

FARMERS' FINANCIAL POSITION

The Fifth District's average farm operator in 1970 had a 172-acre farm valued at \$58,761. His share of the value of farm products sold excluding cash rent equaled \$11,929, while his cash operating expenses averaged \$8,406. His net cash farm income amounted to only \$3,523, but off-farm income added up to an average of \$6,755 and brought his total net cash income to \$9,174. And, if he were in debt, his indebtedness totaled \$15,717.

This picture of the average District farmer's financial position in 1970 is based on published data from the 1970 Survey of Agricultural Finance conducted by the U. S. Bureau of the Census. Information from both the published and unpublished results of this special census survey provides state and national statistics that deal with the many elements of agricultural finance.¹ State data that present a complete picture of the farmer's financial position, his use of credit for purchasing specified items, and his total debts outstanding by kind and source have been made available for the first time.

With this new information at hand, the primary objective of this study, then, is to learn more about the financial position of the Fifth District farmer—his income, both farm and nonfarm; his capital purchases and operating expenditures; his use of credit; and his debts, by amount, kind, and lenders of debt. Although data were collected from both farm operators and landlords, this analysis will concentrate mostly on the farm operators.

FARM INCOME

A farm operator's total net cash income is made up of net cash farm income and off-farm income. Net cash farm income, in turn, is the sum of the operator's share of the value of farm products sold minus cash operating expenses and cash rent. Off-farm earnings, as the name implies, are those received from off-farm sources. Earnings from such sources have become increasingly important to the farm operator and his family in recent years.

Total Net Cash and Net Cash Farm Income
Total net cash income of all farm operators in the

¹ Since the data are based on a sample survey, they are subject to both sampling and nonsampling errors—the latter arising from a variety of reasons such as underreporting, misclassifications by respondents, and processing errors.

District equaled \$1,955 million in 1970. Net cash farm income amounted to \$751 million and represented 38 percent of the total, while off-farm income came to \$1,204 million and accounted for the remaining 62 percent. By states, net cash farm income as a percent of total net cash income ranged from a low of 17 percent in West Virginia to a high of 48 percent in North Carolina.

Farm operators' average total net cash income by economic class of farm varied widely, ranging from around \$2,420 for the low-income farmers to some \$49,930 for those grossing \$100,000 or more in farm sales. Wide variation by value-of-sales categories also occurred in the relative contribution of net cash farm income and off-farm income to the total net cash income of farm operators. For instance, as the value of farm sales rose from less than \$2,500 to \$100,000 or more, net cash farm income's share of the total climbed from 11 to 81 percent. Just the opposite was true in the case of off-farm income. Farms with sales of farm products valued at \$10,000 and over accounted for 49 percent of total net cash income, 82 percent of all net cash farm income, and 29 percent of total off-farm income.

MEASURES OF THE FARM OPERATOR'S FINANCIAL POSITION

Fifth District, 1970

Item	Unit	Average per Farm Reporting
Average size of farm	acres	172
Value of land and buildings per farm	dollars	58,761
Value of farm products sold per farm (operator's share minus cash rent)	dollars	11,929
Cash operating expenses per farm	dollars	8,406
Net cash farm income per farm	dollars	3,523
Off-farm income per farm	dollars	6,755
Total net cash income per farm*	dollars	9,174
Total debt per farm**	dollars	15,717

*Total net cash income of farm operators with off-farm income averaged about \$10,278 if it is assumed that farmers with off-farm jobs had the same net cash farm income as those who did not work off the farm.

**Farm operators with debt only.

Source: Computed from U. S. Bureau of the Census, U. S. Census of Agriculture: 1969, Vol. V, Part 11, "Farm Finance," Tables 1, 14, 20, and 109.

