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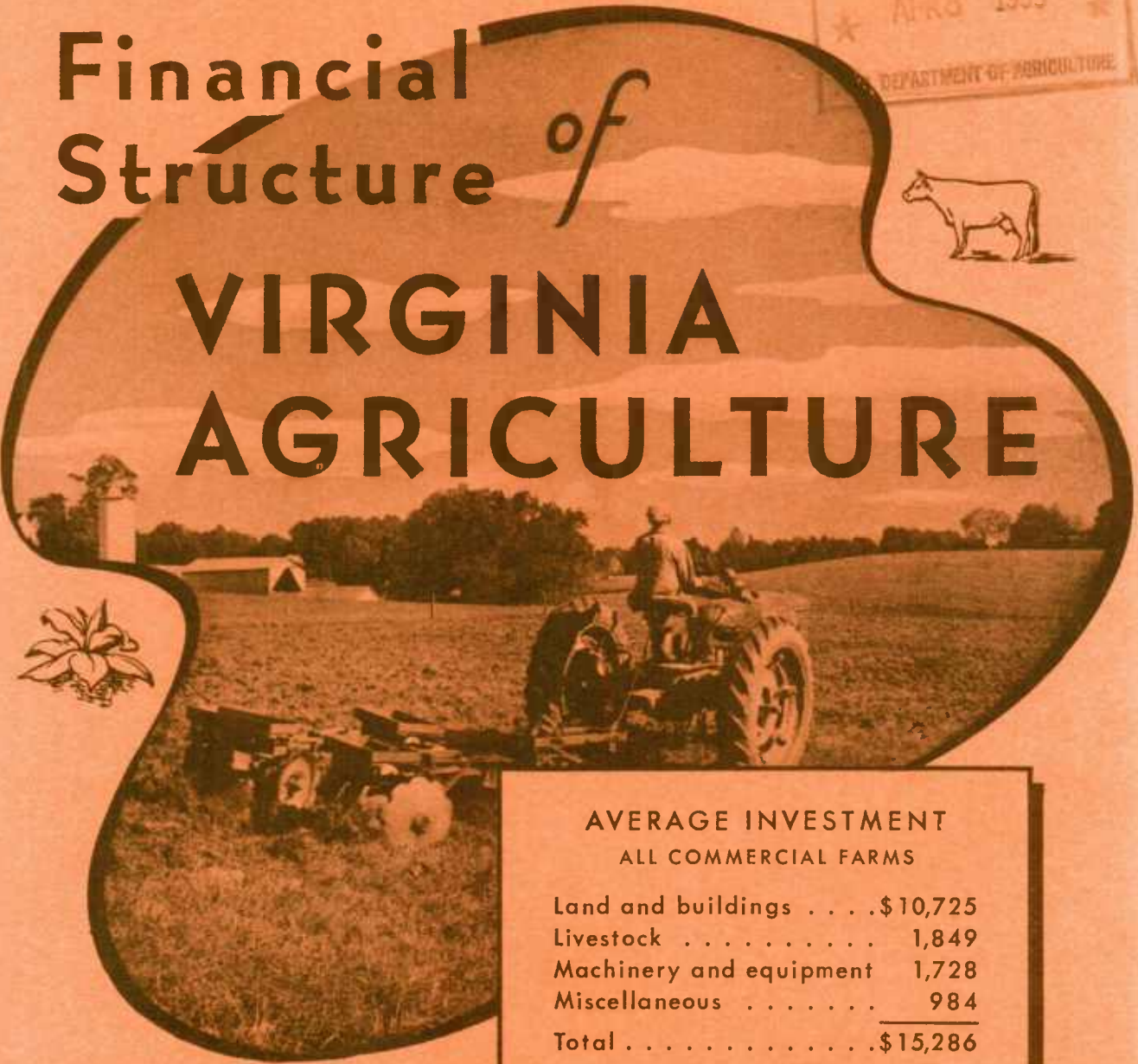
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DEPARTMENT OF AGRICULTURE

# Financial Structure

of

# VIRGINIA AGRICULTURE



AVERAGE INVESTMENT ALL COMMERCIAL FARMS	
Land and buildings . . . . .	\$10,725
Livestock . . . . .	1,849
Machinery and equipment . . . . .	1,728
Miscellaneous . . . . .	984
Total . . . . .	<u>\$15,286</u>

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## SUMMARY AND MAIN CONCLUSIONS

Although a majority of farms in Virginia are commercial farms, as defined by the census, a third or more are part-time and residential farms.

On the average, commercial farms are more than twice as large and more intensively operated than are part-time and residential farms. However, because they receive much larger incomes from off-farm sources, the operators of part-time and residential farms have total net incomes that average almost as large as those of commercial farmers.

Although part-time and residential farms are important sources of income for many families, they account for only a small part of the agricultural production of the State. For this reason, this report deals chiefly with commercial farms and farmers.

In any type of farming, both gross and net farm incomes of commercial farmers in Virginia are closely related to the amount of capital employed in their operations. However, to produce any given amount of gross or net income, a good deal more capital is required in livestock and dairy farming than in tobacco or peanut farming, which have more intensive labor requirements.

In 1949, the average investment per commercial farm in land, buildings, livestock, machinery, crop inventories, and supplies was more than \$26,000 for livestock farms, nearly \$22,000 for dairy farms, about \$9,000 for tobacco farms, nearly \$10,000 for peanut farms, and about \$14,000 for other types of farms. For all commercial farms, the average investment was about \$15,000.

Most of the commercial farms in Virginia, however, involved investments of less-than-average size. More than a fifth of them involved investments of less than \$5,000, and a third involved investments of only \$5,000 to \$9,999. Moreover, nearly three-fifths of the commercial farms contained less than 100 acres and, in 1948, nearly two-thirds produced gross cash receipts of less than \$2,500.

Small-scale farming is found to such an extent in Virginia because physical conditions are favorable to tobacco and peanut farming, which are typically small-scale, and also because of financial factors and business practices as follows:

1. In 1949 nearly a third of the commercial farmers of Virginia had net worths below \$5,000, and more than a fourth had net worths of only \$5,000 to \$9,999. With their small net worths, these farmers were confined to small-scale operations unless they borrowed or leased most of the capital used in their operations.
2. As a rule, however, farmers with small net worths did not borrow or lease most of the capital used in their operations. Even among farmers whose net worths were below \$5,000 in

1949, only two-fifths were tenants; and among those whose net worths were \$5,000 to \$9,999, only 1 in 12 were tenants. Moreover, more than three-fifths of those whose gross cash farm receipts were less than \$2,500 in 1948 reported that they were using no borrowed capital in mid-1949. Of the total capital employed by the small operators in 1949, only about 5 percent was borrowed and about 15 percent was leased. The remainder of the capital, approximately 80 percent, was supplied by these operators from their own net worths.

In 1948 average net cash farm receipts of commercial farmers in Virginia ranged from a little more than \$600 for those whose gross cash farm receipts were below \$2,500 to nearly \$6,000 for those whose gross cash farm receipts were \$10,000 or more. Because of the predominance of small-scale farms, average net cash farm receipts for all commercial farmers were only about \$1,300.

When off-farm income and the value of home-consumed products are added to net cash farm receipts, the average total net income of commercial farmers increased to about \$2,135.

At all age groups, tenants earned, on the average, nearly as much from their farming operations as did owner-operators, although their net worths were only a fourth to a fifth as large as those of owner-operators.

Nearly three-fifths of the operators of commercial farms reported no debts at mid-1949; and the frequency of debt was less among operators of small farms than among operators of large farms. Only 6 percent of the commercial farm operators had debts that amounted to 30 percent or more of the value of their assets.

Banks are the principal single source of non-real-estate credit for farmers who operate farm assets valued at \$5,000 or more, whereas merchants and dealers are the principal source for farmers who operate farm assets of lesser value. However, regardless of the value of the farm assets they operate, Virginia farmers obtain loans from several sources. These sources include banks, production credit associations, merchants and dealers, and private lenders, including other farmers. The Farmers Home Administration serves chiefly the small farmers.

Banks also appear to be the principal single source of real estate credit for all groups of Virginia farmers, except those who operate farm assets valued at less than \$5,000. For the latter, nonfarm individuals are the principal source. Other sources of these smaller farmers, in order of importance, are miscellaneous lenders (including merchants and dealers), banks, and other farmers.

As would be expected, large-scale commercial farmers own larger amounts of liquid financial reserves and other nonfarm assets than do small-scale farmers. Such assets are also a larger percentage of the total assets of large-scale than of small-scale farmers. However, non-farm assets averaged in 1949 only about 15 percent of the total assets of the large-scale farmers. Many of the small-scale farmers reported that they owned no financial reserves or other nonfarm assets.

Only 23 percent of the farm operators in Virginia who had net worths below \$5,000 were depositors of banks, compared with 50 percent of those who had net worths of \$5,000 to \$9,999 and 100 percent of those who had net worths of \$50,000 or more. Operators who were not bank depositors had, on the average, only small amounts of liquid reserves.

The large-scale commercial farmers had more life insurance than did the small-scale operators, and they were more frequently insured. The percentages of farmers insured increased from about 45 percent of those who operated farm assets valued at less than \$5,000 to more than 80 percent of those who operated farm assets valued at \$50,000 or more. The average amount of life insurance per insured farmer varied from about \$350 for the smallest-scale operators to more than \$9,000 for the largest-scale operators.

The main conclusions suggested by the study are as follows:

(1) The chief weakness in the financial structure of Virginia agriculture is the large number of commercial farmers who operate on a scale too small to produce an adequate income. For the most part, the financial condition of medium- and large-scale operators is good. Their incomes are larger, their debts are moderate in relation to the value of their assets, and many have accumulated substantial financial reserves.

(2) As would be expected, most small-scale farmers have little in the nature of liquid financial reserves. Probably they are wise to use virtually all funds they can accumulate to increase their livestock and machinery and to improve their farms. But some medium- and large-scale operators also have small financial reserves. Although modern farming methods have increased the cash costs of farming, apparently these operators could strengthen their financial positions by accumulating larger financial reserves to serve as a buffer against possible declines in farm income.

(3) The problems of small-scale operators arise from many sources, but the only ones touched upon in this report are low income, small net worth, little use of credit, and an apparent aversion to operating as tenants. Low income makes it difficult for these farmers to build up their net worths. It limits their ability, and probably also their desire, to borrow capital. Their aversion to operating as tenants, combined with their small net worths and limited use of credit, confines them to farming operations that involve little capital investment and produce little income.

(4) This circle of relationships, which for many appears to be a closed circle, might be broken in various ways. Adoption of improved farming systems that give year-round productive employment to the farmer would help in many cases, but would probably require more capital or more credit. Use of more borrowed capital, combined when necessary with assistance in planning operations, would enable many to improve their situations. It would help also if the conditions of tenancy could be changed to make tenant operation more attractive to farmers with limited capital. This study indicates that many small-scale operators could increase their incomes substantially by investing their small capital more largely in livestock and machinery and operating as tenants of larger farms, instead of buying small farms.



## FINANCIAL STRUCTURE OF VIRGINIA AGRICULTURE <sup>1/</sup>

By Fred L. Garlock and Malcolm E. Wallace, Agricultural Economists, Bureau of Agricultural Economics; Russell W. Bierman, Agricultural Economist, Federal Reserve Bank of Richmond; and Harry M. Love, Head, Department of Agricultural Economics and Rural Sociology, Virginia Polytechnic Institute

### INTRODUCTION

Following World War II, Virginia farms underwent a rapid transformation. As wartime shortages disappeared, farmers bought new automobiles and motortrucks, replaced worn-out tractors and equipment, and repaired run-down buildings. In addition, they built many new homes and service buildings, made large expenditures for household furnishings and equipment, and greatly increased their inventories of power equipment.

This improvement, or "dressing up," of farms was accompanied by other changes. Many returned veterans reestablished themselves in farming; numerous changes in ownership of farms occurred as tenants, veterans, and others bought farms or enlarged their holdings; new dairy farms were established as the Washington, D. C., milkshed spread farther south and west; and many new rural residences and part-time farms were established by workers in towns and cities.

For the most part, farmers and others who established themselves on farms, could do these things because they had accumulated sizable reserves of cash and savings bonds during the war and because farm and other income rose rapidly as prices and wages increased following the war. However, many found it necessary to borrow, and the agricultural loans of banks and other lenders in Virginia moved rapidly upward. During the 3 years following January 1, 1946, the farm-mortgage debt in Virginia increased 35 percent and the non-real-estate debt of farmers to banks and federally sponsored agencies increased 75 percent.

Because of extensive changes in agriculture during the early post-war years, a need was felt for a study of the ways in which these changes had affected the financial condition of farmers. The desirability of such a study was discussed in the summer of 1948 by representatives of the Virginia Polytechnic Institute and the Bureau of Agricultural Economics, United States Department of Agriculture. Farm prices and incomes

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<sup>1/</sup> Special acknowledgment is due to W. M. Early, Jr., formerly Chairman of the Committee on Agriculture, and Marchant D. Wornom, formerly Secretary of the Virginia Bankers Association; Edward A. Wayne, Vice President, and Stuart P. Fishburne, of the Federal Reserve Bank of Richmond; James R. Austin of the Virginia Polytechnic Institute; Lawrence A. Jones of the Bureau of Agricultural Economics; and Richard G. Schmitt, Jr., formerly of the Bureau of Agricultural Economics, United States Department of Agriculture. Mr. Austin had primary responsibility for editing, tabulating, and analyzing the data until his graduation in June 1950.

were already declining from their postwar peaks but farm costs were still moving upward. It appeared that a price readjustment might be starting which would bring about conditions less favorable for farmers. Of particular interest were the extent to which farmers still held liquid financial reserves after their recent large expenditures for farm and home improvements and the extent to which they were assuming debts that might prove burdensome. A study of these points could also be broadened to throw light on the current cost of acquiring and operating farms and to provide other information in which interest was widespread, such as the importance of nonfarm income to farmers and the ways in which farmers financed their operations.

Following this discussion, further consideration was given at the Virginia Polytechnic Institute to the value and costs of such a study. It appeared that results of the study would be of value to banks, as well as to others. As the banks of the State were active in their support of agriculture, it was decided to ask the Virginia Bankers Association to cooperate in making a survey of Virginia farmers. Officials of the association expressed interest in the information that would be provided by the survey and agreed to help organize and conduct it. The Federal Reserve Bank of Richmond and the Bureau of Agricultural Economics were also asked to cooperate.<sup>2/</sup> Plans for the survey were developed during the following months and the survey was formally launched in March 1949, at the annual Bankers Farm Credit Conference at Natural Bridge, Va.<sup>3/</sup>

Preliminary results of the survey were presented at the annual Bankers Farm Credit Conference in March 1950. As work on the data proceeded, other reports were prepared. These included a thesis for the Master of Science degree at Virginia Polytechnic Institute by James R. Austin, entitled "Financial Status of Virginia Farmers" and an article by Malcolm E. Wallace entitled "Financial Survey of Virginia Agriculture," which appeared in the November 1950 issue of the Agricultural Finance Review.

Results of the survey that pertain to agricultural resources such as land, farm buildings, livestock, machinery, crops, and miscellaneous supplies on farms, cover all farms of the State except manager-operated farms. However, the data presented on the financial condition and incomes of farmers cover only the operators of farms. To be considered an operator, a person had to operate a place that would meet the census specifications for a farm; in addition, he had to own at least part of the land, livestock, or machinery used in the operation and to share in

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<sup>2/</sup> The Federal Reserve Bank of Richmond cooperated in the survey in line with its policy of assisting the banks of its district, and the Bureau of Agricultural Economics because of its interest in the survey as a pilot study which might lead to similar surveys in other States.

