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Bulletin Number 579

Financial Characteristics of U.S. Farms, January 1, 1989

15500
-100

2330
185
700
1050



TIES
USE

REAL ESTATE
MACHINERY
LIVE STOCK
SERIALS BRANCH

CATTLE SALES
HOG SALES
CORN SALES
TOTAL

170400
10000
22500

ASSE

REAL ES.
OWNED
LIVESTOCK
CROPS

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Financial Characteristics of U.S. Farms, January 1, 1989. By Mitchell J. Morehart, James D. Johnson, and David E. Banker. Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture. Agriculture Information Bulletin No. 579.

Abstract

Despite the 1988 drought, the overall financial conditions of farmers and ranchers remained similar to those in 1987. On average, net farm income (profitability) and net cash farm income rose slightly, but fewer farms had positive incomes. More farms had no outstanding liabilities, and fewer farms had debt/asset ratios (solvency) above 0.40. This report provides a detailed analysis of farm financial performance based on the latest information from the Farm Costs and Returns Survey (FCRS).

Keywords: Assets, balance sheet, cash-flow, debt, economic class, Farm Costs and Returns Survey, financial stress, production specialty, region, financial characteristics

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Summary

Overall financial conditions of farms and ranches at the beginning of 1989 remained very similar to those of the previous year. In general, the trend continued toward improved economic performance as compared with the mid-1980's. Much of the progress in recent years can be attributed to efforts by farmers to reduce their debt loads, thus improving their solvency position. Lower debt also means less of a drain on farm income from debt service.

On average, net farm income increased by about \$350 (roughly 1.6 percent) to about \$21,300 in 1988. Increased earnings from crop and livestock sales provided higher gross farm incomes despite increased cash operating expenses. Even though average net farm income was higher, the percentage of farms with positive net incomes declined slightly from 1987. Seventy-five percent of farms had positive net farm income, down 3 percentage points from 1987 although remaining higher than the 69 percent estimated in 1986. All economic size groups had fewer profitable farms than in 1987. Tobacco, other field crop, cotton, and poultry operations had the highest share of operators with positive net income. Regions where more than three out of four farms were profitable (the U.S. average) included the Northeast, Northern Plains, Appalachian, Southeast, Delta, and Mountain.

The proportion of farms with debt/asset ratios above 0.40 dropped from 22 percent in 1986 to 15 percent in 1987, and fell again to 14 percent in 1988. This downward trend in the proportion of farms with relatively high debt levels reflects farmers' efforts to pay off existing debt or rely less on credit than in the earlier part of the 1980's. At the end of 1988, farm operators had average assets of \$359,600 and debt of \$48,200, resulting in a net worth of \$311,400. Comparable numbers for the end of 1987 were assets of \$349,700, debt of \$52,900, and average net worth of \$296,800. The average debt/asset ratio of farm operators at the end of 1988 was 0.13, compared with 0.15 in 1987. Farms with gross sales above \$40,000 had higher than average debt/asset ratios, with values ranging from 0.15 for the \$40,000-\$99,999 economic class to 0.19 for the largest class. Poultry, dairy, cash grain, and cotton farms had the highest average debt/asset ratios among production specialties at the end of both 1987 and 1988. Farms and ranches in the Lake States, Corn Belt, and Northern Plains continued to have the highest regional average debt/asset ratios.

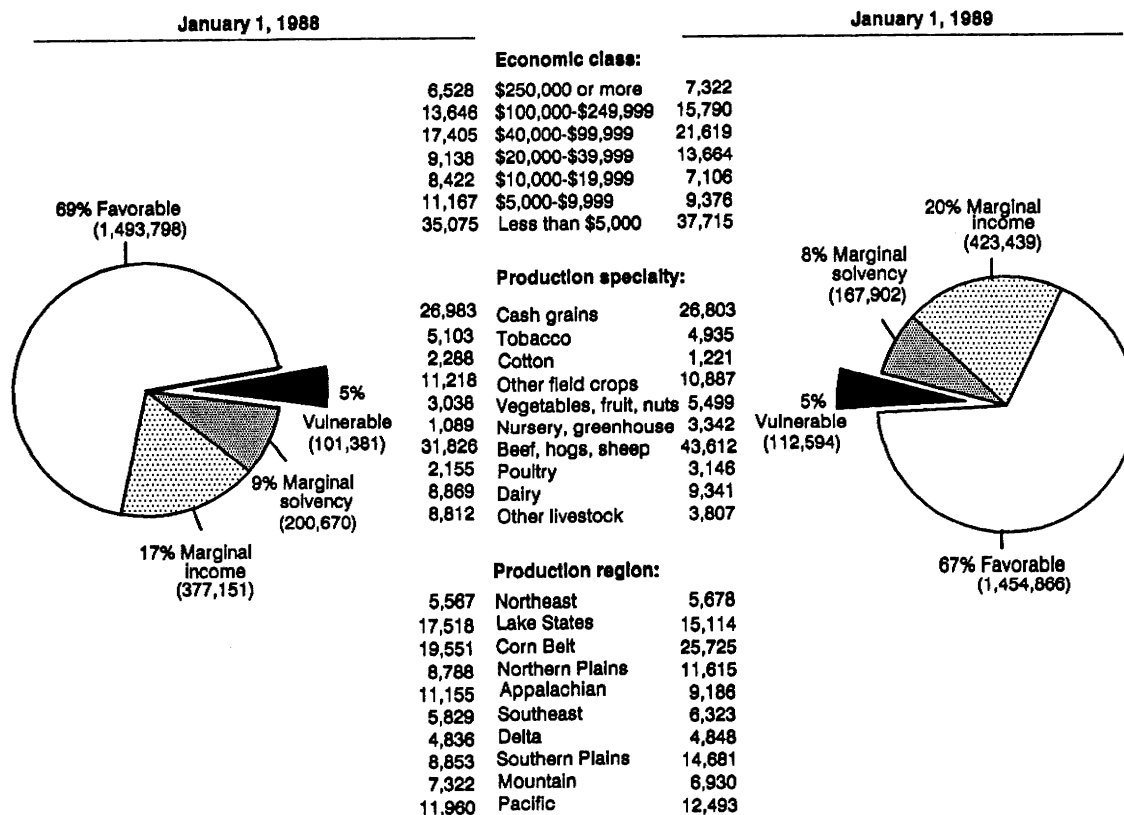
The overall financial position of farm operators is gauged using a framework based on the farm businesses' combined income and debt/asset ratio position. The share of farms classified at either extreme of financial performance was relatively stable in 1988. According to the net farm income measure, 67 percent of farms were in a favorable financial position. The share of vulnerable farms rose from 4.9 percent in 1987 to 5.3 percent, but was still half the value estimated for the mid-1980's. The largest changes in the distribution of farms by combined income and solvency position were the increase in the share of marginal income farms and the reduction in the share of marginally solvent operations.

The Farm Costs and Returns Survey (FCRS) accounts for 81 percent of the total number of farms officially reported by the U.S. Department of Agriculture. The smallest farms (under \$10,000 in gross sales) accounted for most of the difference between

official farm numbers and the FCRS estimates. To extend the results to be representative of all farms, financial performance indicators were weighted by the ratio of USDA farms to the FCRS numbers by economic class. The adjusted data show that approximately 112,600 farms were classified as vulnerable, based on their combined net farm earnings and debt/asset ratio position, at the beginning of 1989, as opposed to 101,000 at the beginning of 1988, and 204,000 at the beginning of 1987 (see figure below). The adjusted data continue to show that 40 percent of the vulnerable farms were in the Corn Belt and Lake States, and that cash grain and livestock operations accounted for most of the stressed operations.

Farms in a vulnerable financial position owed about 20 percent of total farm operator debt (\$16 billion), down from 32 percent (nearly \$37 billion) at the end of 1986. Commercial banks held the largest share (38 percent) of debt owed by vulnerable farms, followed by the Farmers Home Administration (22 percent), and Federal land banks (18 percent).

Estimated distribution of all farms by financial position



Source: FCRS net farm income and solvency classifications weighted by the USDA estimate of farm numbers.

Financial Characteristics of U.S. Farms, January 1, 1989

Mitchell J. Morehart
James D. Johnson
David E. Banker*

Introduction

Despite the 1988 drought, overall financial conditions of farms and ranches remained very similar to those of 1987. Economic performance generally continued to improve since the mid-1980's. Much of the recent progress can be attributed to farmers reducing their debt loads, thereby improving their solvency position. Lower debt also drains less farm income for debt service. The trend toward lower debt levels continued in 1988. More farms had no outstanding liabilities at the end of 1988 than at the end of 1987. Fewer farms had relatively high levels of debt compared with assets. The resurgence in farm real estate values has also contributed to lower debt/asset ratios in recent years.

On average, profits of farm operators were higher in 1988, as net farm income climbed to \$21,307 from \$20,967. Some farmers enjoyed higher earnings by taking advantage of the best commodity prices in recent years. Direct Government payments were lower in 1988. Farmers made fewer net additions to crop and livestock inventories than in 1987. Average operating expenses increased, but not enough to override the expansion in gross farm income.

However, the disparity of financial health among farm operators increased slightly in 1988. Even though average net farm income was higher in 1988, a lower percentage of farms was profitable. Only 75 percent of all farms showed positive net farm income, compared with 78 percent the year before.

Financial stress in agriculture rarely hits evenly across the board, especially in a drought year. Just as farmers are affected differently, some commodities and geographic regions are hurt worse than others. The greatest losses occurred among farmers whose major source of income was crops and whose operations suffered partial or complete failure. Livestock producers in drought-plagued areas also were hurt, but mostly by higher feed costs.

The combined income and solvency position suggests little change in the share of farm operators whose financial condition could be classified as either favorable (very healthy) or vulnerable (very stressed). A favorable financial position describes 67 percent of all farms, a slight decline from 1987 but well above 57 percent in 1986. Financially vulnerable describes only 5.3 percent of all farms, compared with 10 percent in 1986. However, many farms in the vulnerable category were probably not there a year ago. Many of these farms had production expenses, assets, and debt comparable with farms enjoying more favorable financial circumstances. These vulnerable operations were likely hurt by crop failure or marketing factors, which prevented operators from generating enough income to cover expenses in 1988.

This report presents the latest information on the financial performance of farm operators. A profile of farm businesses' net income, cash-flow, assets, liabilities, and returns on investment is developed to help identify and document the diversity in farm financial performance by size and tenure of business, commodity specialization, and area of the country. Data for this report were obtained from the U.S. Department of Agriculture's Farm Costs and Returns Survey (FCRS) conducted by the National Agricultural Statistics Service (NASS) in February and March 1989 for the 1988 calendar year.

*The authors are agricultural economists with the Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture.

Farm Income

The income and cash-flow statement is organized in this report to show the proportion of farm businesses that generate enough cash to meet various levels of financial obligations (see app. I). Two primary measures of earnings are used to analyze the farm businesses' income position. Net farm income (NFI) indicates the level of profit or loss associated with a current year's production. Net cash farm income (NCFI) gives a current or short-term perspective on the earnings position of the business since it does not account for capital consumed in the production process.

Net Farm Income

On average, net farm income increased by about \$350 (roughly 1.6 percent) to \$21,300 in 1988 (see app. VII). Increased earnings from crop and livestock sales provided higher gross farm incomes despite lower levels of direct Government payments, a higher incidence of Commodity Credit Corporation (CCC) loan redemptions (which results in a net withdrawal from current income), and fewer net additions to crop and livestock inventories. Average expenses also increased, but not enough to outweigh the expansion in gross farm income.

However, higher net farm incomes were not realized by all sizes of farms, farm types, or production regions. Average net incomes decreased for all but the largest economic class, which was comprised of farms with gross sales of \$500,000 or more during 1988. The largest percentage declines occurred in the \$20,000-\$39,999 and the \$250,000-\$499,999 economic classes.

Cotton, cash grain, dairy, and general livestock operations were among production specialty farms with lower average net farm incomes than in 1987. Farms in the Northeast, Corn Belt, Northern Plains, Appalachian, and Delta regions also experienced declines in average net farm incomes. Average net farm incomes exceeded the U.S. average in only four regions in 1988, compared with six regions in 1987. Further evidence of increased regional variability in net farm income was the doubling of the range between the lowest and highest average regional incomes.

All economic size groups had fewer profitable farms than in 1987. Both the largest commercial farms (those with sales of \$500,000 or more) and small noncommercial operations (those with gross sales below \$40,000) had a more than proportionate share of farms with negative net farm income. Unlike in the 1987 results, there was relatively little variation in the percentage of farms with positive net farm income across economic classes in 1988 (except in the \$20,000-\$39,999 category).