FARM OPERATORS' INCOME BY ECONOMIC CLASS OF FARM

Fifth District, 1970

Economic Class of Farm*	Total Net Cash Income		Net Cash Farm Income		Off-Farm Income	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
	\$ Million	Percent	\$ Million	Percent	\$ Million	Percent
All farms	1,955.3	100.0	750.8	38.4	1,204.5	61.6
Commercial farms	1,532.8	100.0	741.2	48.4	791.6	51.6
\$100,000 or more	150.4	100.0	122.1	81.2	28.3	18.8
\$40,000 to \$99,999	278.7	100.0	191.5	68.7	87.2	31.3
\$20,000 to \$39,999	331.3	100.0	208.3	62.9	123.0	37.1
\$10,000 to \$19,999	202.3	100.0	90.2	44.6	112.1	55.4
\$5,000 to \$9,999	274.1	100.0	81.1	29.6	193.0	70.4
\$2,500 to \$4,999	232.4	100.0	40.7	17.5	191.7	82.5
\$50 to \$2,499	63.4	100.0	7.2	11.4	56.2	88.6
Noncommercial farms	422.5	100.0	9.6	2.3	412.9	97.7
Part-time farms	355.2	100.0	5.9	1.7	349.2	98.3
Part-retirement farms	67.4	100.0	3.7	5.5	63.7	94.5

Note: Data may not add to totals because of rounding.

*The terms "commercial" and "noncommercial" were not used in the 1970 Survey of Agricultural Finance. The commercial and non-commercial farm groupings are used in this article, however, to make the terminology similar to that used in earlier censuses. Defined, they are as follows:

Commercial farms—Generally, all farms with a value of sales of \$2,500 or more are classified as commercial. Farms with a value of sales of \$50 to \$2,499 are also classed as commercial if the operator is under 65 years of age and does not work off the farm 100 or more days during the year.

Noncommercial farms—The two principal classes of noncommercial farms are the part-time and part-retirement farms. Their annual gross sales from farming are less than \$2,500. Part-time farmers, in addition, work off their farms 100 or more days during the year and are under 65 years of age. Part-retirement farmers, however, are 65 years old or over.

Source: Computed from U. S. Bureau of the Census, 1970 Survey of Agricultural Finance (unpublished data).

Off-Farm Income When farm folks take on a second job, it is typically known as "daylighting"—working an off-farm job during the day and farming on evenings and weekends. For many of these dual jobholders, the second job has been a necessity.

In 1970, 84 percent of the District's farm operators and their families received income from off-farm sources. Some 55 percent of all farm operator families earned income from cash wages and salaries, receiving an average of \$6,911 per family reporting this source of income. Cash wages and salaries, in fact, accounted for 68 percent of the nonfarm income received by all farm families. Operation of nonfarm businesses and professional practice provided the second largest source of off-farm earnings, contributing an average of \$6,215 to farm families reporting this type of income and comprising 12 percent of all income from nonfarm sources. Government farm payments, although received by better than two-fifths of all farm operators, averaged little more than \$900 per farm. Farm operators also obtained some non-farm income from sources such as customwork and rental of agricultural property; Social Security and pensions; and rental of nonfarm property, dividends, and interest.

By economic class of farms, the proportion reporting off-farm income ranged from 74 percent for those with sales of farm products valued at \$100,000 or more to about 100 percent for part-time farmers. Off-farm earnings per farm operator family reporting ran from a low of \$2,775 for the operator with farm sales valued at less than \$2,500 to a high of some \$12,640 for the farmer whose gross sales of farm products amounted to \$100,000 and over. For farmers with farm sales of less than \$20,000, off-farm earnings dominated the income picture. Or, in other words, off-farm income per farm was sizably larger than average net cash farm income when the operators' farm sales were under \$20,000. It would seem clear, therefore, that farm operators' off-farm earnings have made them better customers for consumer goods as well as farm goods. And, because of this extra income, they have often proven to be better farm loan customers.

CAPITAL AND OPERATING EXPENDITURES

Spending by the District's farm operators for capital purchases and operating expenses in 1970 came to a hefty \$2,285 million. Operating expenditures accounted for nearly four-fifths of the total,

while capital purchases made up the remainder. Only 46 percent of the farm operators bought capital items during the year, however. Moreover, capital spending per farm was considerably smaller than average operating expenditures. Capital spending comprised a slightly larger proportion of total expenditures in Virginia and West Virginia than in Maryland and the Carolinas.

Farm operators' capital purchases and operating expenditures varied significantly by tenure of operator and by economic class of farm. Part owners, for instance, represented 27 percent of all farm operators but accounted for 44 percent—almost the same as full owners—of total operator spending for capital and operating items. Total expenditures per farm operator averaged \$10,725 but ranged from some \$8,090 for tenants to around \$17,610 for part-owner operators.

Economic classes of farms showed a much wider range in capital and operating expenditures per farm than did tenure of operator. Spending per farm for capital purchases and operating expenses rose as the sales value of farm products increased, climbing steadily from about \$990 for farms with sales valued at less than \$2,500 to some \$170,675 for farms with sales of \$100,000 or more. The data would seem to indicate that the District's farm operators are firm believers in the familiar saying, "You must spend money, if you wish to make money."