<sup>3/</sup> An explanation of the organization of the project may be found in the July 1950 issue of Banking in an article entitled "How One State Inventoried Agriculture," by W. M. Early, Jr., who at that time was Chairman of the Committee on Agriculture of the Virginia Bankers Association. See also Appendix.



the management of the farm. These requirements are presumed to have excluded hired managers of farms, hired laborers on farms, and sharecroppers, as well as nonoperating owners of farms.

In presenting the results of this survey, chief emphasis is placed on differences in the capital structures of various types and sizes of farms and on the financial condition of the farm operators. Information of this type is not available in census reports or in other sources of agricultural data. In addition, the report shows how the agricultural resources of Virginia are divided among various economic classes of farms and discusses several points concerned with the financing of farms and the investment practices of farmers.

FARM RESOURCES - TYPES AND OWNERSHIP

At midyear 1949, the farms of Virginia, excluding manager-operated farms, were valued at slightly more than 2 billion dollars, as shown by the following tabulation:

<u>Item</u>	<u>Value</u>
	<u>Million</u> <u>dollars</u>
Farm resources:	
Land and buildings-----	1,434
Machinery and equipment-----	220
Livestock-----	223
Miscellaneous-----	<u>137</u>
Total-----	<u>2,014</u>
Claimants:	
Creditors:	
Real estate debt-----	90
Non-real-estate debt-----	46
Nonoperating owners:	
Equity in property leased to operators-----	233
Operating owners:	
Equity in property leased to other operators-----	47
Equity in property operated personally-----	<u>1,598</u>
Total-----	<u>2,014</u>

The total valuation includes real estate, machinery, equipment, livestock, and miscellaneous assets on farms. It does not include the value of crops under cultivation at the time of the survey.

Real estate was the principal agricultural asset. Farm land and buildings were valued at more than 1.4 billion dollars, or about 71 percent of the total for all farm properties. Machinery and equipment,

worth approximately 220 million dollars, constituted 11 percent of the total, and livestock, valued at about 223 million, represented 11 percent. Miscellaneous assets made up the remaining 7 percent.

Most of these agricultural assets were owned by the farm operators themselves. Their equities amounted to more than 1.6 billion dollars (including ownership of 47 million dollars' worth of farm assets they leased to fellow farmers) at midyear 1949. Equities of nonoperating owners (that is, the value of farm properties they leased to operators minus debts against these properties) came to about 233 million dollars, or approximately 12 percent of the total valuation. Farm debts of approximately 136 million dollars made up the remaining claim against the farm assets; these claims of creditors amounted to 7 percent of the total valuation of farm property.

Agricultural Production of Virginia Farm Operators

From the production achieved with the farm assets they employed, Virginia farm operators reported that they sold more than 372 million dollars' worth of agricultural products during 1948. In addition, operators estimated that they had consumed at home 68 million dollars' worth of farm products. Thus, the gross agricultural production reported by Virginia farm operators amounted to more than 440 million dollars, as shown in the following tabulation:

<u>Item</u>	<u>Amount</u>
	<u>Million dollars</u>
Gross cash farm receipts <u>1/</u> -----	372
Value of home-consumed products-----	68
Total gross farm income-----	<u>440</u>
Cash farm expenses-----	<u>229</u>
Total net farm income-----	<u>211</u>
Nonfarm cash income-----	<u>122</u>
Total net income-----	333

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1/ Data do not include agricultural conservation program payments.

The amount of the gross farm income may be an understatement, as independent estimates made by the Bureau of Agricultural Economics indicate that 1948 sales of products from Virginia farms (reduced 4 percent to eliminate sales from manager-operated farms) brought 422 million dollars. With home consumption added, this would give a total agricultural production worth nearly half a billion dollars for the farms covered by the survey.<sup>4/</sup>

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<sup>4/</sup> In this survey, as in other enumerative surveys, apparently there was considerable underreporting of income by the respondents. For this reason the income data should be regarded with caution. These data may be thought of as general indicators, rather than precise measures, of what the operators actually earned. However, part of the difference between the sales reported by respondents in this survey, and the sales estimated independently by the Bureau of Agricultural Economics, may be attributed to tenants who reported only their share of the proceeds from the crops they produced.

Cash Farm Expenses and Net Agricultural Income

From the gross farm income it is necessary to subtract approximately 229 million dollars of farm expenses reported by the operators. This would leave a net farm income of 211 million dollars - 143 million in cash and 68 million in farm produce.

A net farm income of 211 million dollars represents a little more than 10 percent of the value of the farm assets that produced it, but such a comparison would be misleading if presented as earnings on the farm assets alone. Farm income is both a return on the capital employed and a payment for the farmer's labor, and usually the labor of some family members.

Other Income of Virginia Farm Operators

In addition to their agricultural income, Virginia farmers also received substantial income from off-farm sources. For 1948 they reported approximately 122 million dollars of off-farm earnings. Combined with the farm incomes they reported, this indicates a total net income of about 333 million dollars.

Financial Condition of Virginia Farm Operators

Recipients of this income were, as a group, in relatively good financial condition at midyear 1949. Total assets of Virginia farm operators amounted to about 2.1 billion dollars. With a total indebtedness of only 136 million dollars, their combined net worth was almost 2 billion dollars.

Farm properties made up the bulk of the operators' assets, as shown in the following tabulation:

<u>Item</u>	<u>Value</u> <u>Million dollars</u>
Assets: 1/	
Farm-operated:	
Land and buildings-----	1,176
Machinery and equipment-----	209
Livestock-----	212
Miscellaneous farm assets-----	131
Total farm-operated assets-----	<u>1,728</u>
Other assets:	
Farm property leased to others-----	47
Liquid financial assets-----	209
Other nonfarm assets-----	105
Total other assets-----	<u>361</u>
Total assets-----	<u>2,089</u>
Liabilities: 1/	
Farm real estate debt-----	85
Other farm debt-----	46
Nonfarm real estate debt-----	5
Total debt-----	<u>136</u>
Net worth-----	<u>1,953</u>
Total liabilities-----	<u>2,089</u>

1/ Includes only the assets and liabilities of farm operators, whereas the tabulation on page 7 covers all farm assets and all claims thereto.

The owned part of the farm-operated assets was valued at about 1.7 billion dollars. Operators also owned 47 million dollars' worth of other farm properties which they leased to fellow farmers. In addition, they reported owning liquid financial assets of about 209 million dollars, and other nonfarm assets, such as town real estate, nonfarming enterprises, and the like, of about 105 million dollars.

Against these assets only a relatively small amount of debt was outstanding. Farm real estate mortgages amounted to approximately 85 million dollars, "short-term" farm debts totaled 46 million dollars, and nonfarm mortgages about 5 million dollars. Thus the aggregate debt of Virginia farm operators amounted to approximately 136 million dollars, or less than one-fifteenth of the value of their assets.

### Definitions of Economic Classes of Farms

This brief, over-all picture of the agricultural industry of Virginia and of the earnings and financial condition of Virginia farm operators is useful for many purposes, but it gives no clue to the wide diversity of conditions found among different classes of farms and among individual farms and operators. The remainder of this report deals chiefly with these differences.

The basic economic classification of farms used hereafter is as follows: (1) Commercial farms, (2) part-time farms, and (3) residential units. Commercial farms are mainly those from which gross farm sales of at least \$1,200 were reported. However, they include farms from which sales of only \$250 to \$1,199 were reported when the operator's principal income was derived from his farming operations. Part-time farms are those from which gross farm sales of between \$250 and \$1,200 were reported but whose operators did not receive their principal income from farming operations. Residential units are those from which gross farm sales of less than \$250 were reported.

It seemed advisable, also, to subdivide commercial farms into two groups: (1) Commercial A farms operated by those whose income was almost exclusively from the farm (that is, operators reporting off-farm earnings of less than \$250), and (2) commercial B farms operated by those reporting earnings of \$250 or more from off-farm sources. As shown later, commercial B farms on the average are considerably larger and more valuable, and are operated by persons of greater means, than are commercial A farms.

### Dominance of Commercial Farming in Virginia<sup>5/</sup>

Commercial A farms are by far the more important class of farms in Virginia. They included 52 percent of all farms, 65 percent of the acreage, and 58 percent of the value of farm assets represented in the

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<sup>5/</sup> The results of the survey apparently overstate to some extent the importance of commercial farms in Virginia. Approximately 67 percent of the farms represented in the survey were classified as commercial farms, whereas the 1950 Census of Agriculture classified only 52 percent as commercial.

Some of the discrepancy arises from the fact that the survey determined the economic classification of farms on the basis of 1948 farm sales, whereas the 1950 census determined it on the basis of 1949 farm sales. As 1948 sales were greater than those in 1949 (by about 28 million dollars), a considerable number of farms which would have qualified as small-scale commercial farms on the basis of the 1948 sales used in the survey, failed to do so on the basis of the 1949 sales used by the census.

survey (table 1). But the most striking preeminence of commercial A farms was in agricultural production. These farms accounted for 71 percent of gross agricultural production by all farms represented in the survey. If home-consumed production is excluded, and only sales in the market are considered, the share from commercial A farms was 74 percent.

Most of the remainder of Virginia's agricultural production came from the other group of commercial farms, the commercial B farms. These farms, 15 percent of the total number represented in the survey, accounted for 22 percent of the gross agricultural production and of sales in the market. These commercial B farms contained 20 percent of the acreage and 24 percent of the value of farm assets represented in the survey.

Table 1.- Percentage distribution of farms operated, farm assets, cash receipts, and farm production, by classes of farms, Virginia 1/

Class of farm	Mid-1949			1948	
	Farms operated	Value of farm assets	Acreage operated	Gross cash receipts	Farm production
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Commercial A-----	52	58	65	74	71
Commercial B-----	15	24	20	22	22
All commercial-----	67	82	85	96	93
Part-time-----	12	9	7	3	4
Residential-----	21	9	8	1	3
All farms-----	100	100	100	100	100

1/ Excluding manager-operated farms.

#### Relative Position of Part-Time Farms and Residential Units

As the two groups of commercial farms together produced 93 percent of the total agricultural output and made 96 percent of the farm sales, it is clear that the part-time farms and residential units were of minor significance from the standpoint of Virginia's total agricultural production. However, they included about a third of the total number of farms, about 18 percent, by value, of the farm resources, and 15 percent of the acreage of all farms represented in the survey.

Although the aggregate agricultural production of the noncommercial farms was relatively unimportant in comparison with the total output of the commercial farms, farm products raised on the part-time and residential units were of considerable significance to many operators. Home-consumed products produced on these noncommercial farms in 1948 were

reported as worth about 17 million dollars, and from their gross farm sales of about 12 million dollars the operators reported net cash receipts of a little more than 3 million dollars. Although most of the noncommercial operators conducted their farming activities as a side line to their off-farm interests, or lived on their farms in retirement, nevertheless their reported net income from farming totaled 20 million dollars. Considering both home-consumed products and sales in the market, the reported net income from farming operations averaged approximately \$611 for part-time farms and \$279 for residential units.

### Consolidated Balance Sheet and Income Statement, by Operator Classes

The financial condition and income of the various operator groups are shown in aggregate amounts in tables 2 and 3. These aggregate figures reemphasize the predominant position of the two commercial farmer groups in the agricultural industry of Virginia.

### CHARACTERISTICS OF VARIOUS CLASSES OF FARMS AND OPERATORS

Farms of the various economic classes varied widely in average size, value of production, and value of farm assets operated (table 4). Commercial B farms led in all three respects, but commercial A farms followed closely in acreage and value of production. Part-time and residential farms were a great deal smaller than commercial farms. They had assets of much lower value than those employed in commercial farming, and the value of their production was only a fourth and a tenth, respectively, of that of the commercial farms.

### Intensity of Operation

Commercial farms were operated more intensively than part-time and residential farms (table 5). The average value of production per acre for commercial farms was about \$30. Part-time farms averaged only \$17 an acre, and residential farms only \$10 an acre. As shown in table 4, most of the production of residential farms was for home consumption rather than for sale.

Still greater differences among the economic classes of farms were reflected by the value of production per \$100 of farm assets operated. These differences were due partly to the differences in value of production per acre but they also resulted partly from other causes. For commercial farms, it is probable that the average value of the buildings, particularly residences, was considerably higher in relation to the acreage and value of the land on commercial B than on commercial A farms. The value of buildings was also relatively high on part-time and residential farms - the residence alone often represented a large part of the total investment. Moreover, it is probable that the part-time and residential farms were located closer to towns and cities than were commercial farms (no data were collected on this point) and that the per-acre land

values of these farms were higher than those of commercial farms. In any event, part-time and residential farms produced far less income, in relation to value of the farm assets operated, than did commercial farms, and commercial B farms produced relatively less income than commercial A farms.

Table 2.- Assets and liabilities of farm operators,  
by class of operator, Virginia, mid-1949 1/

Item	Operators				
	Commercial		Part- time	Resi- dential	All
	A	B			
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
<b>Assets:</b>					
<b>Farm-operated:</b>					
Land and buildings-----	652	290	108	126	1,176
Machinery and equipment-----	117	60	16	16	209
Livestock-----	135	54	12	11	212
Miscellaneous farm assets---	70	33	14	14	131
<b>Total farm-operated-----</b>	<b>974</b>	<b>437</b>	<b>150</b>	<b>167</b>	<b>1,728</b>
<b>Other assets:</b>					
Farm property leased to others-----	17	18	7	5	47
Liquid financial assets-----	89	83	21	16	209
Other nonfarm assets-----	22	47	16	20	105
<b>Total other assets-----</b>	<b>128</b>	<b>148</b>	<b>44</b>	<b>41</b>	<b>361</b>
<b>Total assets-----</b>	<b>1,102</b>	<b>585</b>	<b>194</b>	<b>208</b>	<b>2,089</b>
<b>Liabilities:</b>					
Farm real estate debt-----	41	28	8	8	85
Other farm debt-----	27	15	2	2	46
Nonfarm real estate debt-----	1	2	1	1	5
<b>Total debt-----</b>	<b>69</b>	<b>45</b>	<b>11</b>	<b>11</b>	<b>136</b>
<b>Net worth of operators-----</b>	<b>1,033</b>	<b>540</b>	<b>183</b>	<b>197</b>	<b>1,953</b>
<b>Total liabilities-----</b>	<b>1,102</b>	<b>585</b>	<b>194</b>	<b>208</b>	<b>2,089</b>

1/ Excluding managers.



Table 3.- Income of farm operators, by class of operator, Virginia, 1948 1/

Item	Operators				
	Commercial		Part-time	Residential	All
	A	B			
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
Gross cash farm receipts-----	277	83	10	2	372
Value of home-consumed products-----	39	12	7	10	68
Total gross farm income-----	316	95	17	12	440
Cash farm expenses-----	170	50	6	3	229
Total net farm income-----	146	45	11	9	211
Nonfarm cash income-----	2	39	36	45	122
Total net income-----	148	84	47	54	333

1/ Excluding managers.

Table 4.- Average acreage, value of agricultural production and farm assets operated, per farm, by class of farm, Virginia 1/

Class of farm	Average acreage	Average value of agricultural production			Average value of farm assets operated
		Products sold	Products consumed in home	Total	
	Acres	Dollars	Dollars	Dollars	Dollars
Commercial A-	122	3,324	464	3,788	13,910
Commercial B-	128	3,385	486	3,871	19,948
Part-time----	53	556	377	933	9,720
Residential--	37	69	313	382	5,522

1/ Value of agricultural output, 1948; acreage and value of farm assets operated, mid-1949.