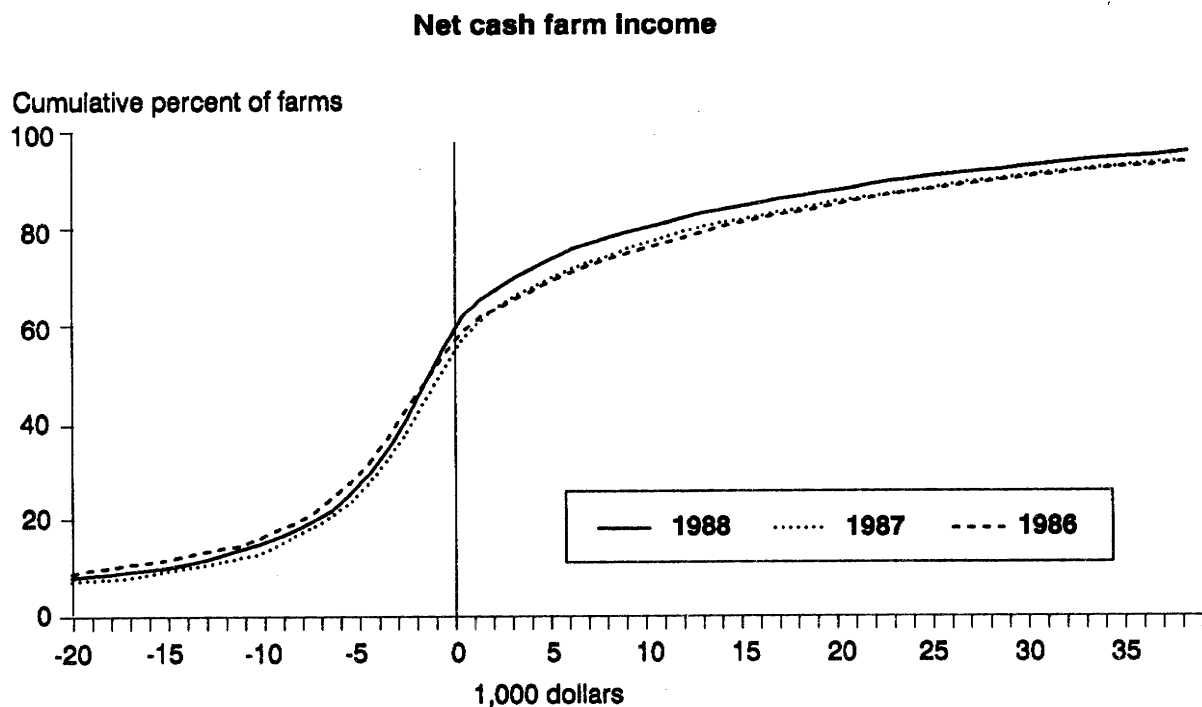
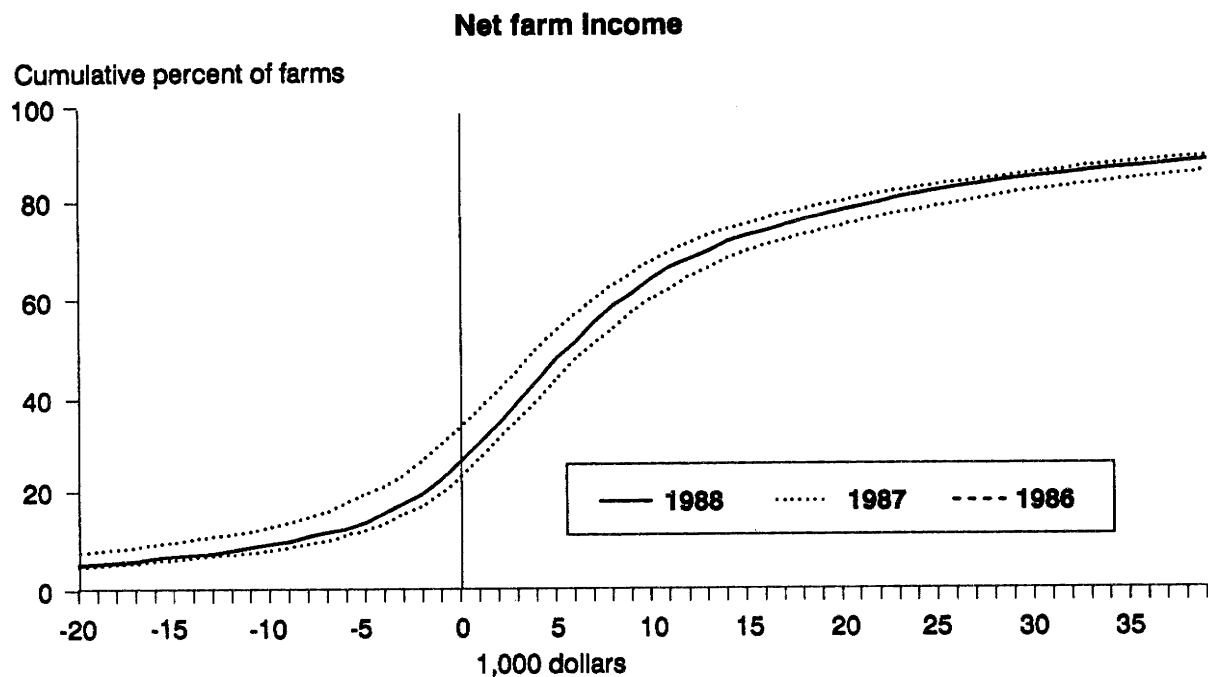
Tobacco, other field crops, cotton, and poultry operations had the highest percentage of operators with positive net income in 1988. On a relative basis, cash grain and beef, hog, or sheep operators accounted for 68 percent of all farms and 72 percent of farms with negative net farm income. General livestock and nursery and greenhouse operators also had a more than proportionate share of farms with negative net farm incomes in 1988. In 1987, beef, hog, and sheep; general livestock; and other field crop farms had a higher than proportionate share of farms with negative incomes. The largest reductions in the share of farms with positive net farm income

Effects of Contracting on Farm Income

Data from the 1988 FCRS, for the first time, allow income and expenses of farm operators to be separated from those of contractors, processors, and other integrated firms involved in agricultural production (see app. VII). The income and expenses of contractors were included in net income estimates to ensure comparability between 1987 and 1988. The contractors' share of income and expenses were also removed from the estimates to give a perspective about the earnings of the traditional farm operator. Most of the effect of this adjustment occurred for average values of net income in the cash-flow and income statements rather than for the distribution of farms by income position. Adjustments to net income were largest for farms with gross sales over \$500,000; farms specializing in the production of poultry, vegetables, fruit, nuts, other field crops, beef, hogs, or sheep; and farms in the Mountain, Southeast, Pacific, and Southern Plains regions.

Figure 1

Cumulative distribution of farms by net income levels, 1986-88



Source: Farm Costs and Returns Surveys, USDA.

occurred for nursery and greenhouse (12 percentage points), poultry (6 percentage points), and cash grain (5 percentage points) production specialties. Other field crop and cotton farms were the only production specialties with a higher percentage of profitable farms than in 1987.

Regions where more than three out of four farms were profitable (the U.S. average) included the Northeast, Northern Plains, Appalachian, Southeast, Delta, and Mountain. The Southern Plains had the

lowest proportion of farms with positive net farm income (67 percent), followed by the Lake States (71 percent). (Lake States farms were also in this position a year ago.) There was considerably larger regional variation in the percentage of farms with positive net farm income than in 1987. There was only a 9-percentage-point difference between the highest and lowest share of farms with positive net farm income in 1987, but the difference spread to 14 percentage points in 1988.

Table 1--Percentage of farms with positive net income by alternative measures

Item	Positive net farm income			Positive net cash farm income		
	1986	1987	1988	1986	1987	1988
	<u>Percent</u>					
All farms	69	78	75	53	57	53
Economic class:						
Sales \$500,000 or over	73	76	74	83	81	78
Sales \$250,000-\$499,999	72	80	77	84	85	84
Sales \$100,000-\$249,999	73	81	77	83	86	82
Sales \$40,000-\$99,999	71	81	75	78	82	76
Sales \$20,000-\$39,999	71	77	69	69	72	63
Sales \$10,000-\$19,999	65	76	75	55	61	54
Sales \$9,999 or less	66	77	76	23	31	31
Region:						
Northeast	72	75	77	49	49	48
Lake States	69	74	71	63	59	61
Corn Belt	70	83	73	64	68	61
Northern Plains	72	78	77	74	78	73
Appalachian	79	80	81	52	53	49
Southeast	69	78	78	37	45	43
Delta	63	79	81	38	56	49
Southern Plains	55	77	67	32	44	43
Mountain	60	75	78	48	52	53
Pacific	67	75	74	40	43	38
Production specialty:						
Cash grains	66	79	74	67	72	66
Tobacco	78	85	84	61	64	59
Cotton	67	79	80	71	83	76
Other field crops	62	75	82	37	47	51
Vegetables, fruit, nuts	66	80	78	42	46	53
Nursery, greenhouse	89	86	74	69	58	51
Beef, hogs, sheep	67	77	74	41	47	43
Poultry	83	88	82	74	73	70
Dairy	78	82	79	83	81	82
Other livestock	54	63	60	23	33	27

Source: Farm Costs and Returns Surveys, USDA.

Net Cash Farm Income

More than half of all farms (53 percent) had positive net cash farm income in 1988, down 4 percentage points from 1987 but equal to 1986 levels. The percentage of farms with positive net cash farm income fell in all but the smallest economic class. The percentage increased in the Lake States and Mountain regions and for producers of other field crops; vegetables, fruit, or nuts; and dairy products. As with net farm income, the largest declines in net cash farm income were confined to particular regions, farm sizes, and farm types. In the three economic classes between \$10,000 and \$99,999, the decline in the proportion of farms with positive net cash farm income ranged from 6 to 9 percentage points. The Corn Belt, Delta, Northern Plains, and Pacific had the largest declines among production regions. Declines in the share of farms with positive net cash farm income among production specialties were greatest for cash grain, cotton, nursery and greenhouse, and other livestock operations, each falling by at least 6 percentage points.

Average net cash income in 1988 rose about \$500 above 1987 levels to \$17,400 (see app. VII). All but the largest and smallest economic classes experienced declines in average net cash income since 1987. Cash grain, cotton, and other livestock farms were the only production specialties with lower average net cash income. Net cash income was higher, on average, in the Lake States and Mountain regions. Ninety-three percent of farms with negative net cash farm incomes had gross sales below \$40,000 in 1988. Nearly half of these farms had positive net farm incomes.

About 78,000 (18 percent) of the 438,000 farm operators with negative net farm income had positive net cash income in 1988 (table 2). This situation was most common for commercial-sized operations (sales over \$40,000), supporting the notion that farms could generate cash-flow by liquidating assets. One-third of farms with positive net farm income did not cover all cash operating expenses. Most of these farms were operations with sales below \$40,000, indicating the importance of noncash items in determining the total net farm income of smaller farm businesses.

Table 2--Net farm income position and net cash income position of farm businesses, 1988

Item	Negative net farm income			Positive net farm income		
	Net cash income position		All farms	Net cash income position		All farms
	Negative	Positive		Negative	Positive	
	<u>Thousand</u>					
Number of farms	359	78	438	475	851	1,326
	<u>Percent</u>					
Percentage of all farms (by sales):						
\$500,000 or more	68.45	31.55	100.00	5.60	94.40	100.00
\$40,000-\$499,999	63.24	36.76	100.00	7.36	92.64	100.00
Less than 40,000	90.10	9.90	100.00	49.35	50.65	100.00
All sizes	82.09	17.91	100.00	35.81	64.19	100.00
Percentage of all debt (by sales):						
\$500,000 or more	71.19	28.81	100.00	7.31	92.69	100.00
\$40,000-\$499,999	70.20	29.80	100.00	9.25	90.75	100.00
Less than 40,000	96.13	3.87	100.00	64.13	35.87	100.00
All sizes	77.88	22.12	100.00	20.08	79.92	100.00
	<u>Million dollars</u>					
Total debt	23,072	6,552	29,624	11,135	44,326	55,461

Source: 1988 Farm Costs and Returns Survey, USDA.

At least 7 percent of farms with sales above \$40,000 and positive net farm income switched from negative net cash income to positive net farm income. Such a small amount of switching to attain positive net farm income indicates that few commercial-sized farm businesses added more to inventory in 1988 than they depreciated in farm capital. Commercial-sized farms most commonly switched from positive cash to negative net farm income. This switch reflects either a decline in inventory to meet cash obligations, excluding principal repayments, or an inability to fully cover depreciation charges with cash earnings. Smaller farms, on the other hand, most often switched from negative cash to positive net farm income. Switching among income measures indicates that both current cash-flow and longer term profit measures should be examined when assessing farm financial performance. This point is forcefully made by the dramatic differences in the income measures by farm size.

Farm Assets and Debt

The farm operator balance sheet was developed directly from farmers' responses to survey questions (app. I). Assets include the farm operator's estimate of the current market value for: all land owned by the operation, including all buildings and structures on the land (including the operator's dwelling if located on the farm or ranch); the farm's share of all autos, trucks, tractors, other farm machinery, equipment, and tools; livestock and poultry and crops in storage, regardless of location; all purchased seed, feed, fertilizers, chemicals, fuel, parts, and other inputs on hand; and any other financial assets of the farm business, such as savings accounts, stocks, or bonds held on December 31, 1988. Liabilities related to the agricultural operations of the farm or ranch were reported as debt owed by operators at the end of 1988. The amount of debt owed to a particular lender was also categorized by the length of the original term of the loan. These categories included: (1) debt with an original term of less than 1 year, (2) debt with an original term of 1-10 years, and (3) debt with an original term of more than 10 years. Debt was defined to include all farm business obligations, and survey enumerators were instructed not to collect data on debt for nonfarm purposes. Debt outstanding was reported by lender rather than by purpose. The categories of lenders included production credit associations, Federal land banks, Farmers Home Administration (FmHA), commercial banks and savings and loan associations, life insurance companies, merchants, dealers, cooperatives, individuals, and other lenders.

The distribution of farms by debt/asset ratio category reveals that 48 percent of farms had no outstanding liabilities at the end of 1988 (table 3). The proportion of farms without debt has increased by about 5 percentage points a year since 1986.¹ The share of farms with a debt/asset ratio above 0.70 declined since 1987, but less dramatically than from 1986-87. Nonetheless, these results provide further evidence of farmers' efforts to pay off existing debt or rely less on credit than in the earlier 1980's.

Farm operators had average assets of \$359,600 and debt of \$48,200 at the end of 1988, resulting in a net worth of \$311,400 (see app. VIII). Comparable numbers for the end of 1987 were assets of \$349,700, debt of \$52,900, and average net worth of \$296,800. The average debt/asset ratio of farm operators at the end of 1988 was 0.13, compared with 0.15 at the end of 1987.