FARM OPERATORS' OFF-FARM INCOME BY SOURCE

Fifth District, 1970

Source	Share of Farm Operators Reporting Income from Off-Farm Sources	Distribution of Farm Operators' Off-Farm Income by Source	Average Off-Farm Income per Farm Operator Reporting
	Percent	Percent	Dollars
Total, all off-farm sources	83.7	100.0	6,755
Cash wages and salaries	55.3	67.7	6,911
Nonfarm business or profession	11.2	12.3	6,215
Government farm payments	41.5	6.7	909
Customwork and rental of agricultural property	17.1	3.9	1,291
Social Security, pensions, etc.	22.4	5.8	1,457
Other sources*	9.4	3.6	2,211

*Rental of nonfarm property, dividends, interest, and other off-farm income.

Source: Computed from U. S. Bureau of the Census, U. S. Census of Agriculture: 1969, Vol. V, Part 11, "Farm Finance," Tables 1 and 20.

FARM OPERATORS' CAPITAL PURCHASES AND OPERATING EXPENDITURES BY ECONOMIC CLASS OF FARM

Fifth District, 1970

Economic Class of Farm	Farms Reporting	Amount		
		Total	Percent of Total	Average per Farm Reporting
	Number	\$1,000	Percent	Dollars
All farms	213,124	2,285,245	100.0	10,723
Commercial farms	157,791	2,196,088	96.1	13,918
\$100,000 or more	3,013	514,248	22.5	170,676
\$40,000 to \$99,999	12,287	631,676	27.6	51,410
\$20,000 to \$39,999	22,775	474,901	20.8	20,852
\$10,000 to \$19,999	23,058	256,628	11.2	11,130
\$5,000 to \$9,999	35,594	190,953	8.4	5,365
\$2,500 to \$4,999	34,882	101,783	4.5	2,918
\$50 to \$2,499	26,182	25,901	1.1	989
Noncommercial farms	55,333	89,158	3.9	1,611
Part-time farms	38,649	71,886	3.1	1,860
Part-retirement farms	16,684	17,272	0.8	1,035

Note: Data may not add to totals because of rounding.

Source: U. S. Bureau of the Census, 1970 Survey of Agricultural Finance (unpublished data).

Capital Purchases Farm operators reported capital purchases of \$493 million in 1970. Although they comprised little more than one-fifth of total operator capital purchases and operating expenditures combined, they made up better than 90 percent of the capital purchases made by both operators and landlords.

Farm operators who made capital purchases were generally those best able to do so. Purchases of capital items averaged around \$5,035 per farm reporting but ran from as low as about \$1,285 for operators with farm sales under \$2,500 to some \$25,125 for the farmer with sales of \$100,000 or more. Farm operators with farm sales of \$10,000 and over added up to only two-fifths of the operators reporting but accounted for three-fourths of the total value of all capital purchases.

With the growing substitution of capital for labor, farming has become increasingly capital intensive. What capital goods, then, did the District's farm operators purchase in 1970? How did the dollar value of these capital items stack up relative to the total value of all purchases? Surprisingly, perhaps, purchases of tractors and farm machinery—new and used combined—had the greatest value by far and made up 27 percent of all capital expenditures. The value of new and used trucks and autos was second

CAPITAL PURCHASES BY CASH AND CREDIT FOR ALL FARM OPERATORS

Fifth District, 1970

Item	Capital Purchases	Share Paid in Cash	Share Bought on Credit of:	
			Less than 12 Months	12 Months or More
	\$1,000	Percent	Percent	Percent
Total capital purchases	493,609	55.7	9.4	34.9
Land and buildings	71,099	50.7	3.7	45.6
Irrigation improvements	11,157	*	*	*
Other land improvements	83,607	55.2	6.8	38.0
Moveable irrigation equipment and machinery:				
New	2,388	77.4	7.8	14.8
Used	790	93.0	4.2	2.8
Tractors and farm machinery:				
New	102,610	46.6	15.2	38.2
Used	28,169	64.2	15.2	20.6
Trucks and autos:				
New	74,724	57.3	8.9	33.8
Used	22,287	74.1	8.3	17.6
Breeding livestock and dairy cows and heifers	64,964	71.6	11.1	17.3
All other agricultural capital purchases	31,813	32.0	4.5	63.5

*Data withheld in some states to avoid disclosure of information for individual farms.