Table 5.- Average value of agricultural production per acre and per \$100 of farm assets operated, by class of farm, Virginia 1/

Class of farm	Value of agricultural production per -	
	Acres	\$100 of farm assets operated
	Dollars	Dollars
Commercial A-----	31	27
Commercial B-----	30	19
Part-time-----	17	10
Residential-----	10	7

1/ Value of agricultural production, 1948; acreage and value of farm assets operated, mid-1949.

Incomes of Operators

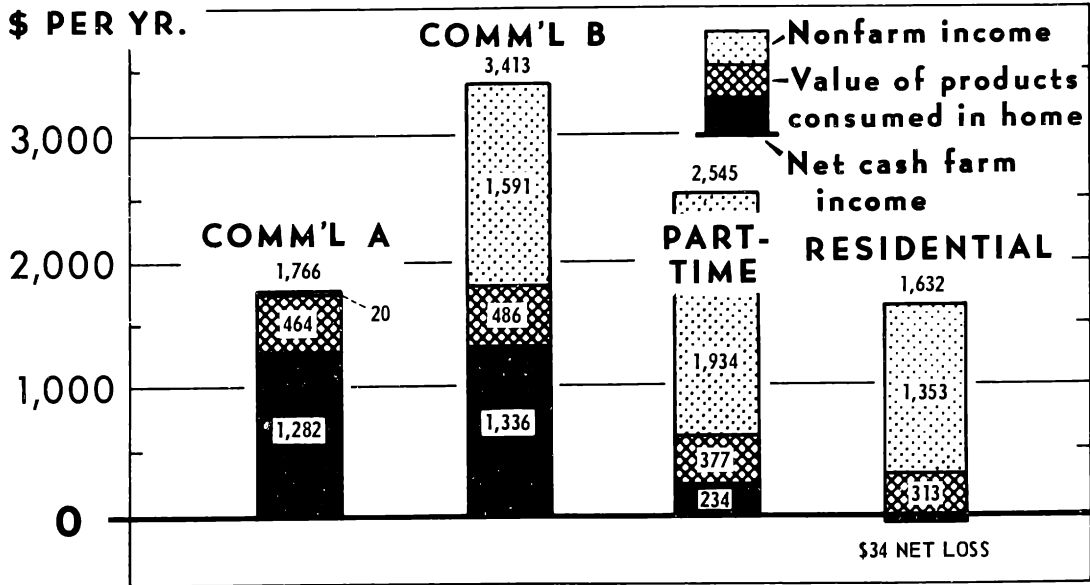
Although production on noncommercial farms was low, the operators of these farms did not have proportionately low total net incomes (table 6 and fig. 1). On the contrary, results of the survey indicate that they earned, on the average, almost as much as the commercial farmers. The total net income of residential farmers averaged \$1,632 and that of part-time farmers \$2,545, making the average for all noncommercial farmers, \$1,959. This compares with \$2,141 for all commercial farmers. However, commercial B farmers had the largest net incomes. They were followed in order by part-time, commercial A, and residential farmers.

Table 6.- Average net income of farm operators, by class of operator and source, Virginia, 1948

Class of operator	Net cash receipts	Value of products consumed in home	Nonfarm income				Total net income
			Work for other farmers	Work for others	Other sources	Total	
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Commercial A----	1,282	464	6	7	7	20	1,766
Commercial B----	1,336	486	121	966	504	1,591	3,413
Part-time-----	234	377	36	1,656	242	1,934	2,545
Residential-----	-34	313	32	1,112	209	1,353	1,632

# AVERAGE NET INCOME OF FARM OPERATORS

By Class of Operator and by Source, Virginia, 1948



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Figure 1.- Of the four classes of farmers, commercial B farmers had the largest net incomes. They were followed, in order, by part-time farmers, commercial A farmers, and residential farmers. The relatively large net incomes of commercial B farmers resulted from the fact that they had more farm income than any other class and they also had substantial off-farm income. Commercial A farmers had almost as much agricultural income as did commercial B farmers but they had virtually no other income. Part-time and residential farmers received most of their incomes from jobs in towns and cities.

The income sources of the various operator classes reflect the way in which these classes were defined. The earnings of commercial A operators had to be almost exclusively agricultural, as by definition no operator was included in this class if he earned as much as \$250 from off-farm sources. Similarly, incomes of residential operators had to be primarily nonagricultural, as no operator was included in this class if he sold as much as \$250 worth of farm products. Part-time operators also by definition had to receive most of their income from off-farm sources.

The relatively large incomes of commercial B farmers resulted from the fact that they had more agricultural income than any other class and they also had substantial off-farm income. Earnings from

"other sources," which were mainly businesses, professions, and investments, were larger for commercial B farmers than for any other class. Commercial A farmers had almost as much agricultural income as did commercial B operators but they had virtually no other income. Part-time and residential farmers received most of their income from jobs in towns and cities. Among such operators were bus drivers, clerks, policemen, teachers, millworkers, salesmen, fishermen, and others. Most of the off-farm income of residential farmers not obtained from jobs with commercial or governmental agencies was received from pensions, relief funds, and gifts, although considerable amounts were received as dividends, rents, and interest.<sup>6/</sup>

Average Financial Condition of Different Classes of Operators

Because of differences in the value of the farms they operated - and in the relative importance of farming to their total economic activities - the financial characteristics of the operators of different classes of farms differed considerably (table 7).

Table 7.- Average assets and liabilities of farm operators, by class of operator, Virginia, mid-1949

Class of operator	Assets					Total debts	Net worth
	Farm		Nonfarm		Total		
	Owned and operated in person	Owned but leased to others	Liquid financial	Other			
	Dollars	Dollars	Dollars	Dollars			
Commercial A----	11,702	204	1,067	263	13,236	832	12,404
Commercial B----	17,817	739	3,377	1,905	23,838	1,787	22,051
Part-time-----	8,072	396	1,134	863	10,465	595	9,870
Residential-----	4,960	162	482	604	6,208	310	5,898

On the average, operators of commercial B farms were the wealthiest among Virginia farmers. They listed total assets averaging about \$23,800, compared with approximately \$13,200 for commercial A farmers and still smaller averages for operators of part-time farms and residential units. Commercial B farmers had by far the greatest average amounts of liquid

<sup>6/</sup> Income from pensions, relief funds, and gifts was probably greater than the survey data show. From some of the schedules it was apparent that the operators had received pensions or support from children, although none was reported.

financial reserves and other nonfarm assets. They also had the largest average amounts of farm assets. In fact, commercial B farmers had the highest averages for every item listed in table 7, including debt. Notwithstanding their larger debts, their average net worth was almost \$10,000 greater than the average of commercial A farmers, who had the second highest net worth.

In terms of averages, commercial B farmers had the highest ratio of debts to assets. Debts were relatively small for all groups, however, and the indebtedness of commercial B farmers amounted to only about 7 1/2 percent of the value of their assets.

Although averages are useful in comparing classes of operators, they could be misleading if taken as typical of the various classes. For example, more than 60 percent of the commercial A, commercial B, and residential farmers, and almost 60 percent of the part-time farmers, had net worths below the average for their class (table 8). A third of the commercial A operators had net worths below \$5,000. This was also true of a sixth of the commercial B operators, a fourth of the part-time operators, and more than half of the residential operators. Likewise, all classes included many operators whose net worth was greatly in excess of the average for the class.

Both wealthy and poor farmers were included in each class. The commercial B class, however, included relatively more operators with high net worths and fewer operators with low net worths than any other class, whereas the opposite was true of the residential class.

#### Banking Relationships of Operators

Farm operators with net worths below \$5,000 made little use of the banks, either as depositories or sources of loan funds. With increases in their net worth, the percentage of the operators who used banking

Table 8.- Percentage distribution of each class of farm operators by net worth, by class of operator, Virginia, mid-1949

Net worth of operator	Operators				
	Commercial		Part-time	Residential	All
	A	B			
	Percent	Percent	Percent	Percent	Percent
Under \$5,000-----	35	16	29	56	36
\$5,000- 9,999-----	27	32	30	32	29
10,000-24,999-----	28	32	35	10	26
25,000-49,999-----	8	11	6	1	6
50,000 or more-----	2	9	0	1	3
Total-----	100	100	100	100	100

services increased sharply. All operators covered by the survey who had net worths of more than \$50,000 had deposit accounts and about a fourth of them were borrowers from banks (table 9). The greatest percentage of borrowers occurred among operators with net worths of \$25,000-\$49,999.

Table 9.- Percentage of farm operators who were depositors or borrowers of banks, by net worth of operator, Virginia, mid-1949

Net worth of operator	Depositor only	Borrower only	Both	Neither	Total	All	All
			depositor and borrower	depositor nor borrower		depositors <u>1/</u>	borrowers <u>2/</u>
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Under \$5,000---	20	10	3	67	100	23	13
\$5,000- 9,999--	42	11	8	39	100	50	19
10,000-24,999--	64	6	17	13	100	81	23
25,000-49,999--	60	3	29	8	100	89	32
50,000 or more-	76	0	24	0	100	100	24

1/ All depositors include operators who were depositors only and those who were both depositors and borrowers.

2/ All borrowers include operators who were borrowers only and those who were both depositors and borrowers.

Commercial B and part-time farmers made greater use of banking services than did commercial A and residential farmers (table 10). About two-thirds of the first two classes were depositors of banks, compared with a little more than half of the commercial A operators and only a third of the residential operators. Still greater differences existed among the various classes of operators with respect to borrowing from the banks. The percentage of commercial B operators who borrowed from banks was four times as large as that of residential farmers. This was partly because the former were more fully engaged in farming and business activities that required use of credit.

Table 10.- Percentage of farm operators who were depositors or borrowers of banks, by class of operator, Virginia, mid-1949

Class of operator	Depositors	Borrowers
	Percent	Percent
Commercial A-----	53	17
Commercial B-----	65	36
Part-time-----	66	23
Residential-----	33	9
All operators-----	52	19

The infrequent use of banks as depositories by farmers with small net worths was probably due to the fact that such farmers had only small amounts of liquid funds. The average total financial reserves reported were only \$252 for operators who were borrowers only and \$121 for operators who were neither depositors nor borrowers (table 11). These averages compare with \$2,309 for operators who were depositors only and \$1,045 for operators who were both depositors and borrowers. Probably most of the operators who did not have deposit accounts could have become depositors had they desired, but apparently they felt that it was not worth while to do so.

Table 11.- Average assets, debts, and net worth of farm operators, by banking relationship, Virginia, mid-1949

Banking relationship of operator	Assets			Total debt	Net worth	
	Farm	Nonfarm				
		Liquid reserves	Other			
	Dollars	Dollars	Dollars	Dollars	Dollars	
Both depositor and borrower-----	22,570	1,045	1,114	24,729	4,228	20,501
Depositor only-----	13,509	2,309	763	16,581	431	16,150
Borrower only-----	8,378	252	416	9,046	1,702	7,344
Neither depositor nor borrower-----	5,067	121	95	5,283	226	5,057

Not nearly as many farmers were borrowers as depositors of banks. Among those with net worths below \$5,000, only 13 percent were borrowers and the percentage rose to only 32 for the net-worth group containing the largest percentage of bank borrowers. Data presented later show that nearly 60 percent of the commercial farmers of Virginia were not using credit from any source at mid-1949, and that fewer of the small than of the large operators were using credit. The data also show that, among operators who used credit, the small operators were financed mainly by merchants, dealers, and individuals whereas the large operators were financed mainly by banks (fig. 4 and tables 23 through 25). Banks apparently made their loan services available to both small and large operators but the large operators either applied in greater number for bank loans, or were better able to qualify for them.

. . . .

The following sections of this report deal exclusively with commercial operators and their farms, as the purpose is to consider problems and practices of persons who are chiefly engaged in agriculture. Part-time and residential farmers are not included because they derive most of their income from nonfarm sources and use their farms chiefly for residential purposes.



COMMERCIAL FARMS - CAPITAL AND INCOME

In this study, "commercial farms" include all farms from which there were gross sales of \$1,200 or more in 1948, and also farms from which there were sales of only \$250-\$1,199, provided the operator received most of his net cash income from farming. At mid-1949, 59 percent of the commercial farms in Virginia contained less than 100 acres and 55 percent were valued at less than \$10,000, counting livestock, machinery, and miscellaneous farm assets as well as land and buildings. In 1948, 64 percent had gross sales amounting to less than \$2,500 (table 12).

Table 12.- Percentage distribution of commercial farms by acreage operated, value of farm assets, and cash receipts, by type of farm, Virginia

Item	Type of farm					
	Live- stock	Dairy	Tobacco	Peanut	Other	All
	Percent	Percent	Percent	Percent	Percent	Percent
Acres operated: <sup>1/</sup>						
Under 30-----	2	6	30	16	32	22
30-99-----	35	45	34	47	37	37
100-219-----	34	35	26	29	20	27
220 or more-----	29	14	10	8	11	14
Total-----	100	100	100	100	100	100
Farm assets operated: <sup>1/</sup>						
Under \$5,000-----	9	5	33	30	21	22
\$5,000- 9,999-----	20	37	35	40	35	33
10,000-24,999-----	37	30	28	25	34	31
25,000-49,999-----	24	19	4	4	8	10
50,000 or more-----	10	9	0	1	2	4
Total-----	100	100	100	100	100	100
Gross cash farm receipts: <sup>2/</sup>						
\$250- 1,199-----	37	37	31	9	42	34
1,200-2,499-----	20	28	38	37	25	30
2,500-4,999-----	24	14	24	37	14	21
5,000-9,999-----	12	9	6	15	13	10
10,000-24,999-----	6	10	1	2	5	4
25,000 or more-----	1	2	0	0	1	1
Total-----	100	100	100	100	100	100

<sup>1/</sup> Mid-1949.

<sup>2/</sup> 1948.

### Size of Farm Business, by Type of Farming

The size of a farming operation or business can be measured in several ways. The acreage of a farm is a common measure of its size, but acreage in itself tells nothing of the differences among farms with respect to productivity of the land, value of farm improvements, kinds and quality of stock and equipment, or intensity of operation. Better measures of the size of a farm business are the value of the farm assets operated - land, buildings, livestock, equipment, and other physical assets - and the gross revenues produced, or the gross cash farm receipts.

With respect to acreage, livestock farms were in general larger than any of the other types. Sixty-three percent of the livestock farms contained 100 or more acres each. This compares with 49 percent for dairy farms and less than 40 percent for tobacco, peanut, and other types. Only 2 percent of the livestock farms and 6 percent of the dairy farms were less than 30 acres in extent, compared with the much higher percentage of small units among tobacco, peanut, and other types of farms.

Similar differences among farm types are found when the size of farm business is measured by the value of the farm assets operated. This is partly a reflection of the fact that land itself constitutes a large part of the value of farm assets operated. Livestock farms generally involved considerably higher asset values than did other types; dairy farms were next in order. Farm assets operated in livestock and dairy farming were seldom valued at less than \$5,000 whereas, among tobacco, peanut, and other types of farms, taken as a group, the percentages with farm assets so valued ranged from 21 to 33.

With respect to gross cash farm receipts, which are perhaps the best measure of the size of a farm business because they reflect intensity of operation as well as other factors, the various types of farming stood in quite a different relationship from that suggested by the acreages and farm values involved. Notwithstanding their large acreages and the relatively high value of the assets operated, both livestock and dairy farms contained a large number of units from which gross cash receipts were comparatively low. In peanut farming, by contrast, relatively few units had very low gross cash receipts despite the large number of units with small acreages and small asset values.