The solvency position of farm operators continued to improve in most size classes, regions, and production specialties. Noteworthy exceptions include a lower average net worth for farms in the \$20,000-\$39,999 and \$10,000-\$19,999 economic classes, a higher debt/asset ratio for nursery and greenhouse operations, and a lower average net worth in the Northern Plains, Appalachian, Southeast, Delta, and Southern Plains regions.

Farms with gross sales above \$40,000 had higher than average debt/asset ratios, with values ranging from 0.15 for the \$40,000-\$99,999 economic class to 0.19 for the largest economic class. This relationship reflects heavier use of debt financing by larger farm businesses. For example, 1 in 4 operations with gross sales above \$100,000 had a debt/asset ratio of 0.40 or higher, compared with 1 in 10 operations with sales below \$40,000 (fig. 2). The three economic classes over \$100,000 accounted for 18 percent of farms but 31 percent of farms with debt exceeding 40 percent of assets.

Average farm operator debt ranged from \$12,855 per farm in the under-\$10,000 economic class to \$456,332 in the \$500,000-or-more economic class. Considering the amount of debt in relation to average gross cash income provides a different perspective. On average, debt exceeded gross cash income for farms in the

¹ This result is likely influenced by adjustments made to the FCRS in order to capture a greater proportion of the official USDA total number of farms. As a result, many of the farms added in the last 2 years are smaller, part-time operations that tend not to have a lot of yearend farm debt. For further details, see appendix II.

Table 3--Distribution of farms and debt by debt/asset ratio category

Year	Debt/asset ratio							
	No debt Farms	0.01-0.40		0.41-0.70		Above 0.70		
		Farms	Debt	Farms	Debt	Farms	Debt	
	<u>Percent</u>							
1988	47.9	38.5	49.0	9.2	31.6	4.4	19.4	
1987	43.9	41.2	45.2	10.0	31.4	4.9	23.4	
1986	38.9	39.5	32.9	13.0	34.0	8.6	33.1	
1985	39.5	39.2	33.7	12.7	32.9	8.6	33.4	
1984	na	na	38.1	11.6	32.9	7.3	29.0	

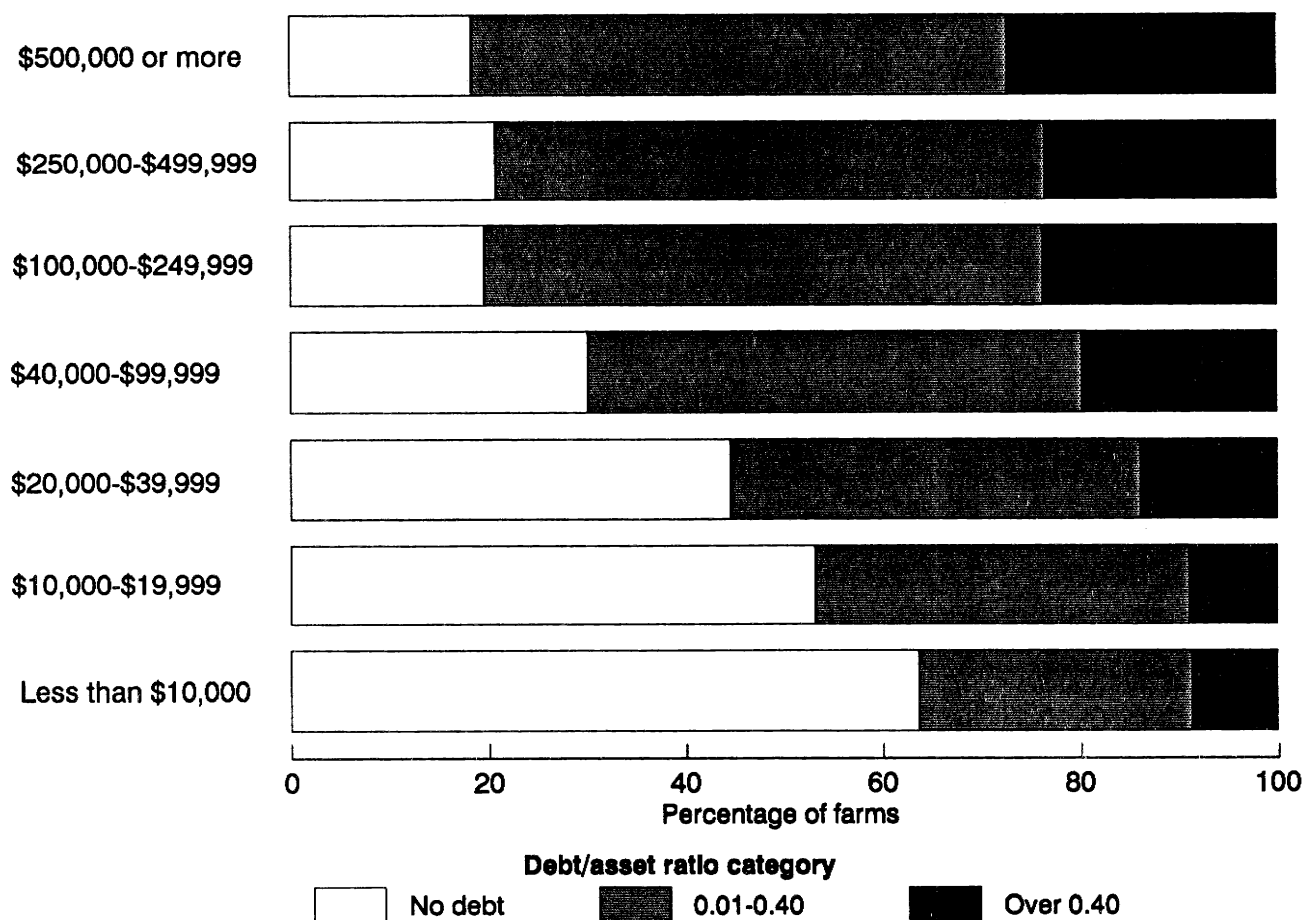
na = Not available.

Source: Farm Costs and Returns Surveys, USDA.

Figure 2

Distribution of farms by debt/asset ratio and economic class, 1988

Economic class



Source: 1988 Farm Costs and Returns Survey, USDA.

economic classes below \$40,000. For the larger farms, debt ranged from 46 percent of gross cash income in the \$500,000-or-more class to 91 percent in the \$40,000-\$99,999 class. The values of this ratio would drop substantially for the smallest farms if off-farm income were added to gross cash farm income. The revised total would show farms in the \$40,000-\$99,999 category with the highest levels of debt relative to total farm and nonfarm income.

The amount of assets per farm also demonstrated a positive relationship with farm size, increasing from \$184,663 for the smallest economic class to over \$2 million for the \$500,000-or-more class. The portion of total assets comprised of land and buildings varied by farm size. Land and buildings, on average, represented nearly 80 percent of total assets for farms in the smallest economic class and declined to 54 percent in the largest class.

Poultry, dairy, cash grain, and cotton farms had the highest average debt/asset ratios among production specialties at the end of both 1987 and 1988. Nursery and greenhouse operations were the only production specialty with a higher debt/asset ratio than in 1987. Average net worth ranged from \$141,186 for tobacco farms to \$508,669 for vegetable, fruit, or nut operations. These farms also had the lowest and highest net worth, respectively, at the end of 1987. The average value of assets increased from 1987 for all farm types but other livestock. The largest increases occurred for cotton and beef, hog, or sheep farms. Average debt increased for other field crop, nursery and greenhouse, and poultry farms. The largest debt reductions occurred for cotton; vegetable, fruit, or nut; and other livestock production specialties.

Farms and ranches in the Lake States, Corn Belt, and Northern Plains retained the highest average debt/asset ratios among production regions. Average net worth was highest in the Mountain (\$568,822), Pacific (\$495,126), and Northeast (\$496,506) regions and lowest in the Appalachian (\$189,297) region. The Northeast and Lake States were the only regions where average debt increased between 1987 and 1988. The largest debt reductions per farm occurred in the Delta (30 percent) and Southeast (26 percent). The average value of assets rose more than 10 percent in the Northeast, Lake States, Mountain, and Pacific regions. The largest declines were in the Delta region.

Overall Farm Financial Performance

The overall financial performance of farm operators has been evaluated since 1984 through a framework based on the farm businesses' combined net income and debt/asset ratio position.² Results presented earlier showed that the share of farms with positive net incomes and the share of highly leveraged farms fell in 1988. The combined income/solvency indicator suggests that regardless of the measure of income used, the improvement in financial performance between 1986 and 1987 was largely sustained in 1988.

Employing alternative income measures affects the distribution of farms among the four performance categories. Net farm income is considered the most comprehensive indicator of farm business profitability and shows the largest percentage of farms in a favorable position. Cash-based income measures provide similar trends in financial performance but focus more on the ability of farms to meet current financial commitments. The most complete picture of a farm's financial status is obtained when both measures are evaluated.

Trends in Overall Farm Financial Performance

The share of farms classified at either extreme of financial performance was relatively stable in 1988 (table 4). According to the net farm income measure, 67 percent of farms were in a favorable financial position. The share of vulnerable farms rose from 4.9 percent in 1987 to 5.3 percent in 1988, but was still half the share estimated for the mid-1980's. According to actual survey estimates, 93,500 farms were vulnerable in 1988 compared with 82,000 in 1987.³ The most noticeable, and statistically significant changes since 1987 in the distribution of farms by financial position using net farm income were the increase in the share of farms in the

²For a detailed discussion of the farm classification system and the measures used to assess farm financial performance, see appendix I.

³The FCRS gives an expanded number of 1.77 million farms, compared with the official USDA estimate of 2.2 million. The majority of FCRS undercounting was for farms with gross sales below \$10,000. An extended analysis to adjust for these differences is presented in appendix II.

Table 4--Distribution of farm operators by financial position

Item	Financial position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
Net farm income:				
1988	66.9	19.5	8.3	5.3
1987	68.1	16.9	10.1	4.9
1986	56.8	21.6	11.7	10.0
Net cash farm income:				
1988	46.0	40.4	6.8	6.8
1987	48.5	36.5	8.2	6.8
1986	41.0	37.0	11.7	9.9
1985	40.4	38.3	11.3	10.0
1984	40.8	40.1	9.2	9.9
Net income, considering all sources of income and expenses: ^{1/}				
1988	49.1	37.3	6.6	7.0
1987	51.7	33.4	8.1	6.8
1986	47.4	31.0	11.1	10.5
1985	45.4	33.3	10.1	11.2
1984	41.4	39.6	6.9	12.1

^{1/} This income measure was formerly denoted as net cash household income. However, a detailed analysis of farm household financial performance will be published at a later date.

Source: Farm Costs and Returns Surveys, USDA.

marginal income category and the decline in the proportion of marginally solvent operations.⁴

Combining net cash income and debt/asset ratio position placed 46 percent of farms in the favorable category, a significant reduction from 48.5 percent in 1987. The share of farms considered financially vulnerable was unchanged at 6.8 percent.

Combining the debt/asset ratio position with net income from both farm and nonfarm sources less operating expenses, estimated principal repayment, and family living expenditures showed some changes in financial performance. For example, 49.1 percent of farms were in a favorable financial position in 1988 as opposed to 51.7 percent in 1987. A slightly higher share was financially vulnerable (7 percent) than in 1987 (6.8 percent). The largest changes, as with the other measures, were the increase in the share of marginal income farms and the decrease in the share of marginally solvent operations.

⁴A t-test was conducted to establish which changes in the percentage distribution of farms by combined net income and debt/asset ratio position were statistically significant. The null hypotheses under the two-tailed tests were that 1988 values were not different from those of 1987. Both 95-percent and 90-percent levels of confidence were considered.

Overall Farm Financial Performance in 1988

Differences among farms in the four categories of financial performance are illustrated in tables 5 and 6. Information developed by economic class reveals that a higher percentage of the two largest economic classes was in a vulnerable financial position. These categories also had a less than proportionate share of farms in a favorable position. This result is unchanged from prior years and reflects heavier use of debt financing by farms in the larger economic classes.

Among production specialties, poultry, nursery and greenhouse, general field crop, and cash grain had the largest share of farms in a vulnerable financial position. Cash grain farms represented 19 percent of all farms but 25 percent of farms in a vulnerable position. Only 4 percent of beef, hog, or sheep farms were considered vulnerable, the smallest share among farm types. However, beef, hog, or sheep farms accounted for the largest share (38 percent) of farms in the vulnerable category, primarily because they were by far the largest share of all farms (49 percent in 1988).

Table 5--Average operating characteristics by net farm income and debt/asset ratio position

Item	Favorable	Marginal income	Marginal solvency	Vulnerable	All farms
			<u>Percent</u>		
All farms	66.92	19.48	8.26	5.33	100.00
Economic class:					
Sales over \$250,000	59.39	15.90	16.79	7.92	100.00
Sales \$40,000-\$250,000	62.13	16.25	14.22	7.40	100.00
Sales under \$40,000	69.38	21.01	5.28	4.33	100.00
Production specialty:					
Cash grains	61.68	18.89	12.40	7.03	100.00
Tobacco	78.06	10.61	6.35	4.97	100.00
Cotton	69.48	14.63	10.19	5.70	100.00
Other field crops	71.98	10.93	10.40	6.69	100.00
Vegetables, fruit, nuts	70.92	17.02	6.71	5.35	100.00
Nursery, greenhouse	68.24	18.56	5.68	7.52	100.00
Beef, hogs, sheep	68.33	22.29	5.21	4.17	100.00
Poultry	59.19	9.44	22.79	8.58	100.00
Dairy	63.95	14.90	15.10	6.05	100.00
Other livestock	53.95	34.31	6.46	5.28	100.00
Region:					
Northeast	70.82	18.92	6.52	3.74	100.00
Lake States	58.25	21.52	13.16	7.07	100.00
Corn Belt	64.60	20.47	8.23	6.71	100.00
Northern Plains	63.31	16.25	13.54	6.91	100.00
Appalachian	75.07	16.56	5.72	2.65	100.00
Southeast	72.25	19.19	5.40	3.15	100.00
Delta	75.57	14.34	5.92	4.17	100.00
Southern Plains	60.42	27.29	6.83	5.45	100.00
Mountain	69.02	15.56	9.31	6.11	100.00
Pacific	64.91	18.73	9.02	7.34	100.00
			<u>Acres per farm</u>		
Land characteristics:					
Acres owned	269	316	232	257	274
Acres cash rented	113	173	210	305	143
Acres share rented	55	52	146	85	64
Acres operated	516	637	662	761	565
Crop acres irrigated	19	17	37	27	21
Pasture	257	315	230	393	273
			<u>Peak number</u>		
Livestock:					
Cattle	52	55	71	68	55
Hogs	30	41	70	79	38
Sheep	6	6	14	13	7
Poultry	272	580	1,254	1,372	472
Other	304	96	135	384	254
			<u>Years</u>		
Operator:					
Age	55	52	43	43	53
Education	12	12	13	13	12

Source: 1988 Farm Costs and Returns Survey, USDA.

