sup> Group averages are unweighted, except for physical assets per farm, which is weighted by the number of farms in the several counties.

<sup>b</sup> Cropland excludes plowable pasture.

<sup>c</sup> Per farm operator.

*PRODUCTS AND FINANCIAL ORGANIZATION*

extensively in the capital structure of agriculture. In order to explore further the ways in which creditor participation may be related to various aspects of farm economic organization, we shall, in the two following chapters, proceed with the analysis of our 108-county sample by classifying counties according to selected indicators of farm credit use.