### Capital Requirements, by Type of Farm

Asset values, or capital investment, used to produce a given amount of gross cash farm receipts were in general much greater for livestock and dairy farms than for peanut or tobacco farms, or for other types taken as a group (tables 13 and 14).

At all gross-receipts levels, livestock farms had the largest investment in real estate. They also had the largest livestock holdings. Only with respect to machinery and equipment did livestock farms fail to have the largest investments, and even here they were near the top.

Table 13.- Average value of farm assets per dollar of receipts, used to produce specified amounts of gross cash farm receipts, by type of commercial farm, Virginia 1/

Gross cash farm receipts	Type of farm					
	Live-stock	Dairy	Tobacco	Peanut	Other	All
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
\$250-\$2,499-----	13.75	9.48	5.90	3.86	7.73	7.82
2,500-9,999-----	7.25	5.41	3.48	3.12	4.17	4.46
10,000 or more-----	5.28	3.09	2.64	2.05	1.33	2.63
All amounts-----	7.60	4.88	4.21	3.05	2.99	4.58

1/ Value of farm assets operated, mid-1949; gross cash farm receipts, 1948. The property values per dollar of gross cash receipts are believed to be somewhat high because gross cash farm receipts probably have not been reported in full.

Dairy farms ranked next to livestock farms in total asset value, in value of real estate, and in value of livestock. Among the small and middle-sized units, they had the largest investments in machinery and equipment of any farm type.

Among the other types, peanut farms in general used the smallest amount of capital.

Figure 2 indicates the amounts of capital used to produce stated amounts of net cash farm receipts. Although net cash farm receipts probably were underreported by the respondents in the survey, it is believed that the data reflect fairly accurately the relative amounts of capital used in various types of farming to produce the stated incomes. These data support the conclusion reached - that, for any given amount of income, livestock farms used the greatest amount of capital, and peanut farms the smallest. The other types ranged, for net cash farm receipts, in the same order as for gross cash farm receipts.

The relationships between capital and income shown by these data are not typical of either the most efficient or the least efficient operators. They are merely averages for the commercial farmers covered by the survey, some of whom were much more efficient than others.

The major reason for these variations in the use of capital is that types of farms differ widely in the possibilities they offer for combining capital and labor. Peanut and tobacco farms require so much labor at the periods of greatest seasonal activity that growers cannot handle large acreages without having extra labor. These farms do not require expensive buildings and the possibilities of substituting machine work for labor are limited. In contrast, to utilize the labor of a farm family, livestock and dairy farms require a relatively heavy investment

in livestock and buildings, and sizable acreages to grow the necessary feeds. In cultivating and harvesting the feed crops, machinery can be substituted to a large extent for labor. Thus farms of these types, with their less intensive labor requirements, offer greater possibilities for the use of capital.

Table 14.- Average value of principal types of farm assets used to produce specified amounts of gross cash farm receipts, by type of commercial farm, Virginia <sup>1/</sup>

LAND AND BUILDINGS

Gross cash farm receipts	Type of farm					
	Live-stock	Dairy	Tobacco	Peanut	Other	All
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
\$250-\$2,499-----	11,367	7,893	5,829	4,321	6,329	7,082
2,500-9,999-----	20,840	18,820	10,444	10,357	14,212	13,888
10,000 or more-----	61,350	39,559	33,625	16,000	36,533	43,928
All amounts-----	18,466	14,229	6,703	7,264	10,120	10,725

LIVESTOCK

\$250-\$2,499-----	1,593	1,570	594	447	616	885
2,500-9,999-----	5,151	3,966	1,038	885	1,665	2,172
10,000 or more-----	17,550	13,477	2,225	2,500	4,729	11,025
All amounts-----	4,179	3,572	718	679	1,248	1,849

MACHINERY AND EQUIPMENT

\$250-\$2,499-----	947	1,121	642	734	1,070	869
2,500-9,999-----	3,309	4,214	1,692	1,891	3,043	2,520
10,000 or more-----	8,580	8,200	7,450	3,750	9,219	8,448
All amounts-----	2,244	2,780	984	1,433	1,978	1,728

ALL FARM ASSETS <sup>2/</sup>

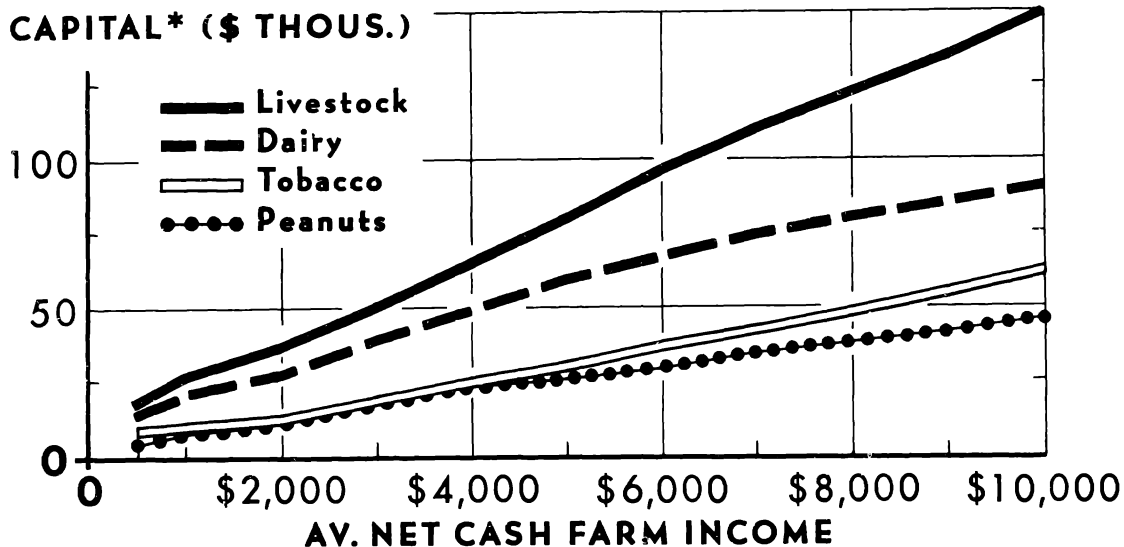
\$250-\$2,499-----	14,750	11,215	7,585	5,924	8,619	9,441
2,500-9,999-----	30,963	28,314	14,299	13,885	20,195	19,805
10,000 or more-----	92,400	64,632	45,750	24,550	54,462	67,329
All amounts-----	26,476	21,734	9,130	9,980	14,280	15,286

<sup>1/</sup> Value of farm assets operated, mid-1949; gross cash farm receipts, 1948.

<sup>2/</sup> Includes miscellaneous farm assets.

# CAPITAL USED TO PRODUCE VARYING NET CASH FARM INCOMES

By Type of Farm, Virginia, 1949



\* LAND, BUILDINGS, LIVESTOCK, MACHINERY, AND OTHER CAPITAL ITEMS; EXCLUDES BANK DEPOSITS AND OTHER NONFARM ASSETS OF OPERATOR

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Figure 2.- To produce any given amount of net cash income, much more capital was used in livestock and dairy farming than in tobacco or peanut farming; and livestock farming required more capital than dairy farming. In each of these types of farming, net cash income was a greater percentage of capital for medium- and large-scale farms than for small-scale farms. Although net cash income was not wholly a return on capital, apparently farmers could get better returns for both their capital and their labor if they operated at the higher income-producing levels.

A further reason for variations in use of capital is that many farms in Virginia are operated by people whose main interests and incomes are connected with nonfarming activities. Many of these farms are of high value but they do not have proportionately high output and returns. Thus they tend to decrease the average ratio of returns to investment among the types of farms where they more commonly occur. These farms are more likely to be livestock or dairy farms - particularly livestock farms - than other types. Few tobacco or peanut farms are of this type.

For these and perhaps other reasons, the capital used to produce any given amount of cash farm receipts, gross or net, was greater for livestock and dairy farms than for other types of farms.

Medium- and large-scale farming of all types was more profitable than small-scale farming. That is to say, the incomes produced by medium- and large-scale farms were a higher percentage of the value of the farm assets operated than those of small-scale farms. Farm income was not wholly a return on capital. For many farmers, it was mainly a return for their labor. Apparently, however, farmers could get larger net returns for both their labor and capital if they operated at the higher gross income-producing levels. The poor returns from small-scale operations were owing to several conditions. A disproportionate part of the total capital of some farmers was invested in living quarters for the operator and his family. For others, the farm was too small, or it was not worked with sufficient intensity, to utilize more than a small part of the operator's time.

### Capital Provided by Operators

In view of the advantages to be gained by operating on a larger scale, one might ask why so large a percentage of the farms (more than 60 percent) were so small, or were operated with so little intensity, as to produce less than \$2,500 worth of products in a year like 1948.

One of the more obvious reasons is that the smaller operators, as a rule, did not have sufficient capital to enlarge or intensify their operations. On the average, operators whose gross farm cash receipts were in the range of \$2,500 to \$9,999 had net worths more than twice as large as those whose gross farm receipts were below \$2,500; and those whose gross cash receipts were \$10,000 or more had net worths many times as large as those of the small-scale operators (table 15). So far as the net worth of the operator - the value of his assets minus the amount of his debts - fixes a limit to his scale of operations, it can be seen that smaller-scale operators, on the average, were handicapped by lack of capital. This was particularly true in livestock and dairy farming, which had higher capital requirements than other types of farming.

But a distinction needs to be drawn here between the situations of commercial A and commercial B operators. The former, it will be recalled, had less than \$250 of off-farm income in 1948 and so depended chiefly upon farming for their living, whereas many of the commercial B operators had more income from nonfarm sources than from farming. Commercial B operators in all groups except the largest-scale livestock producers had substantially greater net worths than the commercial A farmers. Moreover, when the assets owned by commercial A and commercial B operators are compared, as in table 16, it will be noted that the commercial B farmers also were better supplied than commercial A operators with liquid financial reserves and other nonfarm assets, which at least in part could have been used to expand or intensify their farming operations. Shortage of capital was particularly acute with the smaller commercial A operators. Apparently the pressure of nonfarm business activities, rather than lack of capital, explains why many commercial B operators did not enlarge, or intensify, their farming operations.

Table 15.- Average net worth of commercial farm operators, by specified amounts of gross cash farm receipts, and by type of commercial farm, Virginia, mid-1949

ALL COMMERCIAL OPERATORS

Gross cash farm receipts	Type of farm					
	Live-stock	Dairy	Tobacco	Peanut	Other	All
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
\$250-\$2,499-----	13,645	10,089	6,066	4,261	8,197	8,313
2,500-9,999-----	31,032	22,223	12,914	8,768	19,431	17,916
10,000 or more-----	89,690	53,282	47,950	13,800	55,386	63,022
All amounts-----	24,485	17,857	7,825	6,512	13,272	14,580

COMMERCIAL A OPERATORS

\$250-\$2,499-----	11,811	9,954	5,616	3,481	7,324	7,379
2,500-9,999-----	26,430	18,891	11,220	8,544	18,083	15,363
10,000 or more-----	99,164	46,489	24,800	13,800	53,780	61,684
All amounts-----	21,955	16,784	6,666	6,270	12,894	12,404

COMMERCIAL B OPERATORS

\$250-\$2,499-----	19,008	10,458	9,311	7,714	11,014	12,139
2,500-9,999-----	42,867	27,862	20,276	12,500	26,079	28,162
10,000 or more-----	67,583	83,850	55,667	1/	59,400	66,542
All amounts-----	32,118	20,233	13,469	8,419	14,385	22,051

1/ No commercial B operators in this class.

Sources of Supplementary Capital

Farm operators in Virginia were not limited to a scale of operations that they could carry on with their own capital (net worth). They were able to supplement their own capital with borrowed capital (loans) and with capital in the form of physical properties obtained under various arrangements, such as leases, joint tenancy, and partnership agreements (table 17). As a general rule, however, operators themselves supplied most of the capital needed in their operations, although many tenants leased farms that were worth more than their own assets. On the average, commercial A operators supplied about 80 percent of the capital they used, compared with about 85 percent for commercial B operators.

For both commercial A and commercial B operators, leases and other arrangements under which operators were able to obtain the use of physical properties were a more important source of supplementary capital than were



Table 16.- Average value of assets owned by commercial farm operators, by specified amounts of gross cash farm receipts, Virginia, mid-1949

COMMERCIAL A OPERATORS

Gross cash farm receipts	Assets			
	Farm <sup>1/</sup>	Nonfarm		Total
		Liquid financial	Other	
	Dollars	Dollars	Dollars	Dollars
\$250-\$2,499-----	6,980	625	61	7,666
2,500-9,999-----	14,400	1,538	314	16,252
10,000 or more--	63,438	3,838	2,168	69,444
All amounts--	11,906	1,067	263	13,236

COMMERCIAL B OPERATORS

\$250-\$2,499-----	11,217	1,550	632	13,399
2,500-9,999-----	25,071	3,220	1,910	30,201
10,000 or more--	52,752	12,932	6,132	71,816
All amounts--	18,556	3,377	1,905	23,838

<sup>1/</sup> Includes all farm property owned, whether operated personally or not.

loans. This was particularly true of commercial A operators, among whom the rate of tenancy was higher than among commercial B operators. Moreover, such arrangements were most important, relative to loans, among the commercial A operators who conducted small-scale operations. This was due, partly at least, to the fact that the tenancy rate was highest of all among these operators. But even among large-scale operators, with high net worths, these arrangements for obtaining the use of physical properties were a more important source of capital than were loans.

Loans were the source of about 6 to 8 percent of the capital used by the various groups of commercial B operators and of about 3, 4, and 10 percent respectively of the capital employed by small-, medium-, and large-scale commercial A operators. As shown later, less than a third of the commercial farm operators in Virginia who operated farm assets valued below \$10,000 had non-real-estate loans and less than a sixth had mortgages on their farms. Frequency of debt was considerably greater than this among larger scale operators. It appears from this and from the data in table 17, that the smaller scale operators, particularly those who depended mainly upon farming for their living, made little use of credit to enlarge or intensify their operations.

Table 17.- Average capital used by commercial farm operators, by source and by specified amounts of gross cash farm receipts, Virginia, mid-1949

COMMERCIAL A OPERATORS

Gross cash farm receipts	Source of capital			
	Net worth of operator <u>1/</u>	Loans <u>2/</u>	Leases and other <u>3/</u>	Total
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
\$250-\$2,499-----	7,379	288	1,778	9,445
2,500-9,999-----	15,363	890	3,778	20,031
10,000 or more--	61,684	7,760	7,836	77,280
All amounts--	12,404	832	2,208	15,444

COMMERCIAL B OPERATORS

\$250-\$2,499-----	12,139	1,261	1,810	15,210
2,500-9,999-----	28,162	2,039	2,994	33,195
10,000 or more--	66,542	5,274	7,490	79,306
All amounts--	22,051	1,787	2,131	25,969

1/ Borrowers' own capital.

2/ Borrowed capital.

3/ Rented capital and capital supplied through joint ownership.

Income of Commercial Operators

The comparatively small use of credit by the small-scale commercial A operators is more readily understood when the data on net cash incomes of the operators are examined (table 18). Even though the incomes of the operators may have been understated to some extent, this would not invalidate the main conclusion suggested by the data. This conclusion is that incomes of the small-scale commercial A operators were so low as to raise serious doubt, on the part of both lenders and operators, as to whether loans could be repaid.