Table 6--Average financial characteristics by net farm income and debt/asset ratio position

Item	Favorable	Marginal income	Marginal solvency	Vulnerable	All farms
			<u>Dollars</u>		
Income and expenses:					
Crop sales	24,528	17,042	46,824	25,417	24,959
Livestock sales	26,421	25,573	63,433	45,165	30,313
Other farm income	7,667	4,348	20,604	8,511	8,134
Gross cash farm income	58,615	46,963	130,860	79,093	63,406
Noncash adjustments	12,624	-935	16,528	1,639	9,719
Gross farm income	71,240	46,027	147,388	80,732	73,125
Total expenses	45,437	65,084	105,653	108,279	57,591
Net farm income	25,803	-19,056	41,735	-27,547	15,534
Nonfarm income	27,812	34,847	23,904	28,469	28,895
Farm assets:					
Land and buildings	360,788	409,237	290,219	270,357	359,575
Farm equipment	239,212	269,884	179,708	167,903	236,469
Livestock inventory	37,468	40,682	46,643	42,851	39,140
Crop inventory	25,689	27,683	36,248	30,721	27,219
Purchased inputs	10,121	6,504	11,988	8,225	9,469
Other assets	1,708	1,852	2,387	2,629	1,841
Farm operator debt	33,820	38,909	12,019	12,264	31,861
Farm operator debt					
By original term of loan:	24,530	37,012	181,831	179,681	48,232
Less than 1 year	3,064	3,467	14,574	16,097	4,788
1-10 years	8,327	12,785	54,079	57,887	15,619
More than 10 years	13,139	20,759	113,179	105,698	27,825
Commodity Credit Corporation crop loans	1,502	1,574	5,451	5,425	2,052
Net worth	336,258	372,226	108,388	90,675	311,343
			<u>Ratio</u>		
Ratios:					
Debt to asset	0.07	0.09	0.63	0.66	0.13
Return on assets	.05	-.06	.13	-.10	.02
Cash expenses to gross income	.69	1.22	.74	1.25	.82
Interest to gross income	.05	.10	.10	.21	.07

Source: 1988 Farm Costs and Returns Survey, USDA.

Among regions, the Pacific, Lake States, Corn Belt and Northern Plains had the largest share of vulnerable farms. In 1987, the Pacific, Mountain, and Lake States had the largest share of farms in this position. Moreover, in 1988, the Corn Belt contained 19 percent of all farms but 24 percent of those in a vulnerable position; Lake States, 10 percent and 14 percent; Northern Plains, 9 percent and 11 percent; and Pacific, 7 percent and 10 percent. The increase in farms classified as vulnerable in the Corn Belt and Northern Plains was likely related to the 1988 drought.

Farm operators characterized as having high debt/asset ratios were younger and more educated than farmers in other financial positions. On average, they operated larger farms (measured by acreage) but owned a smaller share of the acres operated. Farmers with low income, regardless of debt position, owned fewer of the acres operated. Instead, these farmers operated a higher proportion of cash-rented acreage. Operators with negative income, those with both low and high debt, had more pasture than their counterparts with positive income. However, there was little difference in the peak number of livestock between these groups. Although peak number of animals does not measure total animals produced during the year, the animals-to-pasture ratio implies a more intense use of land resources by operators with positive incomes.

Financial ratios showed that producers in a relatively weak financial position were, on average, more highly leveraged, had lower returns on assets, and had expense-to-income ratios that indicated operating expenses exhausted farm earnings (table 6). For farms in a vulnerable financial position, 21 cents of each dollar of gross earnings went to pay interest on debt. However, high-debt producers posted different returns on current production: farms with positive income had returns of 13 percent, while farms with negative income had returns of -10 percent.

Combined Net Farm Income and Debt/Asset Ratio Position

About 58 percent of the 1,180,000 favorable farms, based on net farm income and solvency position, had no debt at the end of 1988 (table 7). The majority of these favorable farms with no debt (84 percent) had gross sales under \$40,000. Nearly one in four favorable farms had debt/asset ratios between 0.11 and 0.40. This group owed \$24,820 million (29 percent) of total farm operator debt. Just over 10

percent of the 1,326,000 farms with positive net farm income had debt/asset ratios above 0.40, compared with 13 percent at the end of 1987. Most of these marginal solvency farms had gross sales above \$40,000. About 67 percent of the \$26,502 million in farm operator debt owed by marginally solvent operations was owed by farms with debt/asset ratios between 0.41 and 0.70. The amount of debt owed by those with debt/asset ratios above 0.70 fell from \$13,610 million at the end of 1987 to \$9,247 million at the end of 1988. As in 1987, marginal income farms owed the lowest share of total farm operator debt when compared with other financial categories.

Highlights of the distribution of farms across financial categories, based on net farm income and debt/asset ratio position for the various farm classifications, include the following:

- **Economic class.** The share of farms categorized as vulnerable ranged from 3.17 percent for the \$10,000-\$19,999 economic class to 8.38 for the largest class (table 8). Farms in the largest class also had the lowest percentage of favorable farms; farms with gross sales under \$10,000 had the highest percentage. Between 12 and 19 percent of farms in the classes above \$40,000 were marginally solvent, compared with less than 8 percent of farms in the classes below \$40,000. Farms in the economic classes below \$40,000 were more likely to be in the marginal income category rather than the marginal solvency category. Statistically significant changes in the distribution of farms by financial position and economic class since 1987 include: (1) a lower percentage of favorable farms in the \$20,000-\$39,999 class, (2) a higher proportion of marginal income farms for the three classes between \$20,000 and \$249,999, and (3) a lower share of marginally solvent operations for farms with sales between \$40,000 and \$499,999.
- **Production specialty.** In 1988, poultry and cash grain farms had the highest percentage of vulnerable farms, 8.58 percent and 7.03 percent, respectively (table 9). Beef, hog, or sheep operations had the lowest share of vulnerable farms (4.17). However, these farms represented the largest absolute number of financially vulnerable operations because they were the most common production specialty. The share of favorable farms ranged from 53.95 percent for other livestock (also the lowest in 1987) to 78.06 for tobacco farms. Nursery and greenhouse and poultry farms both had a significant reduction

Table 7--Distribution of farms and debt by combined net farm income position and debt/asset ratio category

Farms with positive net farm income	Debt/asset ratio						All farms
	Favorable			Marginal solvency			
	No debt	0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
	<u>Thousand</u>						
Number of farms	689	203	288	104	29	13	1,326
	<u>Percent</u>						
Percentage of all farms (by sales):							
\$500,000 or more	0.29	0.19	0.60	0.25	0.06	0.06	1.45
\$40,000-\$499,999	6.02	4.53	7.90	3.01	.79	.48	22.73
Less than \$40,000	32.77	6.80	7.83	2.61	.80	.19	51.00
All sizes	39.08	11.52	16.32	5.88	1.66	.73	75.18
Percentage of all debt (by sales):							
\$500,000 or more	0	.63	5.61	3.83	1.05	1.46	12.56
\$40,000-\$499,999	0	2.88	17.71	12.24	3.63	2.85	39.31
Less than \$40,000	0	1.35	5.86	4.21	1.48	.40	13.31
All sizes	0	4.87	29.17	20.28	6.16	4.71	65.18
	<u>Million dollars</u>						
Total debt	0	4,139	24,820	17,255	5,242	4,005	55,461

Farms with negative net farm income	Debt/asset ratio						All farms
	Marginal income			Vulnerable			
	No debt	0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
	<u>Thousand</u>						
Number of farms	155	64	125	58	21	15	438
	<u>Percent</u>						
Percentage of all farms (by sales):							
\$500,000 or more	0.07	0.08	0.19	0.09	0.06	0.02	0.51
\$40,000-\$499,999	1.34	.97	2.48	1.44	.50	.27	6.99
Less than \$40,000	7.38	2.57	4.40	1.75	.66	.54	17.31
All sizes	8.79	3.62	7.08	3.28	1.21	.83	24.82
Percentage of all debt (by sales):							
\$500,000 or more	0	.26	2.23	1.92	1.13	.49	6.03
\$40,000-\$499,999	0	.80	6.88	6.59	2.94	1.49	18.70
Less than \$40,000	0	.62	4.16	2.81	1.23	1.26	10.08
All sizes	0	1.68	13.27	11.32	5.30	3.24	34.82
	<u>Million dollars</u>						
Total debt	0	1,431	11,290	9,632	4,510	2,760	29,624

Source: 1988 Farm Costs and Returns Survey, USDA.

Table 8--Distribution of farms by economic class and combined net farm income and solvency position

Economic class/year	Financial position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
		<u>Percent</u>		
\$500,000 or over:				
1988	55.08	17.65	18.89	8.38
1987	54.96	15.77	21.08	8.20
1986	43.32	16.04	29.54	11.10
\$250,000-\$499,999:				
1988	61.52	15.03	15.76 *	7.69
1987	60.34	12.98	19.95	6.73
1986	46.47	14.75	25.79	12.99
\$100,000-\$249,999:				
1988	60.74	15.43 **	16.61 **	7.22
1987	61.32	12.13	19.86	6.70
1986	50.03	14.36	22.72	12.88
\$40,000-\$99,999:				
1988	63.29	16.94 **	12.22 **	7.56
1987	65.84	12.86	15.26	6.04
1986	51.30	16.09	19.42	13.19
\$20,000-\$39,999:				
1988	61.19 **	24.88 **	7.89	6.04
1987	68.42	18.48	8.74	4.36
1986	61.10	19.07	10.12	9.71
\$10,000-\$19,999:				
1988	69.34	21.69	5.80	3.17
1987	70.01	19.94	6.17	3.88
1986	59.05	24.79	6.16	10.00
\$9,999 or less:				
1988	71.37	19.90	4.51	4.22
1987	71.42	18.85	5.73	4.01
1986	61.18	26.96	4.51	7.36
All farms:				
1988	66.92	19.48 **	8.26 **	5.33
1987	68.13	16.93	10.09	4.84
1986	56.82	21.54	11.65	9.98

* = Significant at the 90-percent confidence level.

** = Significant at the 95-percent confidence level.

Source: Farm Costs and Returns Surveys, USDA.

in the share of favorable farms. Farms specializing in other field crops experienced a significant increase in the share of favorable farms. A significant increase in the share of marginal income farms was found for cash grain and beef, hog, or sheep production specialties. Other field crop farms had a significant drop in the marginal income category. Declines in the proportion of marginally solvent operations were significant for cotton; beef, hog, or sheep; and dairy farms.

- **Region.** The Appalachian, Southeast, and Delta regions had the highest percentage of favorable

farms and were among the lowest proportion of farms in the vulnerable category, giving them the strongest overall financial position among production regions at the end of 1988 (table 10). The Corn Belt had the most significant changes in the distribution of farms by financial performance. Its share of both favorable and marginally solvent operations declined by about 5 percentage points, while the percentage of farms in the marginal income category grew by 8 percentage points. The only other significant changes occurred in the Southern Plains, where the percentage of favorable farms fell and the share of marginal income farms rose.

Table 9--Distribution of farms by production specialty and combined net farm income and solvency position

Production specialty/year	Financial position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
Cash grains:				
1988	61.68 *	18.89 **	12.40	7.03
1987	65.29	14.41	13.77	6.54
1986	49.85	18.21	16.15	15.79
Tobacco:				
1988	78.06	10.61	6.35	4.97
1987	77.81	9.35	7.98	4.86
1986	70.23	12.64	8.16	8.97
Cotton:				
1988	69.48	14.63	10.19 *	5.70
1987	65.10	11.10	14.82	8.98
1986	43.82	19.93	23.04	13.21
Other field crops:				
1988	71.98 *	10.93 **	10.40	6.69
1987	65.37	17.14	10.22	7.28
1986	52.81	28.83	9.47	8.88
Vegetables, fruit, nuts:				
1988	70.92	17.02	6.71	5.35
1987	71.37	16.23	9.27	3.12
1986	58.47	24.97	7.40	9.16
Nursery, greenhouse:				
1988	68.24 *	18.56	5.68	7.52
1987	80.30	11.23	6.28	2.19
1986	77.13	8.68	11.64	2.56
Beef, hogs, sheep:				
1988	68.33	22.29 **	5.21 **	4.17
1987	70.36	19.41	6.86	3.37
1986	59.31	25.95	7.82	6.92
Poultry:				
1988	59.19 *	9.44	22.79	8.58
1987	72.83	5.21	15.86	6.10
1986	59.52	8.34	23.55	8.59
Dairy:				
1988	63.95	14.90	15.10 **	6.05
1987	63.20	11.79	19.71	5.30
1986	58.27	10.69	19.92	11.12
Other livestock:				
1988	53.95	34.41	6.46	5.28
1987	58.03	29.57	5.26	7.14
1986	47.88	34.59	5.54	11.98
All farms:				
1988	66.92	19.48 **	8.26 **	5.33
1987	68.13	16.93	10.09	4.84
1986	56.82	21.54	11.65	9.98

* = Significant at the 90-percent confidence level.