Source: U. S. Bureau of the Census, U. S. Census of Agriculture: 1969, Vol. V, Part 11, "Farm Finance," Tables 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, and 56.

in importance and comprised 20 percent of the total. Then followed spending for other land improvements accounting for 17 percent, purchases of land and buildings amounting to 14 percent, and buying breeding livestock and dairy cattle representing 13 percent. The remaining capital expenditures consisted of spending for irrigation improvements, moveable irrigation equipment and machinery, and all other capital purchases.

Operating Expenditures Rising costs and increased use of farm inputs in recent years have caused farmers' operating expenses to skyrocket. Small wonder, then, that operating expenses per farm averaged \$8,406 and added up to a total of \$1,792 million in 1970. Like the farm operator's capital purchases, his operating expenditures increased as his gross sales of farm products rose. For the low-income farmers with farm sales under \$2,500, expenses per farm averaged only \$670. By contrast, the high-income operator with farm sales of \$100,000 and over had operating expenditures averaging

OPERATING EXPENDITURES BY CASH AND CREDIT FOR ALL FARM OPERATORS

Fifth District, 1970

Item	Operating Expenditures	Share Paid in Cash	Share Bought on Credit of:	
			Less than 12 Months	12 Months or More
	\$1,000	Percent	Percent	Percent
Total operating expenditures	1,791,637	80.5*	17.6	1.9
Upkeep of farm buildings, fences, drains, and irrigation systems	61,254	91.6	7.1	1.3
Purchases of livestock other than breeding stock and dairy cows and heifers	106,180	70.4	26.9	2.7
Feed, seed, fertilizer, pesticides, and fuel	727,486	70.5	27.4	2.1
Other agricultural operating expenses	575,650	82.9	14.4	2.7
Expenditures paid by contractors	321,067	100.0**	—	—

*Expenditures paid or provided by contractors equaled 17.9 percent of farmers' total operating expenditures; hence, cash payments made by the operators themselves amounted to 62.6 percent of the total.

**Expenditures paid by contractors are not broken down into cash and credit categories.

Source: U. S. Bureau of the Census, U. S. Census of Agriculture: 1969, Vol. V, Part 11, "Farm Finance," Tables 58, 60, 62, 64, and 66.

around \$150,450 per farm. Farm operators grossing \$10,000 and over from farm sales were responsible for 84 percent of the value of all operating expenditures. Moreover, those in the \$20,000-plus class accounted for almost three-fourths of the total.

How were these operating expenditures distributed? Farm operators used 41 percent of their total operating expenses for feed, seed, fertilizer, pesticides, and fuel; another 32 percent for other agricultural operating expenses; 6 percent for purchases of livestock other than breeding stock and dairy cows and heifers; and 3 percent for upkeep of farm buildings, fences, drains, and irrigation systems. Expenditures paid or provided by contractors for farm operators producing crops or livestock under contract made up the remaining 18 percent.

FARM CAPITAL FLOW

The growing capital requirements of modern-day agriculture have raised many questions concerning the financing of present and future farm capital flows. Financing farm capital flows comes mainly from farmers' cash flows and from debt financing or credit

flows. How are the District's farmers financing their capital flows? What proportion is financed from their cash flows and what proportion from credit flows? Such questions can now be answered from data made available by the special 1970 census survey.

The District's farm operators and landlords spent a staggering \$2,373 million in 1970 for capital purchases and operating expenditures. Spending by farm operators alone amounted to 96 percent of the total.

Of the vast amount of capital used, farm operators and landlords combined paid cash for 61 percent. They borrowed another 25 percent, while contractors paid or provided for 14 percent. (Expenditures paid by contractors were not broken down into cash and credit categories. Although initially tallied separately, the census summation of the data included them with the cash payments.) Farm operators' cash and credit flows showed the same proportions as those of the operators and landlords together.

Credit Flow Funds borrowed by farm operators and landlords to finance agricultural operations during 1970 added up to \$771 million. Farm operators accounted for 95 percent of all borrowed funds. Of the total credit used, 78 percent was for specified items or uses—that is, itemized capital purchases and operating expenditures—and 22 percent for unspecified or general purpose expenditures. Operating

expenditures accounted for three-fifths of the funds borrowed for specified items.