The problem of debt-repayment was not nearly so acute with small-scale commercial B operators, because of their substantial off-farm incomes, as with small-scale commercial A operators. However, as most of the income of these operators came from jobs in towns and cities, their ability to repay loans (except through liquidation of their assets) depended mainly upon the security of their jobs. So far as their farm earnings were concerned, the small-scale commercial B farmers were no more able to repay loans than were commercial A farmers.

Table 18.- Average net cash income of commercial farm operators, by source and by specified amounts of gross cash farm receipts, Virginia, 1948

COMMERCIAL A OPERATORS

Gross cash farm receipts	Cash income		
	Farm	Off-farm	Total
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
\$250-\$2,499-----	621	17	638
2,500-9,999-----	2,023	15	2,038
10,000 or more----	6,092	28	6,120
All amounts-----	1,282	20	1,302

COMMERCIAL B OPERATORS

\$250-\$2,499-----	602	1,316	1,918
2,500-9,999-----	2,075	1,535	3,610
10,000 or more----	5,700	2,911	8,611
All amounts-----	1,336	1,591	2,927

It should be recognized that the net cash incomes shown in table 18 were by no means the entire net incomes of the operators. Most of the operators reported that they consumed in their homes products from their farms valued at \$400 to \$600. Moreover, they had no cash expenses for house rent. If the rental values of the farm homes were computed, they would add many hundreds of dollars to the incomes of operators who live on the better improved farms. For small-scale farmers, particularly the commercial A operators, it would appear safe to add at least \$600 or \$700 to the cash incomes shown (table 18) to cover the value of home-produced food and rent-free housing; and to add much larger amounts for the medium- and large-scale operators.

Notwithstanding this noncash income, the smaller scale commercial A operators, as a group, appear to have a difficult problem. Their operations are apparently less profitable, from the standpoint of both labor income and return on capital, than those of the medium- and large-scale operators; they have little ability to save from their present low incomes; and without more ability to save, they are unable to accumulate the capital necessary to increase their scale of operations. Moreover, even if they had more capital, many would have to move to other farms or to buy additional land in order to use it effectively.

Despite these circumstances, some small-scale operators manage each year to move to a higher income level, and it is possible that more could do so. A hopeful aspect of the situation is that the ability of small-

scale operators to accumulate additional capital - and to enlarge or intensify their scale of operations - apparently could be increased substantially by a comparatively small increase in their incomes. With the rapid development of improved farming methods, including better balanced operations to give year-round productive employment to the farm family, there are increasing possibilities for the small-scale operators, as well as the medium- and large-scale operators, to increase their incomes.

#### COMMERCIAL FARMERS - INVESTMENT POLICIES

Farm assets were the principal investment of both commercial A and commercial B operators. This was true of all except a few individual farmers. For commercial farmers as a whole, farm assets represented approximately 86 percent of all owned assets. This includes the farm assets operated personally (84 percent of total assets) and those owned but leased to others (2 percent).

Investment in farm assets was relatively greater among commercial A farmers than among commercial B operators, because the economic activities of the former were more exclusively agricultural. Farm properties constituted 90 percent of the total assets of commercial A farmers (approximately 88 percent represented by farm properties operated personally and about 2 percent by properties leased to others). The farm assets of commercial B operators made up approximately 78 percent of their total assets (75 percent operated personally and 3 percent leased to others).

#### Relation of Farm and Nonfarm Investments to Net Worth of Operator

Nonfarm investments represented a greater amount of total investments for commercial operators with larger net worths than for those with smaller net worths (fig. 3). This association of diversification of investments with the larger net worths was noticeable among commercial B farmers, and it appears also to some extent among commercial A farmers.

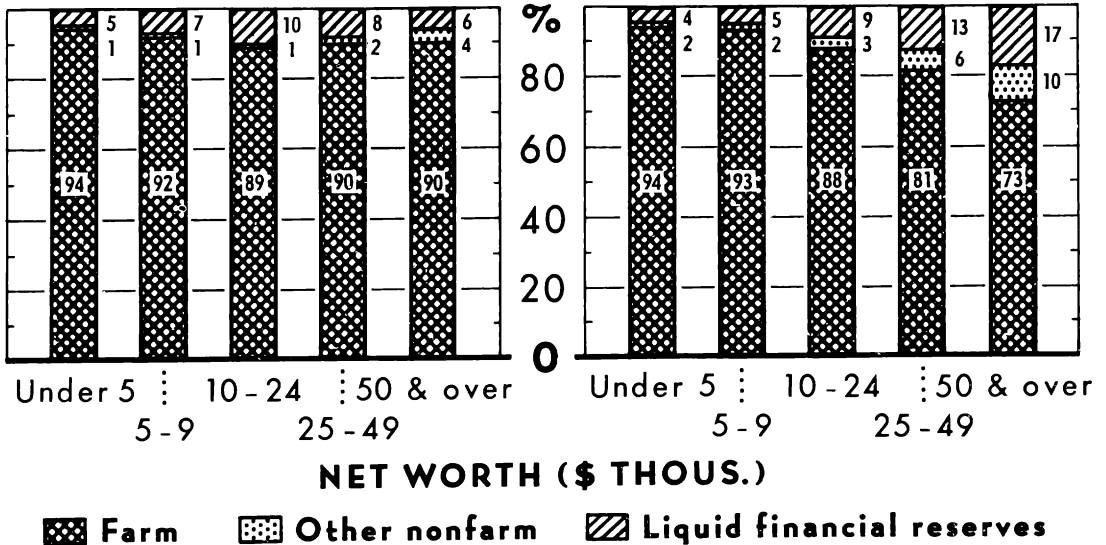
The smallest commercial B farmers (those with net worths of less than \$5,000) listed only 6 percent of their total assets as nonfarm assets and 94 percent as farm assets. However, for each of the successively higher net-worth classes the percentage for nonfarm assets increased and the percentage for farm assets declined until the proportions for the largest commercial B farmers (those with net worths of \$50,000 or more) were 27 percent for nonfarm assets and 73 percent for farm assets. Among the commercial A farmers, nonfarm assets represented 6 percent of total assets for operators with the smallest net worths, 8 percent for operators in the next higher net-worth group (net worths of \$5,000 to \$9,999), and about 10 percent for operators in the three largest net-worth classes.

# FARM AND NONFARM ASSETS OF COMMERCIAL FARM OPERATORS

By Net Worth and Class of Operator, Va., Mid-1949

## COMMERCIAL A

## COMMERCIAL B



U. S. DEPARTMENT OF AGRICULTURE

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Figure 3.- Commercial B farmers with large net worths had a considerably greater part of their total assets in the form of nonfarm assets than did those with small net worths. This relationship between net worth and diversification of assets also appeared among commercial A farmers, though less noticeably than among commercial B farmers. For both classes of commercial farmers, and at all net-worth levels, the nonfarm assets owned by farmers consisted mainly of liquid financial reserves.

### Types of Nonfarm Assets

Nonfarm assets have been grouped into two major classes for the purposes of this report: (1) Liquid financial reserves and (2) other nonfarm assets.

The liquid financial reserves consist of checking accounts, savings accounts, United States Savings Bonds, and a miscellaneous category which includes cash on hand, postal savings, and corporate stocks and bonds. The primary characteristic of the assets in this group is their liquidity.

Some of the other nonfarm assets are scarcely less liquid, but for the most part they appear to be more permanent investments. The items

included in this group are town and city property, stock in cooperatives, notes and mortgages due from farmers, and notes and mortgages due from nonfarmers.

Commercial operators held larger amounts of liquid financial reserves than of other nonfarm assets. As a group, they had approximately 172 million dollars of liquid financial reserves and about 69 million dollars of other nonfarm assets. Thus the greater part of their total nonfarm assets was readily available for use in their farming business if the need arose.

Commercial A farmers kept a greater part of their nonfarm assets in liquid form than commercial B operators. The total nonfarm assets of the former group consisted of 80 percent of liquid financial reserves and 20 percent of other nonfarm assets. Commercial B farmers held only 64 percent in liquid form and had 36 percent invested in relatively more permanent nonfarm assets.

#### Relation of Types of Nonfarm Assets Owned to Net Worth of Operator

Table 19 shows the average values of the various types of nonfarm assets held by the operators at each net-worth level. One of the more important nonfarm asset items was checking accounts. Among the commercial A farmers, checking accounts represented the largest nonfarm asset of all, regardless of the net-worth class, and this is also true among the commercial B farmers at the smaller net-worth levels. Among the larger commercial B farmers, holdings of United States Savings Bonds exceeded amounts in checking accounts, and in one net-worth class "other" liquid reserves and investments in town property also exceeded them.

At almost all net-worth levels the ownership of United States Savings Bonds and of savings accounts at banks accounted for a significant amount of total nonfarm assets. In general, the savings accounts were larger than the bond holdings among the operators with smaller net worths and smaller than bond holdings among the operators with larger net worths.

Among both commercial A and commercial B farmers, operators with net worths of \$50,000 or more had fairly substantial amounts of notes and mortgages. Commercial B farmers in this class held, on the average, more than \$3,000 of these assets. About 73 percent of this was owed to them by nonfarmers. Commercial A farmers in the \$50,000 or more net-worth class held, on the average, about \$2,100 of such assets. Most of their lending - about 54 percent - was to other farmers.

Larger operators (both commercial A and commercial B) placed relatively greater emphasis upon the more permanent type of nonfarm assets than did the smaller operators. Among the commercial A farmers, the operators at the three lower net-worth levels had roughly about seven times as much in liquid financial reserves as in other nonfarm assets, but those at the two higher net-worth levels had, respectively, only about three and two times as much.

Table 19.- Average amounts of nonfarm assets owned by commercial farmers, by type of assets and by class and net worth of operator, Virginia, mid-1949

COMMERCIAL A OPERATORS

Net worth of operator	Nonfarm assets									
	Liquid financial reserves					Other				
	Check- ing account	Savings account	United States Savings Bonds	Other	Total	Stock in coop- eratives	Value of town prop- erty	Notes and mortgages due from -		Total
								Farmers	Non- farmers	
Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	
Under \$5,000-----	59	43	19	20	141	2	0	3	17	22
\$5,000-9,999-----	231	215	92	39	577	5	44	5	28	82
10,000-24,999-----	564	484	466	95	1,609	43	60	41	77	221
25,000-49,999-----	1,170	489	934	304	2,897	144	343	213	171	871
50,000 or more-----	2,844	1,356	2,115	263	6,578	278	959	1,133	956	3,326

COMMERCIAL B OPERATORS

Under \$5,000-----	77	8	46	4	135	0	0	4	38	42
\$5,000-9,999-----	200	127	93	45	465	5	115	4	7	131
10,000-24,999-----	544	260	600	249	1,653	78	366	112	36	592
25,000-49,999-----	944	734	2,353	1,084	5,115	109	1,931	203	62	2,305
50,000 or more-----	3,178	3,141	5,519	1,759	13,597	2,444	2,519	830	2,211	8,004



Life Insurance

An additional type of investment held by many Virginia farmers is represented by their life insurance policies. Approximately half of the operators of commercial farms had some life insurance. The face amount of their policies totaled about 135 million dollars, or an average of more than \$2,500 for each insured operator.

No effort has been made to compute the current cash value of these policies. This value consequently is not included among the assets shown in the balance sheet for Virginia farm operators. However, it is a sizable resource which the farmers could use if necessary, either by borrowing on, or surrendering, their policies.

As would be expected, the operators of the more valuable properties carried the larger life insurance policies and were more frequently insured (table 20). Among commercial A farmers, the frequency of insurance increased markedly as the value of farm assets operated increased. Among commercial B farmers this tendency was not so sharp, as insurance policies were prevalent among all classes of commercial B operators. About 67 percent of all commercial B farmers had life insurance, and their policies averaged about \$3,450 per insured farmer. Comparable data for commercial A farmers were 44 percent and \$2,140.

Table 20.- Percentage of commercial farmers with life insurance policies and average face amount of these policies, by class of operator and by value of farms operated, Virginia, mid-1949

COMMERCIAL A OPERATORS

Value of farm assets operated	Percentage of operators with life insurance	Average face amount of policy per insured operator
	Percent	Dollars
Under \$5,000-----	36	214
\$5,000-9,999-----	39	1,019
10,000-24,999-----	47	2,106
25,000-49,999-----	64	4,350
50,000 or more-----	83	9,117
All amounts-----	44	2,139

COMMERCIAL B OPERATORS

Under \$5,000-----	61	780
\$5,000-9,999-----	54	1,696
10,000-24,999-----	74	2,644
25,000-49,999-----	71	5,318
50,000 or more-----	87	9,959
All amounts-----	67	3,452

Distribution of Liquid Financial Reserves Among Commercial Farmers

In a sense, liquid financial reserves are an integral part of the farm business, as they are available on short notice to pay production expenses, to buy machinery and equipment, improve farm buildings, or contribute in some other way toward the success of the farming operations.

Despite the importance of these assets to the farm business, and for meeting family emergencies, a large number of the commercial farm operators of Virginia reported that they had little or nothing in the nature of a financial reserve (table 21). Half of the commercial A farmers and about a third of the commercial B operators reported that they owned less than \$200 of these assets. An additional 15 percent of all commercial farmers reported holdings of \$200 to \$499. At the other end of the scale, 27 percent of the commercial farmers reported that their financial reserves amounted to \$1,000 or more, and 7 percent reported reserves of \$5,000 or more.

Table 21.- Percentage distribution of commercial farmers by amount of liquid financial reserves owned, by class of operator, Virginia, mid-1949

Amount of liquid financial reserves owned	Commercial operators		All
	A	B	
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
None-----	34	17	30
\$1-\$199-----	16	18	17
200-499-----	14	15	15
500-999-----	10	15	11
1,000-1,999-----	10	9	9
2,000-4,999-----	11	12	11
5,000-9,999-----	4	7	5
10,000 or more----	1	7	2
All amounts----	100	100	100

Probably some farmers underreported the amount of their financial reserves, particularly those who had only "pocket cash." Moreover, the survey was made about midyear, when the financial reserves of Virginia farmers were approaching their preharvest low. These factors are partly responsible for the large number of operators who reported that they had only small amounts of financial reserves or none at all. However, 1948 was a profitable year for Virginia farmers and their liquid financial reserves should have been relatively high the following summer when the survey was made.

The data reported in this survey appear consistent with the data obtained by the Board of Governors of the Federal Reserve System in its annual country-wide surveys of liquid asset holdings. There is every reason to believe that a substantial number of the people of the United States, and of Virginia farm operators, possess financial reserves of only small amounts even in favorable years.

It should be remembered that nearly a third of the commercial farmers of Virginia had net worths of less than \$5,000 and that more than a fourth had net worths between \$5,000 and \$10,000. Most of these operators owned the land they operated. In view of the high values of farm real estate, livestock, and machinery, and the high prices of items used in production, it is understandable that the savings of these small farmers were largely absorbed in the purchase and operation of their farms.

The average amounts of financial reserves reported by the commercial farmers of Virginia are expressed as percentages of their total assets in table 22. The percentage increased for commercial B farmers as net worth increased. It was about four times as large for farmers with net worths of more than \$50,000 as for those with net worths of less than \$5,000. The percentage also increased for commercial A farmers until the net worth class of \$10,000 to \$24,999 was reached. Above that point the reserve percentage decreased until it was little larger for farmers with net worths of more than \$50,000 than for those with net worths of less than \$5,000.