** = Significant at the 95-percent confidence level.

Source: Farm Costs and Returns Surveys, USDA.

Table 10--Distribution of farms by production region and combined net farm income and solvency position

Production region/year	Financial position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
Northeast:				
1988	70.82	18.92	6.52	3.74
1987	68.22	21.82	7.03	2.92
1986	64.00	21.58	8.15	6.27
Lake States:				
1988	58.25	21.52	13.16	7.07
1987	58.83	18.66	15.32	7.18
1986	50.85	17.56	17.89	13.70
Corn Belt:				
1988	64.60 **	20.47 **	8.23 **	6.71 **
1987	70.15	12.38	12.77	4.71
1986	56.81	17.96	13.55	11.68
Northern Plains:				
1988	63.31	16.25	13.54	6.91
1987	63.79	16.03	14.66	5.51
1986	51.95	15.20	19.97	12.89
Appalachian:				
1988	75.07	16.56	5.72	2.65
1987	74.89	16.30	5.33	3.47
1986	72.62	15.49	6.50	5.39
Southeast:				
1988	72.25	19.19	5.40	3.15
1987	71.80	18.02	6.38	3.80
1986	59.71	23.47	9.19	7.63
Delta:				
1988	75.57	14.34	5.92	4.17
1987	71.07	16.16	8.33	4.44
1986	53.93	26.73	9.13	10.20
Southern Plains:				
1988	60.42 **	27.29 **	6.83	5.45
1987	68.91	19.54	7.74	3.81
1986	49.08	34.74	6.04	10.14
Mountain:				
1988	69.02	15.56	9.31	6.11
1987	64.42	19.18	10.45	5.95
1986	49.53	31.29	10.59	8.60
Pacific:				
1988	64.91	18.73	9.02	7.34
1987	66.15	18.20	8.56	7.09
1986	57.77	25.22	8.74	8.27
All farms:				
1988	66.92	19.48 **	8.26 **	5.33
1987	68.13	16.93	10.09	4.84
1986	56.82	21.54	11.65	9.98

** = Significant at the 95-percent confidence level.

Source: Farm Costs and Returns Surveys, USDA.

• **Tenure.** The proportion of farms in a favorable financial position ranged from 72.53 percent for full owners of total land operated to 51.28 percent for full tenants (table 11). Each group also had the highest and lowest percentages, respectively, in 1987. Farmers who owned 41-60 percent of acreage operated had the highest share of vulnerable farms (11.87 percent), followed by full tenants (9.03 percent). Just as in 1987, full owners had the lowest proportion of vulnerable

farms (4 percent). Farmers who owned 41-60 percent of acreage operated had the greatest number of significant changes in the distribution of farms by financial performance. These farms had a significant increase in the percentage of both marginal income and vulnerable operations coupled with a significant reduction in the share of marginally solvent farms. The 3-percentage-point increase in financially vulnerable farms for full tenants was statistically significant.

Table 11--Distribution of farms by land tenure and combined net farm income and solvency position

Tenure/year	Financial position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
Full tenant:				
1988	51.28	26.01	13.68	9.03 **
1987	54.12	24.59	15.18	6.11
1986	37.23	29.03	20.33	13.41
1-20 percent:				
1988	60.32	21.76	11.58 *	6.34
1987	61.44	17.00	15.08	6.48
1986	47.89	22.35	17.12	12.63
21-40 percent:				
1988	58.63	21.29	12.26	7.82
1987	60.48	17.83	15.42	6.27
1986	51.26	17.65	16.96	14.13
41-60 percent:				
1988	61.27	21.94 **	9.12 **	11.87 **
1987	63.33	16.33	15.60	4.75
1986	53.31	22.02	14.03	10.64
61-80 percent:				
1988	65.51	21.40	8.32	4.78
1987	67.33	18.03	8.88	5.76
1986	54.68	21.52	12.54	11.27
81-99 percent:				
1988	69.20	19.79	6.64 *	4.37
1987	65.55	18.41	10.91	5.13
1986	59.02	20.90	12.57	7.51
Full owner:				
1988	72.53	17.10	6.34	4.04
1987	73.90	15.08	6.99	4.02
1986	64.54	20.34	7.08	8.04
All farms:				
1988	66.92	19.48 **	8.26 **	5.33
1987	68.13	16.93	10.09	4.84
1986	56.82	21.54	11.65	9.98

* = Significant at the 90-percent confidence level.

** = Significant at the 95-percent confidence level.

Source: Farm Costs and Returns Surveys, USDA.

Table 12--Distribution of farms and debt by combined net cash farm income position and debt/asset ratio category

Farms with positive net cash farm income	Debt/asset ratio						All farms
	No debt	Favorable		Marginal solvency			
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
	<u>Thousand</u>						
Number of farms	451	146	214	82	24	13	930
	<u>Percent</u>						
Percentage of all farms (by sales):							
\$500,000 or more	0.30	0.21	0.64	0.24	0.07	0.07	1.53
\$40,000-\$499,999	6.28	4.56	8.06	3.37	.82	.54	23.63
Less than \$40,000	18.96	3.52	3.43	1.05	.50	.12	27.58
All sizes	25.55	8.29	12.13	4.65	1.39	.73	52.74
Percentage of all debt (by sales):							
\$500,000 or more	0	.74	6.17	3.79	.98	1.70	13.38
\$40,000-\$499,999	0	2.91	17.72	13.79	3.89	2.95	41.25
Less than \$40,000	0	.66	2.21	1.26	.85	.18	5.16
All sizes	0	4.32	26.09	18.85	5.71	4.83	59.80
	<u>Million dollars</u>						
Total debt	0	3,673	22,201	16,037	4,860	4,107	50,878

Farms with negative net cash farm income	Debt/asset ratio						All farms
	No debt	Marginal income		Vulnerable			
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
	<u>Thousand</u>						
Number of farms	394	121	199	80	26	15	834
	<u>Percent</u>						
Percentage of all farms (by sales):							
\$500,000 or more	0.06	0.06	0.15	0.10	0.05	0.01	0.43
\$40,000-\$499,999	1.07	.94	2.32	1.09	.47	.21	6.10
Less than \$40,000	21.19	5.84	8.80	3.32	.96	.61	40.73
All sizes	22.32	6.84	11.27	4.51	1.49	.83	47.26
Percentage of all debt (by sales):							
\$500,000 or more	0	.14	1.66	1.96	1.20	.25	5.21
\$40,000-\$499,999	0	.78	6.87	5.04	2.68	1.39	16.76
Less than \$40,000	0	1.31	7.82	5.75	1.87	1.48	18.23
All sizes	0	2.23	16.35	12.75	5.75	3.12	40.20
	<u>Million dollars</u>						
Total debt	0	1,898	13,908	10,851	4,893	2,658	34,207

Source: 1988 Farm Costs and Returns Survey, USDA.

Combined Net Cash Farm Income and Debt/Asset Ratio Position

In 1988, one in four farms had positive net cash farm income and no debt, and nearly another one in four had negative income and no debt (table 12). Over 80 percent of farms in both groups had gross sales of \$40,000 or less. Half of the 240,000 farms with debt/asset ratios above 0.40 had negative net cash farm income. These financially vulnerable farms owed \$18,402 million of debt at the end of 1988, compared with \$17,434 million at the end of 1987 and \$24,691 million at the end of 1986. Farms with sales of \$40,000 or less were responsible for 42 percent of farm operator debt owed by farms in a vulnerable position at the end of 1988.

Farms with positive income and debt/asset ratios of 0.11-0.40 owed the largest share (26 percent) of total farm operator debt. Farms with debt representing more than 70 percent of assets, regardless of income position, owed 19.4 percent of total debt compared with 23 percent at the end of 1987. However, in 1988, farms with negative net cash income were responsible for a larger share of this debt than they were in 1987.

Highlights of the distribution of farms across financial categories, based on net cash farm income and debt/asset ratio position for the various farm classifications, include the following:

- **Economic class.** In contrast to the combined net farm income and solvency classifications, the percentage of favorable farms was positively related to economic size. The share of favorable farms increased from 30.26 for the smallest class to 65.97 for the \$250,000-\$499,999 class (table 13). The percentage of vulnerable farms, however, did not have the same positive relationship with farm size. Values ranged from 8.41 percent for the largest economic class to 5.03 percent for the \$10,000-\$19,999 class. The majority of significant changes in the distribution of farms by net cash farm income and solvency position occurred for marginal income farms. The share of marginal income farms in the four classes between \$10,000 and \$249,999 increased by 3 to 7 percentage points. Both the \$10,000-\$19,999 and \$20,000-\$39,999 economic classes had a significant reduction in the percentage of favorable farms. The 3-percentage-point drop in marginally solvent farms in the \$100,000-\$249,999 class was statistically significant.

- **Production specialty.** Dairy farms ended 1988 in the strongest overall financial position with one of the highest percentages of favorable farms and the lowest proportion of vulnerable farms (table 14). Poultry and other field crops had the highest percentages of financially vulnerable farms in 1988, about 11.3 percent and 10.8 percent, respectively. Farms specializing in other field crops were in a similar position in 1987. At least half of all cash grain, tobacco, cotton, poultry, and dairy farms were in a favorable position. These farms along with nursery and greenhouse operations shared this distinction in 1987. Cash grain and beef, hog, or sheep operations had a significant reduction in the proportion of favorable farms. The percentage of favorable farms increased significantly for vegetable, fruit, or nut operations (8 percentage points). Cotton and beef, hog, or sheep farms each had a significant reduction in the share of marginally solvent operations coupled with an increase in the share of marginal income farms. There was a significantly lower percentage of vegetable, fruit, or nut farms in both the marginal income and marginal solvency categories. The only significant change in the percentage of vulnerable farms among production specialties was a 3-percentage-point reduction for dairy farms.
- **Region.** The only significant regional changes in the distribution of farms across financial performance categories since 1987 occurred in the Corn Belt (table 15). This region experienced a 6-percentage-point increase in the share of marginal income farms and a 3-percentage-point drop in the share of marginally solvent farms. As in 1987, the Corn Belt and Northern Plains were the only regions with at least half of farms in a favorable position. The Pacific region continued to have the highest percentage of vulnerable farms, while the lowest values were held by the Northeast, Appalachian, Southeast, and Delta regions.
- **Tenure.** There was relatively little variation in the distribution of favorable farms by tenure class in 1988. Values ranged from 44 percent for full owners to 53 percent for farmers who owned 81-99 percent of acreage operated (table 16). Farmers who owned 61-80 percent of acreage operated had the only significant change in the favorable category, falling from 55 percent in 1987 to 48 percent in 1988. Significant increases in the percentage of marginal income farms occurred for

Table 13--Distribution of farms by economic class and combined net cash farm income and solvency position

Economic class/year	Financial position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
\$500,000 or over:				
1988	59.19	13.54	18.86	8.41
1987	58.94	11.78	21.69	7.59
1986	49.29	10.07	33.32	7.32
\$250,000-\$499,999:				
1988	65.97	10.59	17.81	5.64
1987	63.76	9.56	21.53	5.15
1986	52.71	8.52	31.51	7.26
\$100,000-\$249,999:				
1988	63.52	12.66 **	18.39 *	5.44
1987	64.06	9.39	21.49	5.06
1986	55.40	9.00	27.32	8.29
\$40,000-\$99,999:				
1988	62.94	17.29 **	13.32	6.46
1987	66.04	12.66	15.56	5.74
1986	55.92	11.47	22.18	10.42
\$20,000-\$39,999:				
1988	56.54 **	29.53 **	6.81	7.12
1987	64.58	22.33	7.00	6.10
1986	58.37	21.80	10.19	9.64
\$10,000-\$19,999:				
1988	50.10 *	40.92 **	3.94	5.03
1987	56.47	33.48	4.21	5.84
1986	48.97	34.87	5.97	10.19
\$9,999 or less:				
1988	30.26	61.02	1.00	7.72
1987	29.98	60.29	1.58	8.15
1986	21.68	66.46	1.18	10.69
All farms:				
1988	45.97 **	40.43 **	6.77 **	6.82
1987	48.50	36.57	8.16	6.78
1986	41.40	36.96	11.69	9.94

* = Significant at the 90-percent confidence level.

** = Significant at the 95-percent confidence level.

Source: Farm Costs and Returns Surveys, USDA.

farmers who owned 41-60 of acreage operated, for farmers who owned 61-80 percent of acreage operated, and for full owners of total acreage operated. Operations in the 21-40 percent tenure class, 41-60 percent tenure class, and the 81-99 percent tenure class each had a significant decline in the percentage of marginally solvent farms.

Financial Ratio Analysis

This section presents a set of financial ratios that provides an alternative means of examining recent trends in financial performance as well as differences

in financial structure among various classifications of farms. Financial ratios are a convenient method to use when comparing relationships among information contained in a variety of standard financial statements, because the ratios express relationships on a relative basis. A number of ratios may be considered in any financial analysis (those selected for purposes of this report are defined in app. I). A complete appraisal of a farm's financial position, however, should involve an evaluation of at least one ratio from each of the four principal elements of financial performance: solvency, liquidity or coverage, efficiency, and profitability.