Two-thirds of all funds borrowed were for less than 12 months and 34 percent for 12 months or more. In the case of capital purchases, four-fifths of the borrowings were for a period of 12 months or more. But nine-tenths of the funds borrowed for operating expenditures were for less than 12 months.

Farm Operators' Cash and Credit Flows Since farm operators account for 96 percent of total spending and 95 percent of all borrowings, a more detailed examination of their cash and credit flows might be useful. Tabular material provides much of the detail.

Farm operators paid for 56 percent of the total value of their capital purchases in 1970 with cash. They financed the remaining 44 percent, with 35 percent of the purchases for a period of 12 months or more. Measured in terms of the highest percentage of their purchased values, cash was used to a greater extent than credit in paying for new and used trucks and autos, used tractors and farm machinery, breeding livestock and dairy cattle, new and used moveable irrigation equipment and machinery, and other land improvements. Debt financing was used more extensively in the purchase of new tractors and farm machinery and other agricultural capital purchases. In buying land and buildings, cash and credit were used about equally. With the exception of other agricultural capital items, land and building pur-

FARM OPERATOR DEBT BY KIND AND ECONOMIC CLASS OF FARM FOR ALL FARMS WITH OPERATOR DEBT

Fifth District, 1970

Economic Class of Farm	Total Debt		Real Estate Debt		Non-Real-Estate Debt	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
	\$ Million	Percent	\$ Million	Percent	\$ Million	Percent
All farms	1,361.1	100.0	793.4	100.0	567.6	100.0
Commercial farms	1,263.9	92.9	719.0	90.6	545.0	96.0
\$100,000 or more	198.8	14.6	107.6	13.6	91.2	16.1
\$40,000 to \$99,999	328.8	24.2	190.4	24.0	138.4	24.4
\$20,000 to \$39,999	336.2	24.7	173.0	21.8	163.2	28.8
\$10,000 to \$19,999	164.7	12.1	95.8	12.1	68.9	12.1
\$5,000 to \$9,999	138.6	10.2	85.3	10.7	53.4	9.4
\$2,500 to \$4,999	72.5	5.3	50.7	6.4	21.8	3.8
\$50 to \$2,499	24.3	1.8	16.1	2.0	8.1	1.4
Noncommercial farms	97.2	7.1	74.5	9.4	22.7	4.0
Part-time farms	87.5	6.4	67.9	8.6	19.6	3.5
Part-retirement farms	9.7	0.7	6.6	0.8	3.1	0.5

Note: Data may not add to totals because of rounding.

Source: U. S. Bureau of the Census, 1970 Survey of Agricultural Finance (unpublished data).

chases had the highest percentage (46 percent) of their purchase value financed for a period of 12 months or more.

Farm operators financed 20 percent of the value of all operating expenditures, a much smaller proportion than the 44 percent borrowed for making capital purchases. The dollar volume of credit used for operating expenses was 60 percent larger than that for capital purchases, however. Most of the value of the expenditures financed was for a period of less than 12 months. Operators themselves paid cash for some 62 percent of all operating expenditures, while contractors paid or provided for the remaining 18 percent. Expenditures with the highest percentage of financing (30 percent each) were those for purchases of livestock and poultry other than breeding stock and dairy cattle and those for feed, seed, fertilizer, pesticides, and fuel. Better than nine-tenths of the spending for upkeep of farm buildings, fences, drains, and irrigation systems and more than four-fifths of other agricultural operating expenses were paid in cash.

Funds borrowed for unspecified or general purposes were used for both capital and operating expenses, mostly the latter. Such loans were not used for, or could not be readily allocated to, a specific use or purpose. Thus, when used, the operator reported them as cash payment for the specific item.

FARM DEBT

The outstanding debt held by the District's farm operators and landlords on December 31, 1970 totaled \$1,587 million. Farm operators themselves held \$1,361 million or 86 percent of this total. Landlord debt, on the average, was much smaller than operator debt. Moreover, the proportion of landlords with debt was significantly smaller than for farm operators. This analysis, therefore, will concentrate on farm operator debt and on characteristics of farm operators with debt.

Farm Operator Debt Roughly two-fifths of the District's farm operators were in debt at the end of 1970, although this share varied from one-third in Virginia and West Virginia to one-half in Maryland. Real estate debt comprised almost three-fifths of the total and non-real-estate debt the remainder. Debt outstanding averaged \$15,717 per farm operator reporting but ranged from as low as \$12,168 in West Virginia to as high as \$29,388 in Maryland.