Table 22.- Average liquid financial reserves and average total assets, per commercial operator, and ratio of reserves to total assets, by net worth and class of operator, Virginia, mid-1949

COMMERCIAL A OPERATORS

Net worth of operator	Liquid financial reserves	Total assets	Ratio of liquid financial reserves to total assets
	Dollars	Dollars	Percent
Under \$5,000-----	141	2,642	5.3
\$5,000-9,999-----	577	7,809	7.4
10,000-24,999-----	1,609	16,674	9.6
25,000-49,999-----	2,897	36,400	8.0
50,000 or more-----	6,578	102,667	6.4

COMMERCIAL B OPERATORS

Under \$5,000-----	135	3,046	4.4
\$5,000-9,999-----	465	8,765	5.3
10,000-24,999-----	1,653	18,266	9.0
25,000-49,999-----	5,115	38,219	13.4
50,000 or more-----	13,597	81,126	16.8

## General Investment Policy

These data, together with those presented earlier on other nonfarm assets, throw considerable light on the preferences of Virginia farmers for various types of investments. Although there are large variations among individual farmers, commercial A operators, both large and small, appear to be concerned chiefly with building up their farm assets, presumably to increase their income from farming. Apparently they also believe that they can best provide family security by accumulating equities in farm property. Creating a financial reserve in excess of necessary working funds apparently has a low priority among commercial A operators. Moreover, they show little disposition to invest in nonfarm properties. Commercial B farmers exhibit much the same tendencies, but the larger ones give a considerably higher priority to financial reserves and to nonfarm properties than do the commercial A operators.

It is probable that farmers with low net worths and, usually, with small incomes, are wise to use virtually all of such savings as they can accumulate to increase their livestock and equipment and to acquire and improve farms. This enables them to use their labor and management abilities most effectively in increasing their incomes. Also, it is understandable why many of the farmers with relatively large net worths should confine their investments mainly to farm properties, as they know more about such properties than about other types of property and they can manage them personally. On the other hand, it is possible that many Virginia farmers would better their over-all position by investing to a greater extent in nonfarm assets, particularly by accumulating larger financial reserves.

The need for an adequate financial reserve has increased greatly in recent years, for modern agricultural methods and equipment have brought a marked increase in the cash costs of farming. Farmers need financial reserves so that if farm income should fall they would still have the funds needed to pay for seed, fertilizer, gasoline, oil, and electricity, to repair machinery and buildings, and to cover the many other expenses of farming. Moreover, the cost of the motor vehicles, tractors, and machinery that farmers use today in their operations is so great that many farmers may need to borrow large amounts for replacements when their power equipment wears out unless they accumulate financial reserves for the purpose.

### COMMERCIAL FARMERS - DEBTS AND SOURCES OF CREDIT

As a group, the commercial farmers of Virginia were not heavily indebted at midyear 1949. They reported an aggregate debt of approximately 114 million dollars, or 7 percent of the value of their assets.

The larger part of the debt consisted of mortgages on farm real estate, and amounted to approximately 69 million dollars. Other (non-real-estate or short-term) farm debts totaled about 42 million dollars, and the remainder of the obligations - 3 million dollars - were mortgages on nonfarm properties.

The aggregate debt of 114 million dollars averages a little more than \$1,000 for each commercial operator, but one of the more striking features of the situation was the large number of operators who were without debts. No debts of any kind were reported by 57 percent of all commercial farmers. The average amount of debt - for the indebted commercial operators - was about \$2,460.

#### Distribution of Commercial Operators by Ratio of Debts to Assets

Although the debts were concentrated among a minority of the operators, in relatively few cases were the operator's debts high in relation to the value of his assets. Figure 4 shows the distribution of the operators on this basis. In addition to the 57 percent of all commercial operators who had no debts, 27 percent of the operators had debts totaling less than 15 percent of the value of their assets. Only 6 percent of the commercial operators had debts that totaled 30 percent or more of the value of their assets.

A relatively high ratio of debts to assets need not indicate that the borrower is burdened by his debts. Many tenant-operators, for example, have relatively small asset holdings of their own but are able, through the use of leased properties, to earn good incomes. Loans justified by the earnings of these operators could be high in relation to the assets they own. Likewise, owner-operators may not be burdened by mortgages of relatively large amount if the period of payment is sufficiently long or flexible, and the interest rate sufficiently low, to keep their annual payments in reasonable relation to their incomes.

#### Relative Use of Farm Credit on Farms of Different Value

Credit was more frequently used in operating the larger-scale farms of Virginia than in operating the smaller ones. With increases in the value of the farm assets operated, there were large increases in the average size of the farm debts reported. There were also increases - particularly with respect to farm-mortgage debt - in the number of operators reporting debt (table 23).

Among farmers who operated farm assets valued at \$25,000 or more the number reporting short-term debt was a little more than a third, whereas, among those who operated farm assets of less value, it was a little less than a third. With respect to mortgage debt, the percentage of commercial operators reporting indebtedness was almost tripled as the value of farm assets operated increased from the smallest to the largest class. The data on non-real-estate debt suggest that the number of commercial operators who use credit to finance production and acquire working capital assets increases only slightly with increases in the value of the farm assets operated, but this may not be true, as mortgage credit is used frequently to finance operating and working capital requirements.

# DEBT-ASSET SITUATION

Commercial Farmers, Virginia, Mid-1949

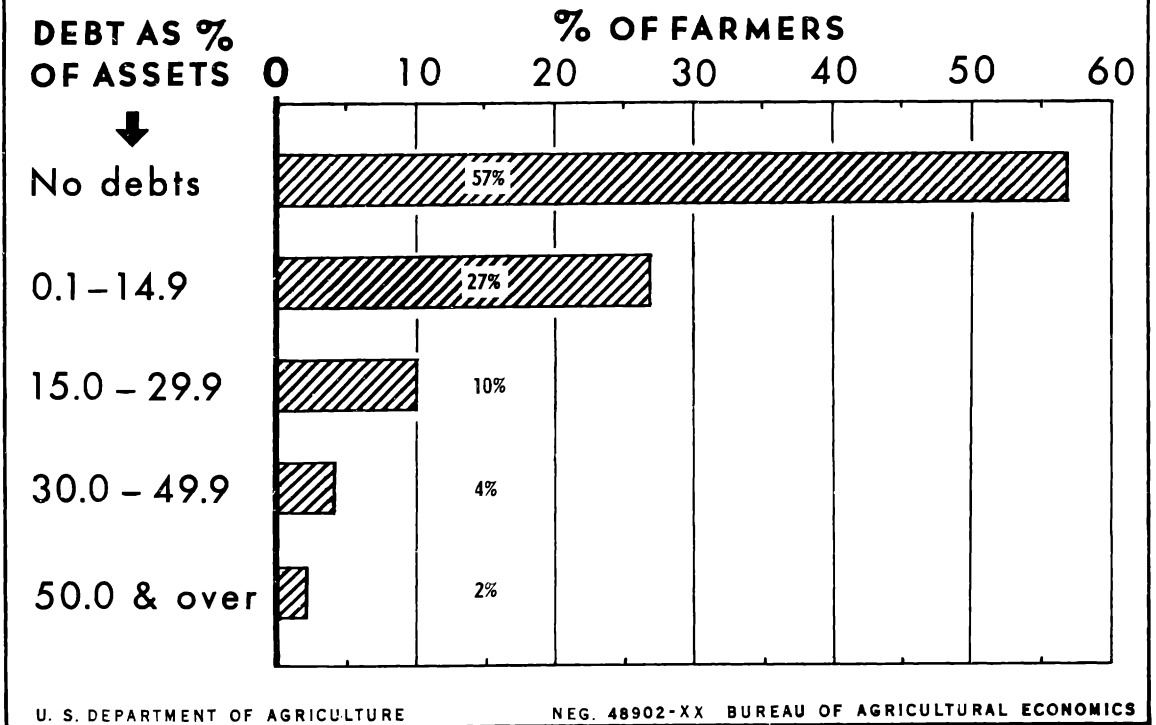


Figure 4.- More than half of the commercial farmers reported that they had no debts at mid-1949. Only 16 percent of the commercial farmers were indebted for amounts equaling 15 percent or more of the value of their assets, and only 2 percent for amounts equaling 50 percent or more of the value of their assets.

The debt averages shown in table 23 are averages for only the indebted operators in each of the respective classes. As would be expected, these averages increased as the value of the farm assets operated increased.

### Sources of Short-Term Farm Credit

Commercial farm operators obtained their short-term (non-real-estate) farm credit from a variety of sources, but the principal lenders were the commercial banks. However, the relative importance of the banks and other lenders varied with changes in the value of the farm assets operated (table 24). 7/

7/ Data reported by farm operators in the sample on short-term credit and its sources are believed to be reasonably accurate. When the data for the sample are expanded, the estimates thus obtained for credit obtained by all farm operators (except managers) from the principal institutional lenders agree closely with the data reported by these lenders. However, so small a proportion of the commercial farm operators reported short-term debt (less than one-third) that, when these operators are grouped by value of the farm assets operated and further grouped by source of credit, some of the groupings contain data on too few cases to make them reliable.

Table 23.- Percentage of commercial farmers reporting farm debt, and average amount of such debt, by value of farm assets operated and by type of debt, Virginia, mid-1949

NON-REAL-ESTATE DEBT

Value of farm assets operated	Percentage of commercial operators reporting debt	Average amount of debt <sup>1/</sup>
	Percent	Dollars
Under \$5,000-----	30	317
\$5,000-9,999-----	33	436
10,000-24,999-----	31	821
25,000-49,999-----	35	2,467
50,000 or more-----	41	8,214

REAL ESTATE DEBT

Under \$5,000-----	13	990
\$5,000-9,999-----	16	1,277
10,000-24,999-----	20	2,664
25,000-49,999-----	32	4,995
50,000 or more-----	35	12,079

<sup>1/</sup> Average for indebted operators only.

Table 24.- Percentage distribution of the non-real-estate debt reported by commercial farmers by source, by value of farm assets operated, Virginia, mid-1949

Value of farm assets operated	Percentage of non-real-estate debt owed to -						
	Banks	Production credit associations	Stores, dealers, merchants	Other farmers	Farmers Home Administration	Other	Total
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Under \$5,000----	21	17	39	15	6	2	100
\$5,000-9,999----	46	6	21	11	8	8	100
10,000-24,999---	49	15	15	13	2	6	100
25,000-49,999---	61	14	9	13	0	3	100
50,000 or more--	69	7	<sup>1/</sup> 20	3	0	1	100

<sup>1/</sup> The high percentage for this class was almost certainly the result of sampling error. If data for one sample operator were omitted, the percentage would be 5 instead of 20.

The principal kind of non-real-estate credit for operators of farm assets valued at less than \$5,000 was "book credit" provided by stores, dealers, and merchants. This kind of credit accounted for approximately 39 percent of that used by these operators, compared with 21 percent furnished by banks, 17 percent by production credit associations, and 15 percent by other farmers.

For all other commercial operators, banks represented the principal source of short-term credit. Banks provided almost half of the total amount borrowed by those who operated farm assets valued between \$5,000 and \$24,999, and more than half of the amount borrowed by those who operated farm assets worth \$25,000 or more. Dairy farmers were prominent among those who obtained their short-term farm loans from banks.

In contrast to the behavior of bank credit, the amount of non-real-estate debt owed to stores, dealers, and merchants decreased as the value of farm assets operated increased. This is indicated by the data for all except the operators of farm assets valued at \$50,000 or more. The relatively high percentage of short-term credit from stores, dealers, and merchants indicated for the operators in that class was almost certainly the result of sampling error. One operator who reported an extremely large amount of dealer credit dominated the relatively small sample for that class. For the other operators in this class, credit from stores, dealers, and merchants amounted only to 5 percent of total non-real-estate credit.

Short-term credit obtained from production credit associations was second in volume only to that from banks so far as operators with net worths above \$10,000 are concerned. Production credit associations furnished 15 percent of the non-real-estate credit reported by operators of farm assets in the \$10,000 to \$24,999 class and 14 percent of that reported by operators in the \$25,000 to \$49,999 class. Production credit associations were also important lenders for the smallest commercial farmers, providing 17 percent of the credit reported by operators of farm assets valued at less than \$5,000. Much of the PCA lending to this group went to operators of peanut and tobacco farms. Their loans to the "middle-sized" operators were mainly to operators of livestock and tobacco farms.

Non-real-estate loans from the Farmers Home Administration were found chiefly among farmers who operated farm assets valued at less than \$10,000. This reflected the eligibility rules of that agency, which restrict loans to operators who are unable to obtain adequate credit from other established lenders.

Other farmers represented another important source of short-term credit utilized by Virginia operators and, except for the largest operators, this source of credit was significant. From 11 to 15 percent of the short-term debt reported by operators of farm assets valued at less than \$50,000 was obtained from other farmers.



Other types of non-real-estate debt enumerated in the survey included Commodity Credit Corporation loans, loans from insurance and personal loan companies, rents and taxes due but not yet paid, current doctor bills, and the like. None of these types accounted for a very large amount of the non-real-estate debt outstanding at the time of the survey.

### Sources of Farm-Mortgage Credit

The survey data on farm-mortgage debt, when expanded, indicate a total farm-mortgage debt of 85 million dollars for all farm operators in Virginia. This does not include the debt on manager-operated farms or on farms operated by tenants. The survey estimate of 85 million dollars for farm operators compares with an estimate by the Bureau of Agricultural Economics, based on other data, of about 90 million dollars at mid-1949 for all owners of farms, including nonoperating owners. It appears that the survey estimate of the mortgage debt of farm operators is reasonably accurate.

The survey estimates of the amounts of mortgage loans held by some lenders, however, do not agree closely with the amounts of loans reported by these lenders. Survey estimates of mortgage loans held by the Federal land bank and Farmers Home Administration appear to be fairly accurate, but the survey estimate of mortgage loans held by commercial banks is greatly in excess of the amount reported by the banks, which includes loans to nonoperating owners as well as to operators. Mortgage loans held by insurance companies, and a miscellany of other lenders, including individuals, apparently were underestimated in the survey.

It is possible that some of the reporting farmers failed to distinguish between banks as lenders and bankers acting as agents for other lenders or as trustees under deeds of trust. Also banks may have sold some of their mortgage loans to private investors without the borrowers being fully aware of, or remembering, that the loans had been transferred. Whatever the reasons for the differences between the survey estimates and the amounts of farm-mortgage loans reported by some of the lenders, these differences must be kept in mind in interpreting results of the survey.

Operators of the less valuable farm assets reported that they received more of their farm real estate credit from nonfarming individuals than from any other source (table 25). They listed about a fourth of their real estate credit as coming from nonfarming individuals, as compared with about a fifth from banks and 16 percent from their fellow farmers. The remainder of the farm-mortgage debt reported by these operators was described as coming from the Federal land bank (7 percent), from savings and loan associations and insurance companies (9 percent), and from miscellaneous sources (23 percent). No mortgage indebtedness to the Farmers Home Administration was reported by these operators, but a larger sample might have revealed some. The 23 percent of mortgage debt ascribed to miscellaneous sources by these smaller operators may be overstated. At any rate, it is clear that these smaller operators had a more even distribution of their mortgage debt among various lenders than did the larger operators. This was also true of their short-term debt.

Table 25.- Percentage distribution of the farm-real-estate debt reported by commercial farmers by source, by value of farm assets operated, Virginia, mid-1949

Value of farm assets operated	Percentage of farm-real-estate debt owed to -							
	Banks	Non-farming individuals	Other farmers	Federal land bank	Farmers Home Administration	Insurance and savings and loan companies	Miscellaneous	Total
	Per-cent	Per-cent	Per-cent	Per-cent	Per-cent	Per-cent	Per-cent	Per-cent
Under \$5,000-----	19	26	16	7	0	9	23	100
\$5,000-9,999-----	42	18	18	8	9	0	5	100
10,000-24,999----	43	23	14	10	2	2	6	100
25,000-49,999----	50	23	8	14	1	4	0	100
50,000 or more---	64	23	0	8	0	5	0	100

As in the field of non-real-estate debt, the importance of bank lending appears to have increased with increases in the value of the farm assets operated, and among all except the smallest operators banks apparently were the most prominent single source of farm-mortgage credit. However, as noted above, the results of the survey overstate their importance in this field of credit.