Table 14--Distribution of farms by production specialty and combined net cash farm income and solvency position

Production specialty/year	Financial position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
Cash grains:				
1988	54.50 *	26.07 **	11.97	7.46
1987	58.29	21.41	13.45	6.85
1986	47.14	20.92	19.40	12.53
Tobacco:				
1988	55.28	33.39	3.61	7.71
1987	58.83	28.33	4.73	8.11
1986	52.70	30.17	8.27	8.86
Cotton:				
1988	65.82	18.29 **	10.49 **	5.40
1987	66.44	9.76	16.39	7.41
1986	45.63	18.11	25.40	10.86
Other field crops:				
1988	44.40	38.50	6.31	10.79
1987	40.75	41.76	6.36	11.13
1986	30.97	50.67	6.29	12.07
Vegetables, fruit, nuts:				
1988	49.24 *	38.70 *	3.76 *	8.31
1987	40.81	46.79	6.03	6.36
1986	35.79	47.65	6.01	10.54
Nursery, greenhouse:				
1988	47.74	39.06	3.74	9.47
1987	53.61	37.91	4.29	4.18
1986	57.74	28.07	10.92	3.27
Beef, hogs, sheep:				
1988	39.26 *	51.26 **	3.51 **	5.87
1987	42.80	46.79	4.57	5.66
1986	34.49	50.77	6.14	8.59
Poultry:				
1988	50.13	18.50	20.07	11.30
1987	58.72	19.33	13.97	7.98
1986	51.40	16.46	22.98	9.16
Dairy:				
1988	64.68	14.17	17.36	3.79 **
1987	62.17	12.82	18.50	6.51
1986	60.05	8.91	22.92	8.12
Other livestock:				
1988	25.15	63.11	2.28	9.47
1987	30.47	57.14	2.07	10.33
1986	21.10	61.37	1.98	15.54
All farms:				
1988	45.97 **	40.43 **	6.77 **	6.82
1987	48.50	36.57	8.16	6.78
1986	41.40	36.96	11.69	9.94

* = Significant at the 90-percent confidence level.

** = Significant at the 95-percent confidence level.

Source: Farm Costs and Returns Surveys, USDA.

Table 15--Distribution of farms by production region and combined net cash farm income and solvency position

Production region/year	Financial position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
Northeast:				
1988	43.10	46.63	5.21	5.05
1987	43.74	46.31	5.08	4.88
1986	40.90	44.68	7.62	6.80
Lake States:				
1988	49.86	29.91	11.29	8.94
1987	46.72	30.78	12.70	9.80
1986	42.47	25.94	20.38	11.21
Corn Belt:				
1988	52.98	32.08 **	7.82 **	7.11
1987	56.27	26.26	11.35	6.12
1986	49.54	25.24	14.57	10.66
Northern Plains:				
1988	58.87	20.68	13.75	6.69
1987	63.67	16.15	14.29	5.89
1986	51.82	15.33	22.00	10.85
Appalachian:				
1988	45.51	46.12	3.70	4.67
1987	49.46	41.73	3.88	4.93
1986	46.81	41.30	4.88	7.02
Southeast:				
1988	39.70	51.75	3.61	4.94
1987	39.80	50.03	5.36	4.82
1986	30.59	52.60	6.12	10.69
Delta:				
1988	44.25	45.66	5.20	4.90
1987	48.19	39.04	7.47	5.29
1986	28.56	52.10	9.01	10.33
Southern Plains:				
1988	37.11	50.61	5.95	6.34
1987	39.66	48.79	4.55	7.00
1986	27.39	56.43	5.04	11.14
Mountain:				
1988	46.29	38.29	6.71	8.71
1987	45.04	38.55	6.78	9.62
1986	36.90	43.92	10.92	8.26
Pacific:				
1988	34.27	49.37	3.74	12.62
1987	38.51	45.84	5.19	10.45
1986	33.99	49.00	6.11	10.90
All farms:				
1988	45.97 **	40.43 **	6.77 **	6.82
1987	48.50	36.57	8.16	6.78
1986	41.40	36.96	11.69	9.94

** = Significant at the 95-percent confidence level.

Source: Farm Costs and Returns Surveys, USDA.

Table 16--Distribution of farms by land tenure and combined net cash farm income and solvency position

Tenure/year	Financial position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
Full tenant:				
1988	50.39	26.90	14.50	8.21
1987	52.49	26.22	13.83	7.46
1986	40.38	25.89	22.35	11.39
1-20 percent:				
1988	47.14	34.93	11.30	6.62
1987	47.15	31.28	13.52	8.04
1986	35.15	35.10	17.57	12.18
21-40 percent:				
1988	46.22	33.70	10.57 *	9.51
1987	48.49	29.82	13.82	7.87
1986	41.10	27.81	19.97	11.12
41-60 percent:				
1988	47.65	35.56 *	9.49 **	7.30
1987	51.16	28.49	14.61	5.74
1986	43.68	31.64	15.66	9.01
61-80 percent:				
1988	48.03 *	38.88 **	7.92	5.17
1987	54.79	30.57	8.27	6.37
1986	46.54	29.66	14.09	9.71
81-99 percent:				
1988	53.15	35.83	5.19 **	5.83
1987	52.45	31.51	11.36	4.68
1986	47.25	32.66	13.89	6.19
Full owner:				
1988	43.57	46.05 **	3.87	6.51
1987	46.06	42.92	4.20	6.81
1986	40.45	44.43	5.31	9.81
All farms:				
1988	45.97 **	40.43 **	6.77 **	6.82
1987	48.50	36.57	8.16	6.78
1986	41.40	36.96	11.69	9.94

* = Significant at the 90-percent confidence level.

** = Significant at the 95-percent confidence level.

Source: Farm Costs and Returns Surveys, USDA.

Comparing average financial ratios for 1987 and 1988 suggests that the overall solvency position of farms and their ability to service debt improved, although profitability fell modestly (table 17). Average financial ratios were also estimated separately for farms with gross sales above \$40,000 and those having \$40,000 or less in gross sales. Results suggest that the improvement in solvency and debt-repayment ability was largely confined to farms with gross sales above \$40,000. The primary changes from 1987 for farms with sales of \$40,000 or less were a reduced ability to service debt out of farm income and a lower return to assets and equity of the farm business. The 1988 FCRS afforded the first

opportunity to remove contractors' income and expenses from financial ratio estimates. Farm operators were less able to service debt, were not as economically efficient, and had lower returns than shown prior to these adjustments. These results were particularly true for the largest farms; farms that specialized in the production of poultry and vegetables, fruit, or nuts; and farms in the Northeast and Southeast regions. For comparability with 1987 results, both estimates of financial ratios were provided for 1988.

The average debt/asset ratio for all farms was 0.13, down from 0.15 in 1987 (table 17). There was a

Table 17--Selected average financial ratios by size of farm, 1987-88

Measures	Gross sales								
	Less than \$40,000			\$40,000 or more			All farms		
	1987a	1988a	1988b	1987a	1988a	1988b	1987	1988	1988b
	<u>Ratio</u>								
Solvency measures: ^{1/}									
Debt/asset	0.08	0.08	0.08	0.20	0.17	0.17	0.15	0.13	0.13
Leverage	.09	.08	.08	.25	.21	.21	.18	.15	.15
Liquidity and coverage measures:									
Times interest earned	5.31	4.84	4.26	4.98	5.66	4.29	5.04	5.50	4.28
Debt service coverage	.46	.24	-.06	3.09	3.40	2.58	2.54	2.71	2.00
Debt servicing	.22	.24	.27	.11	.10	.11	.12	.11	.13
Efficiency measures:									
Asset turnover	.09	.09	.08	.33	.33	.29	.23	.23	.20
Debt burden	-.01	-.04	-.09	.42	.48	.34	.32	.36	.24
Gross	1.02	1.07	1.16	.73	.72	.78	.76	.76	.82
Interest expense	.12	.12	.14	.07	.06	.07	.07	.07	.07
	<u>Percent</u>								
Profitability measures:									
Profit margin	30.58	28.38	25.88	24.98	25.49	20.36	25.92	25.93	21.24
Return on assets	.23	-.28	-.65	6.59	6.52	4.06	3.92	3.74	2.13
Return on equity	-.46	-.99	-1.39	5.64	5.72	2.74	2.87	2.79	.94

a = Estimates include income and expenses associated with contractors.

b = Estimates exclude income and expenses associated with contractors.

^{1/} See appendix I for definitions of financial ratios.

Source: Farm Costs and Returns Surveys, USDA.

similar decline in the leverage ratio. At the end of 1988, farm liabilities represented only 15 percent of total equity. As one might expect, debt represented a substantial portion of the capital structure for farms with gross sales over \$40,000. These farms had liabilities that were 17 percent of assets and 21 percent of equity at the end of 1988, compared with 20 and 25 percent, respectively, in 1987. Farms with sales of \$40,000 or less had a debt/asset ratio and a leverage ratio that were at least half the values of larger farms. Solvency ratios of those smaller farms were essentially unchanged since 1987.

The improved coverage ratios reflect higher average net incomes and lower interest payments in 1988. Net farm income was 5.5 times the size of interest payments in 1988, compared with 5.04 in 1987. This greater ability to service debt was largely confined to farms with sales above \$40,000. Unlike other ratios, however, there was relatively little variation in the ratio of times interest earned between these groups.

The average debt service coverage ratio increased from 2.54 in 1987 to 2.71 in 1988. Values of this ratio were considerably lower for farms with sales of \$40,000 or less than for farms with higher sales. The debt service ratio indicates that interest and principal repayment represented 11 percent of gross cash farm income, which was a 1-percentage-point reduction from 1987. As was the case for the other coverage ratios, debt service required a much larger portion of income for farms with gross sales of \$40,000 or less than for farms with higher gross sales. Farms with sales below \$40,000 typically have higher nonfarm earnings. In most cases these earnings would also be available for use in servicing debt commitments. Excluding contractors' income and expenses from the calculation of coverage ratios reduced ratio values for farms with sales above \$40,000.

Farm operators' overall efficiency in using assets, debt, and other resources in operating the farm business remained similar to 1987. The larger farms

(more than \$40,000 in gross sales) registered slight improvements, while efficiency of smaller farms was unchanged. Gross farm income represented 23 percent of total assets at the end of both 1987 and 1988. Assuming the current volume of production continues, complete asset turnover would require 4-5 years. Asset turnover was estimated to occur over three times faster for farms with gross sales over \$40,000 than for those with lower sales. The strain on cash-flow to retire debt increased in 1988, as evidenced by the 4-percentage-point gain in the average debt burden ratio. Much of this change was associated with farms that had gross sales above \$40,000. The gross ratio reveals the amount of gross cash farm income that is absorbed by cash operating expenses. The average value for all farms was identical to 1987 at 76 percent. The average gross ratio increased by 5 percentage points for farms with sales of \$40,000 or less and remained above 1, indicating that cash expenses exceeded gross cash farm income. Farms with gross sales above \$40,000 experienced a slight improvement in the gross ratio, suggesting a more efficient use of resources than in 1987. Interest continued to account for 7 percent of gross cash farm income and ranged from 6 percent for farms with gross sales above \$40,000 to 12 percent for farms with lower gross sales.

On average, farms were marginally less profitable than in 1987. The average profit margin for all farms of 25.93 percent was nearly identical to last year. Farms with sales above \$40,000 had a small increase in the average profit margin, while smaller farms experienced a decline in the ratio of net farm income to gross farm income. There was also a slight decline in both returns on assets and returns on equity. Returns were dramatically different for farms with sales of \$40,000 or less and for those with higher gross sales. Farms with sales of \$40,000 or less had negative returns on both assets and equity. The average return on assets for farms with gross sales above \$40,000 was 6.52 percent, a small decline from last year. Returns on equity for these farms rose from 5.64 percent at the end of 1987 to 5.72 percent at the end of 1988.

Farms With Gross Sales Above \$40,000

A great deal of the economic activity associated with farming is generated by about 600,000 farms that typically have more than \$40,000 of gross sales during the year. While representing only a third of all farms, this group accounts for 84 percent of gross farm income, 85 percent of total expenses, 60 percent

of assets, and 77 percent of total farm operator debt. In contrast to smaller operations, most operators in this group consider farming to be their primary occupation (90 percent compared with 40 percent of farms with gross sales of \$40,000 or less). As a result, this group typically depends more on farming as the primary source of household income. For these reasons, many regard this group of farms as representing commercial agriculture.⁵ The remainder of this section uses financial ratios to focus on the financial performance of this group of farms.

Economic Class

Average financial ratios for farms with sales above \$40,000 are presented by economic class in appendix table 18. Farms in the \$40,000-\$99,999 class ended 1988 in the strongest solvency position, having both the lowest average debt/asset (0.15) and leverage (0.17) ratios. For the remaining three larger economic classes, average debt/asset ratios ranged from 0.18 to 0.19 and the leverage ratio ranged from 0.21 to 0.24. These ratios suggest relatively little variation in the solvency position of these farms. Both solvency measures for all economic classes declined in 1988. Farms with gross sales above \$250,000 registered the largest gains in solvency position.

Farms in all economic classes increased their capacity to service debt. The most significant improvement occurred for farms with gross sales above \$250,000. Average coverage ratios calculated without contractors' income and expenses were lower than when included. Farms in the \$500,000-or-more economic class felt the largest effects from this adjustment. For example, the debt service coverage ratio for the largest economic class fell from 5.20 to 3.28 when contractors' income and expenses were excluded, while values of this ratio for the \$40,000-\$99,999 class fell from 2.62 to 1.87.

Comparing average asset turnover ratios for 1987 and 1988 (both including contractors' income and expenses) suggests a decline in the efficiency of asset use for all but the \$40,000-\$99,999 economic class. Most economic classes required a greater share of net cash farm income to retire debt than in 1987. Farmers' general efficiency in resource use, as

⁵There are a variety of definitions of commercial farms offered in the literature. For purposes of this report, farms with gross sales above \$40,000 are referred to as commercial farms.

indicated by the gross ratio, deteriorated for all but the largest economic class. Across all economic classes, interest as a proportion of gross cash farm income fell by 1 percentage point.

Only in the largest economic class were farms more profitable in 1988 than in 1987. Farms in the \$250,000-\$499,999 economic class experienced the largest reduction in profitability. The average profit margin showed considerably less variation across economic classes than did other profitability measures, particularly when contractors' income and expenses were excluded from the estimates. For farms with gross sales above \$500,000, the average rate of return on equity fell from 15 percent to 7 percent after removing contractors' income and expenses.