Debt by Economic Class Farm operator debt appeared to be concentrated in the hands of those grossing \$20,000 and over in farm sales. These operators comprised only 29 percent of all those who were in debt, but they held 64 percent of the total debt outstanding. Moreover, better than three-fifths of the operators in each of the three value-of-sales

FARM OPERATORS WITH DEBT BY ECONOMIC CLASS OF FARM

Fifth District, 1970

Economic Class of Farm	Farm Operators With Debt	Farms Reporting Operator Debt as Percent of All Farms in Each Class		Average Debt per Farm Operator Reporting	Share of Total Debt	
		Number	Percent		Real Estate	Non-Real-Estate
				Dollars	Percent	Percent
All farms	86,596	40.6		15,717	58.3	41.7
Commercial farms	70,787	44.9		17,855	56.9	43.1
\$100,000 or more	1,988	66.0		99,995	54.1	45.9
\$40,000 to \$99,999	7,710	62.7		42,646	57.9	42.1
\$20,000 to \$39,999	15,336	67.3		21,923	51.5	48.5
\$10,000 to \$19,999	11,698	50.7		14,082	58.1	41.9
\$5,000 to \$9,999	15,860	44.6		8,740	61.5	38.5
\$2,500 to \$4,999	11,400	32.7		6,359	69.9	30.1
\$50 to \$2,499	6,795	26.0		3,570	66.5	33.5
Noncommercial farms	15,809	28.6		6,145	76.7	23.3
Part-time farms	12,339	31.9		7,089	77.6	22.4
Part-retirement farms	3,470	20.8		2,788	67.8	32.2

Source: Computed from U. S. Bureau of the Census, 1970 Survey of Agricultural Finance (unpublished data).

FARM OPERATORS WITH DEBT BY TENURE, AGE OF OPERATOR, AND YEARS ON FARM

Fifth District, 1970

Classification	Farm Operators With Debt	Farms Reporting Operator Debt as Percent of All Farms in Each Class	Average Debt per Farm Operator Reporting	Share of Total Debt	
				Real Estate	Non-Real- Estate
	Number	Percent	Dollars	Percent	Percent
All farms	86,596	40.6	15,717	58.3	41.7
Tenure of operator:					
Full owners	42,464	34.0	13,790	69.7	30.3
Part owners	32,620	57.3	21,211	55.6	44.4
Tenants	11,512	36.6	7,259	0.7	99.3
Age of operator:					
Under 35 years	8,752	49.9	16,507	56.4	43.6
35 to 44 years	14,636	51.5	18,647	60.9	39.1
45 to 54 years	22,382	46.9	14,455	54.3	45.7
55 to 64 years	15,020	30.7	13,108	59.8	40.2
65 years and over	6,228	19.8	8,577	68.5	31.5
Age not reported	19,578	50.0	18,890	58.3	41.7
Years on farm:					
Not reported	10,462	27.1	13,599	53.7	46.3
Under 2 years	4,341	49.4	13,483	74.1	25.9
2 to 4 years	6,589	54.6	12,865	66.5	33.5
5 to 9 years	10,438	53.6	16,661	58.7	41.3
10 to 14 years	8,887	43.7	14,121	51.9	48.1
15 to 19 years	8,024	47.7	18,328	57.4	42.6
20 to 29 years	11,569	35.4	15,084	55.9	44.1
30 years and over	6,708	26.6	12,624	61.9	38.1
No 1969 report	19,578	50.0	18,890	58.3	41.7

Source: Computed from U. S. Bureau of the Census, 1970 Survey of Agricultural Finance (unpublished data).

classes of farms in the \$20,000-plus group reported debts, and their average debts ranged from a low of around \$21,925 to a high of almost \$100,000. These same farm operators had relatively more of the total non-real-estate debt than of the real estate debt, a good indication that they were highly commercialized farmers. Their proportion of the total non-real-estate debt by economic class, in fact, closely paralleled their proportion of net cash farm income by class.

Below the \$20,000-plus category, the proportion reporting debt in each economic class (except part-time farmers) declined, falling to a low of 21 percent for part-retirement farms. The average size of debt followed the same pattern. Although these operators represented 71 percent of all who had debts, they held only 36 percent of the total debt outstanding. Generally speaking, as their volume of gross sales fell below the \$20,000-plus category, real estate debt as a share of total debt increased. Overall, the evidence seems to suggest that debt was held by those best able to repay.