Nonfarming individuals represented a significant source of mortgage credit for the operators of all classes of commercial farms. The survey indicates that, in addition to furnishing about a fourth of the mortgage credit borrowed by the smallest operators, they provided nearly a fifth of that borrowed by operators of farm assets in the \$5,000-to-\$9,999 class and more than a fifth of that obtained by operators of farm assets in each of the three largest value classes. These data doubtless understate the actual importance of nonfarming individuals as mortgage lenders.

Commercial operators also borrowed a relatively large amount from their fellow farmers. Although the survey revealed no mortgage indebtedness to other farmers by the largest operators, a larger sample might have indicated a small amount of this type of indebtedness. It is likely that farmers also were underweighted as a source of credit by the survey.

The Federal land bank was listed as a mortgage creditor by all classes of operators. Operators of "middle-sized" farms relied on this lender a little more extensively than those operating farm assets of either large or small value. One-tenth of the operators in the \$10,000-

to-\$24,999 class, and 14 percent of those in the \$25,000-to-\$49,999 class listed the Federal land bank as the source of their farm-mortgage credit.

The Farmers Home Administration was responsible for about a tenth of the farm real estate credit extended to operators in the \$5,000-to-\$9,999 class. It may also have had some loans outstanding to operators in the class under \$5,000, although none appeared in the survey. By reason of its lending policies, the FHA is relatively unimportant as a lender to the larger scale operators.

Savings and loan associations and insurance companies were enumerated together in the survey. Together they may have held as much as 10 percent of the farm-mortgage loans of Virginia farm operators. As noted above, their importance is substantially understated in the results of the survey.

Miscellaneous sources of farm-mortgage credit included business firms such as stores, dealers, and merchants doing business with farmers, and nonprofit institutions. These sources were most important to operators of low-valued farm assets.

#### COMMERCIAL FARMERS - RELATION OF TENURE AND AGE TO FINANCIAL CONDITION

As a general rule, commercial farmers in Virginia who can afford to do so prefer to buy farm real estate and become owner-operators rather than to operate as tenants. Approximately five in six commercial farmers owned some or all of the real estate they operated. Most of the one-sixth who were tenants would be unable to buy a very valuable farm even if they were to put all their capital into real estate.

Evidence of this is presented in table 26. Among the operators with net worths of less than \$5,000, only 60 percent were farm owners. But in the next higher net-worth class - \$5,000 to \$9,999 - the percentage of owners was 92, and in the net-worth classes of \$10,000 or more, almost all the operators owned farm real estate. Presumably, then, only a relatively small number of the operators who are now tenants would continue as such if they accumulated more sizable net worths and could buy farms of their own.

As a group, tenants were younger than owner-operators (table 27). Thirteen percent of the tenants were under 30 years of age, and 44 percent were in their thirties or forties, making a total of 57 percent who were less than 50 years old. In contrast, only 39 percent of the owners were less than 50 years old. Thus tenancy is more prevalent among young farmers than among older farmers who have had more time to accumulate net worth (fig. 5).

#### Net Worth and Age of Operator

The net worths of farmers do not always represent accumulations from past earnings. Other factors are present in many cases, such as inheritances, gifts, and properties acquired through marriage. Also

Table 26.- Percentage distribution of commercial farmers by tenure, by net worth of operator, Virginia, mid-1949

Net worth of operator	Owners	Tenants	Total
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Under \$5,000-----	60	40	100
\$5,000-9,999-----	92	8	100
10,000-24,999-----	96	4	100
25,000-49,999-----	99	1	100
50,000 or more-----	100	0	100
All net worths-----	84	16	100

Table 27.- Percentage distribution of commercial farmers by age, by tenure, Virginia, mid-1949

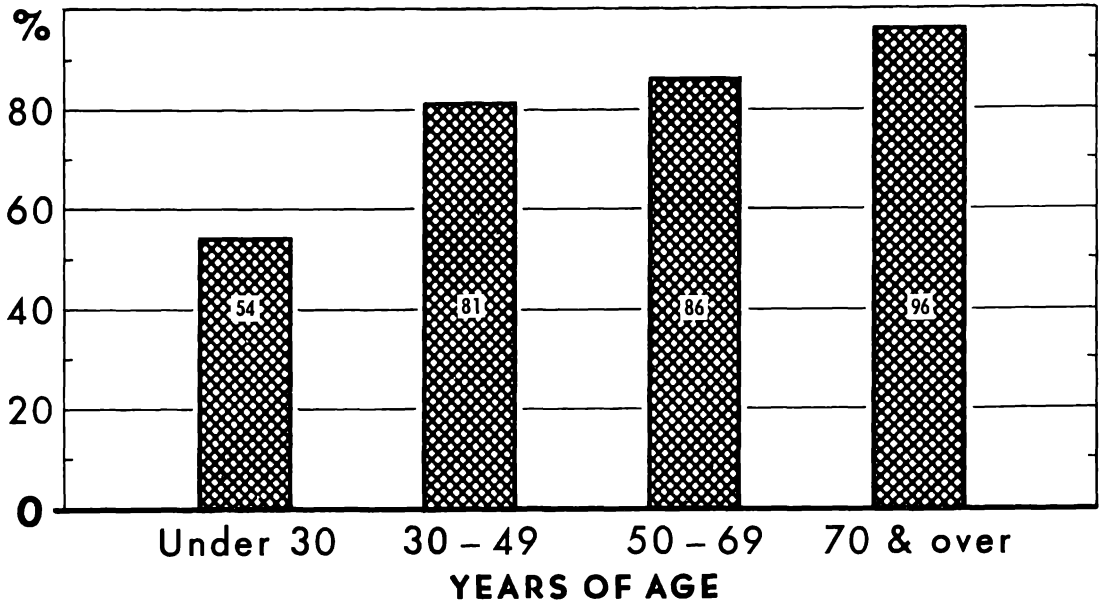
Age of operator	Owners	Tenants
	<u>Percent</u>	<u>Percent</u>
Under 30 years-----	3	13
30-49 years-----	36	44
50-69 years-----	47	40
70 years or over-----	14	3
All ages-----	100	100

farmers' net worths have been increased by the appreciation of farm asset values during the recent years of inflation. (Farmers who have only recently bought farms have not gained as much from appreciation as have those who bought at lower price levels.) However, it is probably safe to assume that the majority of the farmers have accumulated most of their present wealth from past earnings and from appreciation of assets bought with their earnings. And from this viewpoint the relation between net worth and age may be compared.

For commercial farmers as a group, the lowest net-worth average is found among the youngest operators. Farmers less than 30 years old had net worths averaging approximately \$9,800, compared with \$13,800 for operators in their thirties and forties and \$17,900 for those in their fifties and sixties (table 28). However, after the latter age group is reached, the increase in net worth ends, for among the operators aged 70 or more the average falls back to \$14,400.

# PERCENTAGE OF OWNERS AMONG COMMERCIAL FARM OPERATORS

By Age Groups, Va., Mid-1949



U. S. DEPARTMENT OF AGRICULTURE

NEG. 48903-XX BUREAU OF AGRICULTURAL ECONOMICS

Figure 5.- The tenancy rate was low in Virginia. Almost all the older commercial farmers were part- or full-owners of the farms they operated, and, even among farmers less than 30 years old, more than half were owners.

Operators in these various age groups are different persons, rather than the same operators at different age levels. However, the changes in net-worth averages from one age group to another probably describe, at least roughly, the way in which the average net worths of commercial farmers vary during their lifetimes. Young operators begin farming on a fairly modest scale and add considerably to their resources during their most productive years. At some point in later life they begin to curtail their activities and, perhaps by gradually selling some of their capital assets, to live off their prior accumulations.

Among owners the characteristic changes are essentially the same as those already shown, but the net-worth averages of tenants follow a slightly different pattern. The largest net worth is found among tenants in their thirties and forties, whereas among owners the highest average was reported by operators in their fifties and sixties.

Table 28.- Average net worth of commercial farmers, by age and tenure, Virginia, mid-1949

Age of operator	Owners	Tenants	All
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Under 30 years----	14,867	3,375	9,759
30-49 years-----	16,688	4,123	13,833
50-69 years-----	20,342	2,923	17,859
70 years or over--	15,139	3,443	14,445

This difference is not surprising. The younger tenants undoubtedly include many operators who aspire to be owners. If they are successful in accumulating the wealth necessary to make that shift, they disappear from the tenant class. Thus in the older age groups among the tenants relatively few tenant-operators who have large net worths remain, as many of those with large net worths have already become owners. <sup>8/</sup>

Owners' Financial and Income Averages - Relation to Age

Differences in financial condition among the various age groups of operators are brought out more clearly when asset, debt, and income averages are presented along with the net-worth averages. Table 29 shows the pattern of these averages among the owner-operators.

The youngest owner-operators owned farm assets averaging almost \$16,000, as compared with the top average of approximately \$18,400 among operators in their fifties and sixties. (Both figures include the value of farm assets owned but leased to others.) However, the farm equities of the two groups differ more than these two averages indicate, for the younger operators had, on the average, almost \$2,400 of debt against their assets, whereas the operators in their fifties and sixties had debts averaging only about \$970.<sup>9/</sup> The larger indebtedness of the younger operators - as well as their smaller accumulations of liquid financial reserves - reflects the fact that they had had only a short period in which to pay on their obligations and to build up their financial reserves.

In passing from owner-operators of less than 30 years of age to those in their thirties and forties, the average value of farm properties increases to approximately \$16,700. Operators' equities also increase

<sup>8/</sup> It should be added, with reference to table 28, that the net-worth average of tenants aged 70 or more may be subject to considerable sampling error, as the number of tenant-operators in that age group was very small.

<sup>9/</sup> These averages refer to the operators' total debts, but only a very small part represents nonfarm debts.

Table 29.- Average assets, debt, net worth, and net income of commercial farm owner-operators, by age of operator, Virginia, mid-1949

Age of operator	Assets					Total debts	Net worth	Net income	
	Farm		Nonfarm					From agriculture <u>1/</u>	Total <u>2/</u>
	Owned and operated personally	Owned but leased to others	Liquid financial reserves	Other	Total				
Under 30 years---	15,774	183	890	383	17,230	2,363	14,867	1,643	2,253
30-49 years-----	16,550	124	1,570	576	18,820	2,132	16,688	2,234	2,835
50-69 years-----	17,916	505	2,075	820	21,316	974	20,342	2,053	2,316
70 years or more-	13,699	141	1,578	146	15,564	425	15,139	1,444	1,555

1/ 1948 income. Includes the value of home-consumed products.

2/ 1948 income. Net income from agriculture plus net income from nonfarm sources.

through reduction of debt. At the same time, liquid financial reserves and other nonfarm assets increase considerably.

The highest average for each type of asset is found among owner-operators in their fifties and sixties. However, these operators do not earn the highest incomes. From the standpoint of earnings, the best span of years apparently occurs when operators are in their thirties and forties. 10/

It is not advisable to relate the income averages in table 29 directly to the asset averages as a measure of operating efficiency, for the farm assets listed there are only the farm assets actually owned by the operators. Many of these owners increased the scale of their farm enterprises by operating additional assets under lease from others. It is probable that this practice was more prevalent among operators under 50 years of age than among those past 50.

#### Tenants' Financial and Income Averages - Relation to Age

Tenant-operators had much more modest asset and net-worth averages than did owners of comparable age (table 30). However, through the use of leased assets, tenants earned incomes of nearly the same magnitude as those earned by the owners.

The peak earning years for tenant-operators apparently occurred when they were in their thirties and forties, just as among owner-operators. Operators in this age group were also the wealthiest of the tenants. As noted earlier, the tendency for the financially stronger tenants to become owners means that in the older age groups of tenants there are relatively few operators of substantial means.

Average debts of the tenant groups were much lower than those of the owner groups. However, tenants' debts follow the same pattern as the debts of owners. Debts were highest among the youngest operators and they diminished with increases in the operators' ages.

#### General Relation of Age to Earnings and Wealth

Among both owners and tenants, farmers earning the highest average incomes were those in their thirties and forties. Apparently these middle years are the period in which experience and vigor are best balanced.

Although they earn the highest incomes, it does not necessarily follow that farmers in the 30-through-49 age group can add to their accumulations at a greater rate than operators in the other age groups. As a

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10/ These age limits must be regarded as only approximate. A different age classification might modify the conclusions somewhat. For example, it is possible that another span of 20 years (say, from age 35 through age 54) would yield higher income averages than those for the 30-through-49 groups.



Table 30.- Average assets, debt, net worth, and net income of commercial farm tenant-operators, by age of operator, Virginia, mid-1949

Age of operator	Assets					Total debts	Net worth	Net income	
	Farm		Nonfarm		Total			From agriculture <sup>1/</sup>	Total <sup>2/</sup>
	Owned and operated personally	Owned but leased to others	Liquid financial reserves	Other					
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	
Under 30 years---	3,279	4	500	113	3,896	521	3,375	1,733	1,954
30-49 years-----	3,253	201	744	263	4,461	338	4,123	2,126	2,274
50-69 years-----	2,537	43	390	147	3,117	194	2,923	1,743	1,810
70 years or over-	2,457	0	1,000	0	3,457	14	3,443	1,129	1,129

<sup>1/</sup> 1948 income. Includes the value of home-consumed products.

<sup>2/</sup> 1948 income. Net income from agriculture plus net income from nonfarm sources.

rule, the middle years are also the period when the operator's family expenses are greatest, both because the family group is generally largest during these years and because most of the expenses for education come in this period.

Because of this it is reasonable to suppose that farmers in the 30-through-49 age group, even those with the highest average incomes, are not in as good a position to increase their holdings as are those whose family responsibilities have been materially reduced. This would explain the fact that the wealthiest group of operators were those in their fifties and sixties (except among tenants, for reasons already noted). Operators aged 70 or more were little burdened by family responsibilities, but most of them were well past their best earning years and were in no position to add to their wealth from current income. The data suggest that in general they were doing the opposite - supplementing current income by liquidating some of their investments.

#### Relation of Farm Income to Tenure

At each net worth level, tenants reported larger net farm incomes than did owners. Table 31 shows this for farmers whose net worths were below \$25,000. Data for farmers whose net worths were above \$25,000 are not presented because the number of tenants in these net worth classes was too small to provide a dependable basis for comparison.

Although the data cover only 1 year, they suggest that farmers can earn larger incomes by investing their capital in livestock and farm machinery than by investing it in farm land and buildings. Probably the main reason for this is that farmers who rent farms and invest most of their capital in livestock and farm machinery can operate on a larger scale, and make fuller and more effective use of their time, than can farmers with equal wealth who invest most of their capital in farm land and buildings. However, in the proportion that they are used in Virginia, capital in the form of livestock and machinery may be more productive than capital in the form of farm land and buildings.

Table 31.- Average net worth and average net farm income of commercial farm operators, by tenure and net worth of operator, Virginia

Net worth of operator	Average net worth 1/		Average net farm income 2/	
	Owners	Tenants	Owners	Tenants
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Under \$5,000----	3,032	1,712	1,033	1,632
\$5,000-9,999----	7,382	6,917	1,374	2,031
10,000-24,999---	15,851	14,325	1,936	3,231

1/ Mid-1949. 2/ 1948. Includes value of products consumed in the home.