Production Specialty

The solvency position of nearly all production specialties improved from 1987 (app. table 19). Nursery and greenhouse farms were the exception, with marginally higher debt/asset and leverage ratios than in 1987. Yet when compared with other production specialties, these operations continued to have among the lowest values of both solvency measures. Farms that specialized in the production of vegetables, fruit, or nuts easily had the largest improvement in solvency position over the last year. As in 1987, the most highly leveraged operations were cash grain, other field crop, poultry, and dairy farms.

Cash grain, poultry, and dairy were the only production specialties that were not in a better position to service debt from farm earnings than in 1987. On average, net farm income (excluding contractors' income and expenses) was at least 5 times the size of interest payments for tobacco; vegetable, fruit, or nut; nursery and greenhouse; and poultry operations. Other livestock farms had the only negative average debt service coverage ratio (excluding contractors' income and expenses). The highest values occurred for nursery and greenhouse (10.29) and poultry (4.48) farms. Values for the remaining production specialties ranged between 2 and 4. Based on the debt service ratio, interest and principal repayment required the largest share of gross farm income for cash grain and other field crop farms.

Average asset turnover ratios (excluding contractors' income and expenses) for 1988 reveal that nursery

and greenhouse, poultry, and cotton farms had the most efficient asset use among production specialties. For these farms, generating enough production to equal the value of assets would require between 2 and 3 years. Tobacco, nursery and greenhouse, and poultry operations were in the best position to retire debt at the end of 1988, having the highest average debt burden ratios (excluding contractors' income and expenses). Cotton; vegetable, fruit, or nut; beef, hog, or sheep; and other livestock farms had average gross ratios (excluding contractors' income and expenses) above 0.78 (the average for all farms with sales of more than \$40,000), suggesting a lower than average efficiency in resource use.

By any measure, farm business profitability increased since 1987 for tobacco; vegetable, fruit, or nut; beef, hog, or sheep; and poultry farms. Profits per dollar of gross income in 1988, as indicated by the profit margin (excluding contractors' income and expenses), exceeded 25 percent for poultry, nursery and greenhouse, and tobacco farms. These farms also earned higher returns on assets and equity than other production specialties.

Production Region

Over the last year, the Lake States, Southeast, Delta, Mountain, and Pacific regions showed considerable improvement in solvency positions (app. table 20). The Appalachian region was the only area with higher debt/asset and leverage ratios. Farms in the Lake States, Corn Belt, Northern Plains, and Appalachian regions were more highly leveraged than other regions in 1988, with debt representing at least 25 percent of equity.

On average, farm operators' ability to service debt from farm earnings improved the most since 1987 in the Delta, Southern Plains, Mountain, and Pacific regions. In 1988, the Northeast, Appalachian, Southeast, and Delta regions demonstrated the highest relative capacity to service debt from annual farm income.

The Northeast, Appalachian, Delta, and Southern Plains regions were, on average, more efficient users of assets than in 1987. Given 1988 production volume, the Southeast and Delta regions required the least amount of time to generate production equal in value to assets. Farmers in the Northeast, Appalachian, Southeast, and Delta regions were better able to retire debt than were other regions at the end of 1988. The most efficient resource use

occurred in the Appalachian, Southeast, and Delta regions, where gross ratios (excluding contractors' income and expenses) were 0.70 or less. Average gross ratios increased in the Northeast, Corn Belt, Northern Plains, and Appalachian regions, indicating a decline in economic efficiency from 1987.

Farms earning the highest profits, on average, in 1988 were located in the Northern Plains, Appalachian, and Delta regions. Regions showing increased profitability from 1987 included the Mountain and Pacific. The greatest reductions in average profits were for farms in the Corn Belt and Northeast.

Farm Operator Rates of Return

The distributions of farm operators by farm business returns on assets and debt/asset ratio and by returns on equity and debt/asset ratio changed very little from the 1987 distributions. This is consistent with changes in the income and balance sheet statements. The distributions of farms, farm debt, and assets were also very similar to the 1987 distributions when these items were cross-classified by farm business returns on equity and other classifications, such as economic class, production value, tenure, production specialty, and acreage operated.

Farm operators with a favorable combination of returns and a demonstrated ability to sustain equity and service debt by earning either high returns with relatively high debt or positive returns with little or

no debt (equity cushion) are in a fairly secure financial position. Farm operators with inadequate returns to sustain current equity or to fully service debt over the longer term are in a less stable position and will likely experience financial difficulties unless they are able to increase their returns or reduce their debt service burden.

Farm Business Returns on Assets

The percentage of all farms with returns on assets of -5 percent or better decreased slightly from 79 percent in 1987 to 77 percent in 1988. The distribution of farms by returns across debt/asset ratio categories changed similarly. For example, farms with debt/asset ratios of 0.40 or less showed a decrease from 68 percent in 1987 to 67 percent in 1988 in the proportion of farms with returns of -5 percent or better (table 18). Nearly 51 percent of all operators had returns that fell between -5 percent and 5 percent, and half of those had no debt. Even for highly leveraged groups, returns on assets most commonly were between -5 percent and 5 percent at the end of 1988.

Just over 21 percent of all farmers were in the strongest financial position (debt/asset ratios of 0.40 or less and returns on assets of at least 5 percent) in 1988, compared with 22 percent in 1987. The proportion of farms in the weakest position (debt/asset ratios above 0.40 and returns on assets under -5 percent) was 4 percent in 1988, the same as in 1987.

Table 18--Distribution of farms by debt/asset ratio and farm business returns on assets

Return on assets	Debt/asset ratio						All farms
	No debt	0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
	Percent						
0.20 or over	1.56	0.58	1.60	0.89	0.25	0.24	5.13
0.10 to 0.19	2.35	.94	1.99	.86	.33	.12	6.58
0.05 to 0.09	6.83	1.93	3.63	1.48	.39	.09	14.35
-0.05 to 0.04	26.87	8.45	10.56	3.61	.80	.45	50.74
-0.10 to -0.06	3.74	1.27	2.15	.84	.35	.09	8.44
-0.20 to -0.11	3.24	1.09	1.99	.94	.37	.14	7.78
-0.21 or less	3.28	.87	1.48	.54	.38	.42	6.98
All farms	47.87	15.14	23.40	9.16	2.87	1.56	100.00

Source: 1988 Farm Costs and Returns Survey, USDA.

Farm Business Returns on Equity

Returns on equity decreased slightly in 1988 compared with those in 1987. Just over 70 percent of all farms had returns on equity of -5 percent or better, compared with nearly 72 percent in 1987 (table 19). As was the case in 1987, the largest share of all farms had returns on equity in the -5 percent to 4 percent range. This was also true for farms with a debt/asset ratio of 0.40 or less. Farms in this category likely experienced little or no financial stress in 1988. However, those with negative returns must improve their performance to remain viable in the future.

Just over 20 percent of farms in 1988 were in the strongest financial position, with both low debt/asset ratios (0.40 and below) and high returns (greater than 5 percent), compared with 21 percent in 1987. Some farms earned adequate returns on equity in 1988, despite being highly leveraged. About 4 percent of all operators had debt/asset ratios of 0.41-1.0 and returns on equity of over 5 percent. Excluding insolvent farms, those in the most difficult financial position (debt/asset ratios above 0.40 and returns on equity below -5 percent) constituted nearly 7 percent of all farm operators in 1988, compared with just over 6 percent in 1987.

Economic Class

Farms with returns on equity of -5 percent or better made up about 70 percent of farms in 1988 and were responsible for over 64 percent of all debt and 82 percent of all assets (table 20). The comparable

figures for 1987 were 72, 60, and 82 percent. Thus, in comparison to 1987, a slightly smaller proportion of farms had returns on equity of -5 percent or better. These farms controlled a higher share of total farm operator debt and about the same share of assets. In most instances, this pattern was repeated across all economic classes.

The 45 percent of all operators who had returns on equity between -5 percent and 5 percent were responsible for 29 percent of the debt at the end of 1988 but owned nearly 60 percent of all assets. Over half of all operators whose equity returns fell within this range earned less than \$10,000 in annual gross sales. They owned 17 percent of all operators' assets at the end of 1988, but owed only 5 percent of all debt. Within each economic class, the largest share of operators had returns in the -5 percent to 4 percent range, except for those in the \$500,000-or-more class. Over 29 percent of the operators in that class had returns of 20 percent or better.

Acreage Operated

Farmers operating more than 2,000 acres in 1988 made up about 3.5 percent of all farm operators but were responsible for nearly 17 percent of all operator debt and about 16 percent of all assets (app. table 21). Farmers operating 100 or fewer acres made up a much higher proportion (44 percent) of all operators but controlled similar percentages (17 and 25 percent) of debt and assets. Over a third of farmers operating 501 acres or more had returns of 5 percent or better in 1988. In comparison, less than a fourth of farmers operating fewer than 501 acres had returns of 5 percent or better.

Table 19--Distribution of farms by debt/asset ratio and farm business returns on equity

Return on equity	Debt/asset ratio						All farms
	No debt	0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
	<u>Percent</u>						
0.20 or over	1.51	0.59	1.82	1.23	0.60	na	6.68
0.10 to 0.19	2.28	.91	1.87	.72	.13	na	5.99
0.05 to 0.09	6.72	1.68	2.86	.78	.20	na	12.32
-0.05 to 0.04	26.82	8.05	8.37	1.68	.12	na	45.19
-0.10 to -0.06	3.94	1.70	2.97	.79	.13	na	9.55
-0.20 to -0.11	3.15	1.23	2.94	1.40	.12	na	8.88
-0.21 or less	3.46	.98	2.56	2.55	1.58	na	11.14
Insolvent farms	na	na	na	na	na	1.56	.25
All farms	47.87	15.14	23.40	9.16	2.87	1.56	100.00

na = Not available.

Source: 1988 Farm Costs and Returns Survey, USDA.

Production Specialty

About 76 percent of all operators specialized in cash grain; beef, hog, or sheep; and dairy enterprises in 1988. These operators owed 77 percent of all operator debt and held about 76 percent of all operator assets (app. table 22). The percentage of cash grain; beef, hog, or sheep; and dairy operators with returns greater than -5 percent decreased slightly from 73, 74, and 64 percent in 1987 to 71, 70, and 61 percent in 1988. The share of debt held by cash grain and beef, hog, or sheep operations with returns greater than -5 percent increased by about 5 percent from 1987 to 1988. The share of assets held by these farms did not change from 1987 to 1988. The share of debt and assets controlled on dairy operations with

returns of -5 percent or more both decreased by about 5 percent from 1987 to 1988.

The percentage of farms that were insolvent or had low returns on equity varied by specialty. Other livestock, dairy, and tobacco farms had the greatest share (42, 38, and 32 percent) of operators who either had returns on equity less than -5 percent or were insolvent. They were followed closely by beef, hog, or sheep; cash grain; and nursery and greenhouse farms (30, 29, and 28 percent). The share of operator debt and assets on farms that had returns below -5 percent or were insolvent was greatest for other livestock (45 and 24 percent) and dairy (42 and 26 percent) farms.

Table 20--Distribution of farms, debt, and assets by rate of return on equity and economic class

Economic class	Item	Farm business returns on equity							Insolvent farms	All farms
		0.20 or over	0.10 to 0.19	0.05 to 0.09	-0.05 to 0.04	-0.10 to 0.06	-0.20 to 0.11	-0.21 or less		
		Percent								
\$500,000 or over	Operators	0.58	0.22	0.26	0.47	0.12	0.11	0.17	0.03	1.97
	Debt	4.43	2.41	1.91	4.72	1.10	1.51	2.00	.52	18.60
	Assets	2.19	1.56	1.54	5.69	.69	.64	.64	.05	13.00
\$250,000-\$499,999	Operators	.84	.62	.53	1.10	.26	.27	.34	.02	3.98
	Debt	3.06	1.92	1.75	3.76	1.01	1.72	1.73	.17	15.11
	Assets	1.24	1.37	1.73	5.36	.68	.62	.56	.02	11.57
\$100,000-\$249,999	Operators	1.81	1.59	1.24	4.09	.86	.83	1.18	.11	11.70
	Debt	3.97	3.49	2.27	7.42	2.62	2.35	3.63	.55	26.30
	Assets	1.51	2.31	2.17	9.76	1.49	1.04	.99	.06	19.34
\$40,000-\$99,999	Operators	1.38	1.06	1.82	5.37	1.44	1.28	1.64	.06	14.04
	Debt	2.22	.93	1.68	4.66	1.91	1.96	3.08	.17	16.60
	Assets	.80	.73	1.70	8.42	1.55	1.04	.95	.02	15.21
\$20,000-\$39,999	Operators	.88	.52	.97	4.69	1.22	1.32	d	d	10.97
	Debt	1.14	.19	.47	2.17	.88	1.00	d	d	6.91
	Assets	.28	.29	.65	6.06	.94	.71	d	d	9.42
\$10,000-\$19,999	Operators	.34	.37	1.11	6.37	.98	1.50	d	d	11.89
	Debt	.24	.10	.48	1.57	.30	.60	d	d	4.37
	Assets	.09	.12	.62	5.89	.48	.60	d	d	8.13
\$9,999 or less	Operators	.86	1.61	6.40	23.10	4.67	3.55	d	d	45.44
	Debt	.51	.59	1.54	4.73	1.44	1.24	d	d	12.11
	Assets	.21	.54	2.43	16.51	1.77	1.02	d	d	23.34
All farms	Operators	6.68	5.99	12.32	45.19	9.55	8.88	11.14	.25	100.00
	Debt	15.57	9.64	10.11	29.03	9.25	10.36	14.61	1.43	100.00
	Assets	6.32	6.92	10.84	57.69	7.60	5.67	4.82	.15	100.00

d = Data insufficient for disclosure.