Debt by Tenure, Age, Years on Farm Some 57 percent of all part-owner operators reported debt. By comparison, only 37 percent of the tenants and 34 percent of the full owners indicated they were in debt. Part owners had an average indebtedness of around \$21,210, well above the \$13,790 average for full owners and close to three times the average tenant's debt. Since full owners own all the land they operate, perhaps it is no surprise to find that real estate debt, with 70 percent, accounted for the largest proportion of their total debt. Part owners, on the other hand, had only 56 percent of their total indebtedness secured by real estate.

Beginning with 45 years of age, the proportion of operators who were in debt declined as age increased. Around half of the farm operators under age 45 reported debt, but the share dropped to one-fifth for those 65 years and over. The average size debt rose through age 44, peaking at about \$18,650 in the 35-to-44-year group, and then fell as the age of the operator increased. At age 65 and over, the average

**TOTAL OPERATOR DEBT RELATIVE TO MEASURES OF INCOME OF
FARM OPERATORS WITH DEBT BY ECONOMIC CLASS OF FARM**

Fifth District, 1970

Economic Class of Farm	Operator Debt as A Percent of—					
	Total Operator Debt	Operators' Share of Farm Products Sold Minus Cash Rent		Cash Operating Expenses	Net Cash Farm Income	Total Operator Net Cash Income
		\$ Million	Percent	Percent	Percent	Percent
All farms	1,361.1	89	122	328	137	
Commercial farms	1,263.9	84	116	304	149	
\$100,000 or more	198.8	50	63	235	186	
\$40,000 to \$99,999	328.8	75	101	290	182	
\$20,000 to \$39,999	336.2	89	138	249	154	
\$10,000 to \$19,999	164.7	114	153	442	157	
\$5,000 to \$9,999	138.6	141	209	430	108	
\$2,500 to \$4,999	72.5	190	274	620	83	
\$50 to \$2,499	24.3	303	381	1,487	118	
Noncommercial farms	97.2	509	482	-9,209	68	
Part-time farms	87.5	559	520	-7,515	72	
Part-retirement farms	9.7	282	291	8,876	46	

Source: Computed from U. S. Bureau of the Census, 1970 Survey of Agricultural Finance (unpublished data).

debt was less than half that of the peak level. The kind of debt operators had seemed to have little relationship to age.

Roughly half of the beginning farmers—those with less than two years on the farm—reported they were in debt. Although this proportion was somewhat below the share of those who had been farming from two to nine years, it was larger than for all others who had farmed longer. Beginning farmers had an average indebtedness of some \$13,485, larger than the average of those who had been farming from two to four years and for 30 years and over but smaller than for those whose years in farming were in between. Nearly three-fourths of the total debt of the beginning farmers was real estate debt. This fact suggests that these operators own some land as they start farming. The average size debt of the beginning farmers, however, lends support to the general concern for the adequate financing of young farmers.

In general, the proportion of farm operators reporting debt fell as the number of years on the farm exceeded four. But of those who were in debt, the average debt trended upward and peaked at the end of 19 years in farming. For the longer term operators with 20 or more years on the farm, average debt declined. There seems to be little if any trend in the shares of real estate and non-real-estate debt as the years on the farm increase.

Debt Relative to Measures of Income Examination of farm operator debt relative to measures of income—or selected cash flows—by economic class of farm provides an excellent picture of farmers' debt position. Operator debt as a percent of each of four cash flows—operators' share of farm products sold minus cash rent, cash operating expenses, net cash farm income, and total operator net cash income—is revealed in an accompanying table.

Looking at the various commercial farms, for example, one finds that total debt becomes an increasing proportion of the value of farm products sold as the gross sales decline. For the operator grossing \$100,000 or more in 1970, average total debt was only 50 cents per dollar of sales (adjusted for cash rent). But the operator with farm sales of less than \$2,500 had around \$3.00 in debt for each dollar of sales.

Debt expressed as a percent of cash operating expenses showed a similar pattern. The \$100,000-and-over operator had 63 cents in debt for each dollar of operating expenses. But for the low-income operator with sales under \$2,500, his debt per dollar of expenses came to some \$3.80.