APPENDIX

Statistical Methods and Check Data

Original plans for the survey were for interviewers to visit 600 farms in each of 6 regions into which the State of Virginia was divided for survey purposes. These farms included all located within the boundaries of 726 small areas chosen by random selection by the Statistical Laboratory at Iowa State College, Ames, Iowa. The number of these areas varied from 110 to 139 in the various regions.

Interviewers were to try to obtain records from each of the farm operators, except managers and sharecroppers, who lived within the designated areas.<sup>11/</sup> It was recognized that the desired information would not be obtained from all "eligible" farm operators but records were expected from about 3,000.

Had the survey worked out as planned, the data obtained should have been representative of all farm operators, except managers and sharecroppers, for each of the regions and for the State as a whole. Under such circumstances, distributions and averages for each region could have been computed directly from the regional data, and regional totals could have been obtained by expanding the sample data by the ratio of the total number of farms in the region, excluding manager- and cropper-operated farms, to the number of farms in the sample. State totals and distributions could have been obtained simply by adding the regional totals and distributions.

For various reasons, these methods could not be applied. Only 1,467 usable records were obtained - less than half the number expected - and these reflected an undersampling of operators of small farms. These shortcomings resulted partly from failure of the interviewers to cover all the sample areas and from the fact that many sample areas did not contain as many farm operators as had been expected. Moreover, the operators of many small units that should have been included in the survey apparently were passed over by the interviewers in the belief that they were not operating farms. All but a few of the farmers who were interviewed willingly gave the information requested. The small number of records obtained made it impracticable to attempt to present regional data and the undersampling of small-farm operators required the development of a new plan for handling the data to obtain State totals, averages, and distributions.

The method decided upon, after considerable experimentation, was to divide the sample farm operators of each region into four groups, based on the acreage of the farms they operated. Each operator was then given a weight determined by dividing the total acreage operated by all operators of the region (except managers) in his acreage group by the

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<sup>11/</sup> Managers and sharecroppers were excluded on the grounds that neither had to finance the operation of farms. Copy of questionnaire is shown on p. 57.

total acreage operated by all sample operators of the region in his acreage group. The 1945 Census of Agriculture was used to determine the acreage operated by all operators of the region, as the weights were computed before results of the 1950 census became available. The weights, or expansion ratios, derived by this method are shown in table 32.

Table 32.- Expansion factors used in weighting data collected in 1949 Virginia survey, by specified areas and by acreage of farms

Acres in farm	Area					
	1	2	3	4	5	6
Under 30----	100.8	375.8	110.5	184.8	523.3	351.2
30-99-----	65.1	127.3	58.5	126.5	228.6	120.4
100-219-----	50.8	60.7	48.4	66.7	133.2	86.4
220 or more-	37.4	53.9	66.4	64.8	77.7	107.6

These ratios were used to expand the sample data into State totals and also, in preparing frequency distributions and some of the averages, to give proportionate weight to farms - or the operators of farms - of various sizes. Weighted averages were used in the analysis when data for farms of widely different sizes or values - or farm operators of widely different net worths - were combined. Simple averages were used when the data of closely similar magnitudes were combined.

In the analysis, chief emphasis is placed on the capital required to operate farms of various types and sizes and on the financial condition of the operators of such farms. Except for certain biases in the data, which are noted below, the survey results used for these purposes are believed to be reasonably accurate.

Beyond this, however, the data were expanded to provide State estimates of the value of all farm assets in Virginia, except those of manager-operated farms, and of the assets and liabilities of all farm operators, except managers and sharecroppers. These estimates are subject to question because of the sampling and weighting methods employed. Particularly subject to question is the inclusion (in the estimates) of cropper-operated farms and of those who were considered to be the real operators of these farms, when sharecroppers and cropper-operated farms were omitted from the sample. The methods used, however, produced State estimates which correspond closely enough to check data from the census and other sources to warrant confidence that they are in general reasonably accurate (tables 33 and 34).

Table 33.- Results of the 1949 survey and other sources, by items, Virginia

Item	Unit	1949 survey data	Other sources		
			Data	Source and date	
		Thousands	Thousands		
1. Farm operators (excluding man- agers and share- croppers), by size of farm operated:					
Under 30 acres---	Number	52	56	Census of Agriculture, 1945.	
30-99 acres-----	do	56	56	Do.	
100-219 acres-----	do	35	34	Do.	
220 acres or more----	do	16	15	Do.	
2. Value of farm land and buildings, excluding manager- operated farms.	Dollars	1,434,000	1,225,000	Census of Agriculture, 1950. <u>1/</u> <u>2/</u>	
			1,380,000	Census of Agriculture, 1940, adjusted for in- crease shown by BAE index of land values. <u>1/</u>	
3. Value of livestock on farms.	do	223,000	208,000	Agricultural Estimates, BAE, Jan. 1, 1949. <u>1/</u>	
4. Value of crops and livestock mar- keted.	do	372,000	422,000	Bureau of Agricultural Economics. <u>1/</u>	
5. Farmer-owned demand deposits.	do	65,000	105,000	Estimate by Federal Reserve Board, for Jan. 31, 1949.	
6. Farm-mortgage debt owed by owner- operators.	do	85,000	80,000	Bureau of Agricultural Economics (total farm- mortgage debt minus es- timate for tenant- and manager-operated farms).	
7. Farm-mortgage loans:					
Commercial banks	do	<u>3/</u> 46,229	<u>4/</u> 27,805	Federal Deposit Insurance Corporation, June 30, 1949.	
Federal land bank and Land Bank Commissioner loans.	do	<u>3/</u> 7,929	<u>4/</u> 8,983	Farm Credit Administra- tion, June 30, 1949.	
8. Non-real-estate loans:					
Commercial banks	do	<u>3/</u> 27,586	<u>5/</u> 30,910	Federal Deposit Insurance Corporation, June 30, 1949.	
Production credit associations.	do	<u>3/</u> 4,287	<u>5/</u> 7,072	Farm Credit Administra- tion, June 30, 1949.	

1/ Value reduced by 4 percent to eliminate manager-operated farms. 2/ Based on 20-percent sample of farms. More restrictive definition of farms was used in 1950 than in earlier censuses. 3/ Loans to farm operators only. 4/ Loans to all borrowers on farm real estate security. 5/ May include some loans to others than active farm operators.

Table 34.- Percentage distribution of commercial farms by value of products sold, by source of data, Virginia

Value of products sold	Percentage of commercial farms	
	Survey <u>1/</u>	Census <u>2/</u>
	<u>Percent</u>	<u>Percent</u>
\$250-\$1,199-----	34	31
1,200-2,499-----	30	31
2,500-4,999-----	21	21
5,000-9,999-----	10	9
10,000-24,999-----	4	6
25,000 or more-----	1	2
Total-----	100	100

1/ 1948 sales as reported in survey.

2/ 1949 sales as reported in 1950 census.

Nevertheless, the data contain some known biases, most of which are discussed in the text, as follows:

1. Small farms are still slightly underweighted compared with large farms; and noncommercial farms are substantially underweighted compared with commercial farms.
2. Both gross and net farm income appear to have been under-reported.
3. There may also have been underreporting of the liquid assets owned by farmers, although this is not certain. A large part of the discrepancy between the survey estimate and the Federal Reserve estimate of farmer-owned demand deposits, shown in table 33, may be explained by the difference in dates to which the estimates apply. Farmer-owned deposits in Virginia are usually much lower at midyear than at the end of January because of seasonal factors.
4. Although farm debts in general appear to have been reported with reasonable accuracy, the survey estimate for bank-held farm-mortgage debt is far too high.

QUESTIONNAIRE

County \_\_\_\_\_ Segment No. \_\_\_\_\_

A STUDY OF THE FINANCIAL STATUS OF VIRGINIA FARMERS, MARCH 1949

1. Does the occupant of this place conduct any farming operation on this place or elsewhere which includes 3 acres or more of land or will produce \$250 or more of products this year? Yes \_\_\_ No \_\_\_ (If answer is no, stop interview at this point.)
2. Does the occupant own any of the land, livestock or equipment and share in the management of the land farmed? Yes \_\_\_ No \_\_\_ (If answer is no, stop interview at this point.)
3. Is the operator: owner \_\_\_ or tenant \_\_\_? (If tenant, give name and address of landlord.) \_\_\_\_\_
4. Does the operator of this place receive more than one-half of his net income from farming? Yes \_\_\_ No \_\_\_
5. A. How many acres are operated either personally or with hired labor or croppers?  
 Acres in this place . . . . . \_\_\_\_\_  
 Other land operated . . . . . \_\_\_\_\_  
 Total land operated . . . . . \_\_\_\_\_
- B. Of the total acreage above, how much is owned by the operator \_\_\_; owned by members of the operator's family \_\_\_; owned by others \_\_\_?
- C. How many acres of other land are owned by the operator but rented to others? \_\_\_\_\_.
6. What is the age of the operator? \_\_\_\_\_ years.
7. What is the total amount of life insurance on the operator? \$ \_\_\_\_\_
8. What is the fair current value of all property operated?

	<u>Owned by</u>		
	<u>Operator</u>		<u>Others</u>
A. Land and Buildings . . . . .	\$ _____	\$ _____	\$ _____
Land (exclusive of buildings) \$ _____			
B. Machinery and Equipment:			
Truck . . . . . No. _____	\$ _____	\$ _____	
Tractor . . . . . No. _____	\$ _____	\$ _____	
Automobile . . . . . No. _____	\$ _____	\$ _____	
Cultivators, Plows, Disk, Harrow, etc.	\$ _____	\$ _____	
Planter, Drills, Sprayer, Wagons, etc.	\$ _____	\$ _____	
Harvesting Equipment, Mower, Binder, etc.	\$ _____	\$ _____	
Dairy and Poultry Equipment . . . . .	\$ _____	\$ _____	
Small Tools and Other . . . . .	\$ _____	\$ _____	
Total . . . . .	\$ _____	\$ _____	\$ _____

C. Livestock:

Horses and Mules . . . . .	\$ _____	\$ _____	
Dairy Cows, Heifers, Bulls, etc. . . . .	\$ _____	\$ _____	
Beef Cattle, Cows and Calves . . . . .	\$ _____	\$ _____	
Hogs, Shoats and Pigs . . . . .	\$ _____	\$ _____	
Sheep and Lambs . . . . .	\$ _____	\$ _____	
Turkeys . . . . .	\$ _____	\$ _____	
Hens and Laying Flock . . . . .	\$ _____	\$ _____	
Broilers . . . . .	\$ _____	\$ _____	
Total . . . . .	\$ _____	\$ _____	\$ _____

D. Miscellaneous:

Supplies, Hay, Grain, Fertilizer, etc. on Hand . . . . .	\$ _____	\$ _____	
Fruits and Crops in Storage . . . . .	\$ _____	\$ _____	
Farm Household Furnishings, etc. . . . .	\$ _____	\$ _____	
Other . . . . .	\$ _____	\$ _____	
Total . . . . .	\$ _____	\$ _____	\$ _____
TOTAL VALUE OF ALL PROPERTY . . . . .			\$ _____

9. Value of other farm property owned by the operator in Virginia \$ \_\_\_\_; other States \$ \_\_\_\_.

10. What is the current value of nonfarm property owned by the operator?

Stock or certificates in cooperatives . . . . .	\$ _____
Town or City Property . . . . .	\$ _____
Notes, Mortgages or Accounts Due from Farmers . . . . .	\$ _____
Notes, Mortgages or Accounts Due from Others . . . . .	\$ _____
U. S. Savings Bonds (Maturity Value) . . . . .	\$ _____
Savings Account at Bank . . . . .	\$ _____
Checking Account in Bank . . . . .	\$ _____
Other, Cash on Hand, Corporation Stock, Postal Savings, etc. . . . .	\$ _____
Total Nonfarm Assets . . . . .	\$ _____

11. What are the amounts owed on real estate mortgages against the real estate owned by the operator of this place?

<u>Type of lender</u>	<u>Farm property</u>	<u>Nonfarm property</u>
Commercial Banks . . . . .	\$ _____	\$ _____
Other Farmers . . . . .	\$ _____	\$ _____
Individuals (not farmers) . . . . .	\$ _____	\$ _____
Federal Land Bank . . . . .	\$ _____	\$ _____
Farmers Home Administration . . . . .	\$ _____	\$ _____
Savings and Loan Association, Insurance Companies . . . . .	\$ _____	\$ _____
Other . . . . .	\$ _____	\$ _____
Total . . . . .	\$ _____	\$ _____



12. Non-real-estate credit - what are the amounts owed by the operator on chattel mortgages, crop liens, unsecured notes, open accounts, etc. and approximately what was the largest amount owed at any one time last year?

<u>Type of lender</u>	<u>Owed now</u>	<u>Largest amount owed last year</u>
To: Commercial Banks (exclude CCC loan)	\$ _____	\$ _____
Other Farmers . . . . .	\$ _____	\$ _____
Production Credit Associations . . . . .	\$ _____	\$ _____
Stores, Dealers, and Time Merchants	\$ _____	\$ _____
Commodity Credit Corporation . . . . .	\$ _____	\$ _____
Farmers Home Administration . . . . .	\$ _____	\$ _____
Insurance or Personal Loan Companies	\$ _____	\$ _____
Taxes, Interests, Rent, Doctors and Others . . . . .	\$ _____	\$ _____
Total non-real-estate Debt . . . . .	\$ _____	\$ _____

13. Operator's gross cash farm receipts 1948 \$ \_\_\_\_\_; cash farm expenses 1948 \$ \_\_\_\_\_.

14. What were the two or three principal sources of gross cash farm receipts in 1948? Secure only the principal items, at least 75 percent of total.

Dairy Products \$ \_\_\_\_\_, Livestock \$ \_\_\_\_\_, Grain \$ \_\_\_\_\_,  
Fruit \$ \_\_\_\_\_, Tobacco \$ \_\_\_\_\_, Truck Crop \$ \_\_\_\_\_, Pea-  
nuts \$ \_\_\_\_\_, Poultry \$ \_\_\_\_\_, Potatoes \$ \_\_\_\_\_, Other \$ \_\_\_\_\_

15. How much nonfarm income was received by the operator in 1948 from:

Work for Other Farmers . . . . .	Days _____	\$ _____
Other Work . . . . .	Days _____	\$ _____
Other Sources (interests, rents, dividends, etc.) . . . . .		\$ _____
Total . . . . .		\$ _____

16. Approximate value of home-grown products used in the home in 1948.  
\$ \_\_\_\_\_.

17. A. How much does the operator expect to spend in the next 12 months for the following:

Buy Farm or Additional Land . . . . .	\$ _____
Land Improvements - fence, tile drain, terracing . . . . .	\$ _____
New Buildings or Building Repairs . . . . .	\$ _____
Farm Machinery, Tractors, Auto, Truck, Livestock . . . . .	\$ _____
Home Furnishings or Equipment . . . . .	\$ _____
Other . . . . .	\$ _____
Total . . . . .	\$ _____

B. Money for the above expenditures to be obtained from:

Cash Funds Now on Hand . . . . .	\$ _____
Redemption of Savings Bonds . . . . .	\$ _____
Liquidation of Other Assets . . . . .	\$ _____
Income to be Earned During Year . . . . .	\$ _____
Borrowing . . . . .	\$ _____
Other Sources . . . . .	\$ _____
Total (should agree with above) . . . . .	\$ _____