Debt in relation to net cash farm income was pretty much the same for each of the three classes of farms in the \$20,000-plus category. But as gross sales declined below the \$20,000 level, debt became a much

larger proportion of gross sales. This finding, perhaps, lends support to the view that nonfarm income becomes relatively more important than farm income for those classes of farms with low gross farm sales.

Generally speaking, debt in relation to total net cash income was higher for the high-income farms than for those grossing low farm sales. This situation probably resulted from the fact that the high-income operators, with highly commercialized operations, made fairly heavy use of non-real-estate as well as real estate credit. But non-real-estate credit appeared to be much less important to operators with low gross farm sales.

Sources of Borrowed Capital Good information giving farm loans outstanding by institutional lenders has been available on a state basis for many years. But data showing the amount of credit supplied by merchants and dealers and individuals have been woefully lacking. Now, however, the special 1970 census survey has provided a complete state-by-state picture of total farm debt, by source, for the first time.

Commercial and savings banks provided the largest proportion—around one-fourth—of the combined farm operator and landlord debt outstanding. They were followed closely by the Federal land banks with

22 percent. Credit from the production credit associations comprised 16 percent, while individuals supplied 15 percent of the total and ranked fourth as a source of borrowed capital. A mortgage or deed of trust was the predominant form of credit extended by individuals.

Merchant and dealer credit, primarily non-real-estate credit, comprised only 4 percent of the combined operator and landlord debt. But their relative share of the total varied widely from state to state, ranging from about 1 percent in Maryland to 10 percent in West Virginia. Actually, this same sort of state-by-state variation existed for the other major lenders, too. Ranking fifth and supplying 9 percent of the total debt was the Farmers Home Administration. Life insurance companies and other lending institutions provided other debt capital.

Banks supplied credit to the greatest number of farm borrowers and were followed by merchants and dealers, Federal land banks, and PCA's in that order. But the largest average size loans were made by individuals who provided credit either under a mortgage or deed of trust, or under a land purchase contract. The average bank loan was considerably smaller than the loans made by individuals, the Federal land banks, and PCA's but were more than three times the average loan made by merchants and dealers.

TOTAL OPERATOR AND LANDLORD DEBT FOR FARM OPERATORS AND LANDLORDS WITH DEBT

Percentage Distribution by Lenders of Debt

Fifth District by States, 1970

Source of Debt	Maryland	Virginia	West Virginia	North Carolina	South Carolina	Fifth District
	Percent	Percent	Percent	Percent	Percent	Percent
Federal land banks	21.0	20.7	15.4	20.5	31.3	22.1
Farmers Home Administration	5.3	5.2	25.5	11.7	9.6	9.2
Insurance companies	1.8	4.9	1.0	4.9	2.1	3.7
Commercial and savings banks	34.9	36.5	22.9	15.3	16.6	24.8
Production credit associations	6.1	8.6	6.8	25.4	22.4	16.3
Individuals from whom you bought part or all of this farm under—						
A mortgage or deed of trust	22.6	12.6	10.6	8.6	3.3	11.5
A land purchase contract	2.4	3.0	0.6	0.8	1.2	1.7
Other lending institutions	3.6	4.9	4.2	5.8	3.0	4.6
Merchants and dealers, total	0.6	1.1	9.6	5.8	9.3	4.4
Any other individuals	1.6	2.0	3.2	0.9	0.9	1.4
Unpaid bills	0.1	0.5	0.2	0.3	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from U. S. Bureau of the Census, U. S. Census of Agriculture: 1969, Vol. V, Part 11, "Farm Finance," Table 108.

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5-ANNEX

G.8

SUMMARY

Most cash farm sales are produced by the comparatively small number of farmers grossing \$20,000 and over. Off-farm income has become important to a majority of farm operator families but especially so to those with lower net cash farm income. Spending per farm for capital purchases and operating expenses rose as the sales value of farm products increased.

Farmers used borrowed funds to finance 25 percent of their total farm capital flows. They paid cash for 61 percent, and contractors paid or provided for 14 percent.

The evidence seems to indicate that debt generally was held by those best able to repay. More operators of large farms with gross sales of \$20,000 or more were indebted than were the small farm operators. Average debt loads were also greater for the large highly commercialized farmers.

Institutional lenders provided the major portion of borrowed capital. Surprisingly, perhaps, individuals supplied 15 percent of the credit and merchants and dealers only 4 percent.

Sada L. Clarke

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