Source: 1988 Farm Costs and Returns Survey, USDA.

Poultry, cotton, other field crop, and nursery and greenhouse farms had the highest proportions (58, 38, 37, and 37 percent) of operations with returns on equity of at least 5 percent. Only 18 percent of beef, hog, and sheep farms; 20 percent of other livestock farms; and 23 percent of tobacco farms had returns on equity of that level.

Region

The 1988 regional distributions of operators, operator debt, and operator assets by region were nearly identical to those in 1987 (app. table 23). Changes in the regional distributions of operators, debt, and assets from 1987 to 1988 were typically in the range of 1 percent or less. One exception occurred in the Corn Belt, where operators, operator debt, and operator assets all declined by 2 percent. Changes in the distributions of operators, operator debt, and operator assets by region and farm business returns on equity from 1987 to 1988 were not uniform in direction. This is in contrast to changes in these distributions from 1986 to 1987 when, for example, the share of operators, operator debt, and assets for operations with returns on equity of -5 percent or greater generally increased. For example, in the Corn Belt, the share of operators, operator debt, and operator assets for farm operations with business returns on equity of -5 percent or better decreased to 67, 60, and 75 percent in 1988, compared with 73, 62, and 82 percent in 1987. But in the Pacific region, the share of operators, operator debt, and operator assets for farm operations with business returns on equity of -5 percent or greater increased from 72, 58, and 80 percent to 75, 68, and 87 percent in 1988. In 1988, the Southeast and Delta States had the highest shares (79 and 77 percent) of operators with returns of -5 percent or better. These operators controlled about 85 percent of the assets in both regions and held about 67 percent of the debt. In comparison, only about 61 percent of the operators in the Lake States had returns of -5 percent or above. These farms accounted for 59 percent of operator debt and 72 percent of operator assets in that region. The Lake States had the highest proportion (41 percent) of debt owed by operators who were either insolvent or had returns on equity less than -5 percent, followed by the Corn Belt, Southern Plains, and Delta States (40, 39, and 38 percent). Farmers in the Lake States, Corn Belt, and Northern Plains owed about 50 percent of all operator debt on farms that were either insolvent or had returns below -5 percent. Farmers in the Southern Plains, Pacific, and Mountain States owed another 22 percent.

At the other extreme, the Mountain States had the largest percentage (35 percent) of operators who earned returns on equity of 5 percent or more. They controlled 46 percent of the debt in the Mountain States and held about 27 percent of the assets. Twenty-seven percent of operators in the Pacific, Northern Plains, Southeast, and Delta regions had returns on equity above 5 percent. Farmers in the Appalachian and Southern Plains regions, where only 20 percent of the farms had returns on equity of 5 percent or more, had the lowest returns.

Tenure

Full owners accounted for about 53 percent of all farm operators in 1988, controlled 34 percent of all operator debt, and held nearly 48 percent of all assets (app. table 23). Full tenants accounted for 9 percent of all operators, owed about 6 percent of all operator debt, and held about 5 percent of all operator assets. About 47 percent of full tenant operators had returns of -5 percent or better, compared with nearly 76 percent of full owners. Over twice as many tenants (53 percent) had returns of -6 percent or less or were insolvent compared with full owners (24 percent).

Lender Portfolio Perspective

This section examines the distribution of operator debt by lender and operator financial status. The distribution of operator debt by income/solvency position and by operator economic class, production specialty, and region is also analyzed.

Debt Distribution by Lender

The distribution of lender debt by operator leverage position indicates that commercial banks, Federal land banks, and the Farmers Home Administration (FmHA) held nearly 75 percent of all operator debt (table 21). About 39 percent of FmHA debt was owed by farms with debt/asset ratios greater than 0.71, compared with 41 percent at the end of 1987 and 54 percent at the end of 1986. The percentage of operator debt held by commercial banks in this category also declined from 19.5 percent on January 1, 1988, to 16.9 percent on January 1, 1989. The percentage of operator debt held by commercial banks, Federal land banks, and FmHA on farms with debt/asset ratios of 0.40 or less increased from 50, 44, and 25 percent on January 1, 1988, to 52, 53, and 27 percent on January 1, 1989. Of all the debt owed by highly leveraged operators (debt/asset ratios exceeding

Table 21--Distribution of debt owed by farm operators by debt/asset ratio and lender

Lender	Debt/asset ratio on January 1, 1989					All farms, January 1	
	0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71 1.0	Over 1.0	1989	1988
	<u>Percent</u>						
Commercial banks:							
Own debt	7.7	44.0	31.4	9.8	7.1	100.0	100.0
All lender debt in class	47.2	41.4	39.6	34.0	35.5	39.9	36.0
All operator debt	3.1	17.6	12.5	3.9	2.8	39.9	36.0
Federal land banks:							
Own debt	5.8	47.0	34.4	8.2	4.5	100.0	100.0
All lender debt in class	17.2	21.3	21.0	13.8	10.9	19.3	19.2
All operator debt	1.1	9.1	6.6	1.6	.9	19.3	19.2
Farmers Home Administration:							
Own debt	2.5	24.3	33.8	20.7	18.6	100.0	100.0
All lender debt in class	5.8	8.6	16.1	27.3	35.3	15.1	15.9
All operator debt	.4	3.7	5.1	3.1	2.8	15.1	15.9
Production credit association:							
Own debt	8.3	52.8	27.4	6.8	4.6	100.0	100.0
All lender debt in class	8.0	7.8	5.4	3.7	3.7	6.3	6.4
All operator debt	.5	3.3	1.7	.4	.3	6.3	6.4
Merchants and dealers:							
Own debt	12.9	42.9	27.6	11.4	5.2	100.0	100.0
All lender debt in class	4.7	2.4	2.1	2.4	1.6	2.4	2.5
All operator debt	.3	1.0	.7	.3	.1	2.4	2.5
Life insurance companies:							
Own debt	5.5	43.2	34.0	12.7	4.5	100.0	100.0
All lender debt in class	2.5	3.0	3.2	3.3	1.7	3.0	3.0
All operator debt	.2	1.3	1.0	.4	.1	3.0	3.0
Individuals:							
Own debt	6.6	48.0	28.3	11.9	5.2	100.0	100.0
All lender debt in class	13.0	14.6	11.5	13.4	8.5	12.9	13.9
All operator debt	.8	6.2	3.6	1.5	.7	12.9	13.9
All other lenders:							
Own debt	8.7	26.9	24.9	20.5	19.0	100.0	100.0
All lender debt in class	1.6	.8	1.0	2.2	2.9	1.2	na
All operator debt	.1	.3	.3	.3	.2	1.2	na
All lenders:							
All lender debt in class	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All operator debt	6.5	42.4	31.6	11.5	8.0	100.0	100.0

na = Not applicable.

Source: Farm Costs and Returns Surveys, USDA.

0.40), commercial banks held the largest share (19 percent), followed by FmHA (11 percent), and Federal land banks (9 percent). The proportion of debt on insolvent operations (debt/asset ratios above 1) held by commercial banks, Federal land banks, and FmHA decreased from 10, 10, and 24 percent on January 1, 1988, to 7, 5, and 19 percent on January 1, 1989.

Total reported farm operator debt declined by over \$3 billion from January 1, 1988, to January 1, 1989 (app. table 22). The total debt held by commercial

banks, Federal land banks, and FmHA was \$63 billion, representing no change from January 1, 1988. However, total debt owed to commercial banks increased by about \$2 billion while decreasing by about \$1.3 billion for FmHA. Nearly \$1 billion of the decrease in FmHA debt occurred on outstanding loans to insolvent operations (debt/asset ratios over 1). Total debt on insolvent farm operations declined by over \$3 billion during 1988, while debt held on farms with debt/asset ratios of 0.11-0.40 increased by nearly \$2 billion. Commercial banks, Federal land banks, and FmHA held \$5.5 billion of the \$6.8 billion

in debt on insolvent farms at the end of 1988. Commercial banks held the largest share of debt on insolvent operations, followed closely by FmHA. From 1985 to 1987, the total amount of debt held by FmHA on insolvent farm operations exceeded that held by commercial banks.

Distribution of Operator Debt by Financial Position

FCRS data on operator debt were also examined by lender and operator financial position. In classifying operator debt by financial position, two alternative measures of income were used: net farm income (NFI) and net cash farm income (NCFI).

With regard to either income measure, the share of operator debt held by the three major lenders (commercial banks, Federal land banks, and FmHA) on farms in a vulnerable financial position increased during the year. The share of debt held on vulnerable operations increased the most for FmHA. FmHA's share of operator debt held on farms in this position increased from 23 percent on January 1, 1988, to 28 percent on January 1, 1989, when NFI was used to measure income (table 22). The share of operator debt held by commercial banks on farms in a vulnerable position increased slightly from 18 percent on January 1, 1988, to 19 percent on January 1, 1989 (fig. 3).

The share of debt held on farms in a favorable position decreased slightly by about 1 percent for

commercial banks and FmHA from January 1, 1988, to January 1, 1989. For Federal land banks, the share of debt held on farms in this position increased by about 5 percent when NFI was used to measure income. In the marginal financial categories, the share of lender debt held on farms in a marginal income position generally increased, while the share of debt held on farms in a marginal solvency position decreased.

Debt Owed by Farms in a Vulnerable Position

Commercial banks, Federal land banks, and FmHA held 78-79 percent of total debt on financially vulnerable farms on January 1, 1989, depending on the income measure used (app. table 26).

When income was measured on a net farm basis, commercial banks held 38 percent of the debt on financially vulnerable farms, followed by FmHA (22 percent), and Federal land banks (18 percent) (fig. 4). Most of the remaining debt in this category was held by other individuals and production credit associations.

FmHA had the largest share of its debt on farms in vulnerable and marginal financial positions when compared with other lenders. On a NFI basis, FmHA's share of debt held on farms in marginal or vulnerable positions was 81 percent, compared with 64 percent for commercial banks and 62 percent for Federal land banks.

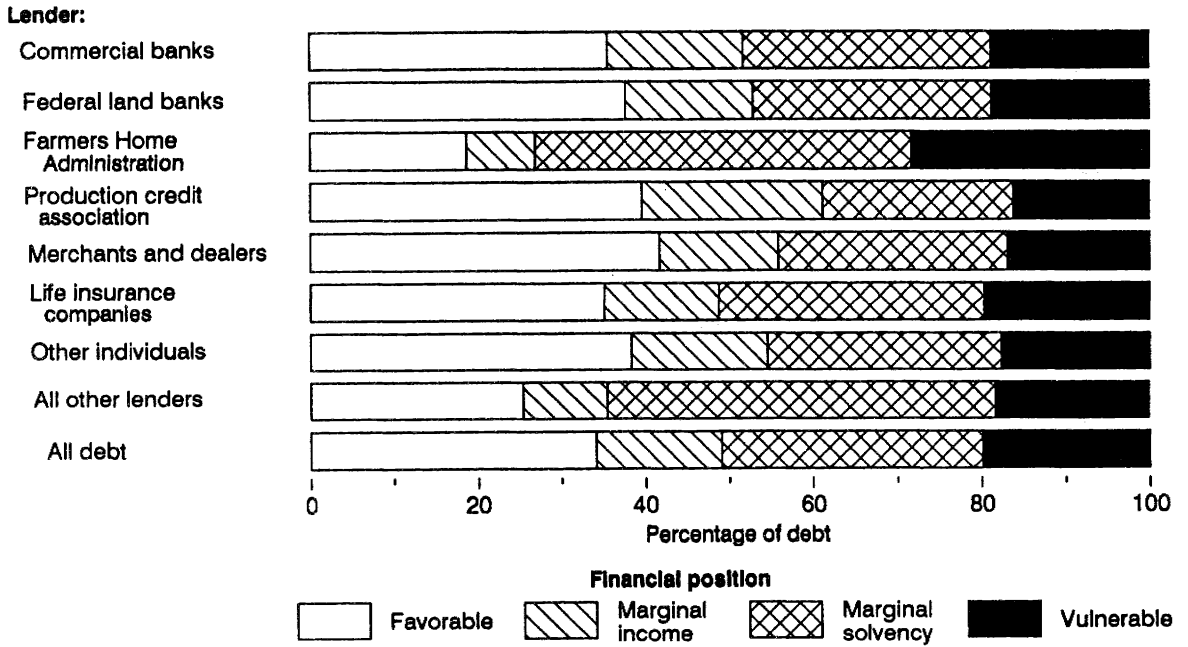
Table 22--Distribution of debt owed by farm operators by net farm income and solvency position, January 1, 1989

Item	Income/solvency position				All farms
	Favorable	Marginal income	Marginal solvency	Vulnerable	
	<u>Percent</u>				
Commercial banks:					
Own debt	35.6	16.2	29.4	18.8	100.0
All lender debt in class	41.7	43.3	37.7	37.8	39.9
All operator debt	14.2	6.5	11.7	7.5	39.9
Federal land banks:					
Own debt	37.7	15.2	28.3	18.8	100.0
All lender debt in class	21.3	19.6	17.5	18.2	19.3
All operator debt	7.3	2.9	5.5	3.6	19.3
Farmers Home Administration:					
Own debt	18.6	8.2	44.9	28.3	100.0
All lender debt in class	8.3	8.2	21.7	21.5	15.1
All operator debt	2.8	1.2	6.8	4.3	15.1
Production credit association:					
Own debt	39.7	21.5	22.6	16.2	100.0
All lender debt in class	7.3	9.0	4.6	5.1	6.3
All operator debt	2.5	1.3	1.4	1.0	6.3
Merchants and dealers:					
Own debt	41.7	14.0	27.3	16.9	100.0
All lender debt in class	2.9	2.2	2.1	2.0	2.4
All operator debt	1.0	.3	.7	.4	2.4
Life insurance companies:					
Own debt	35.0	13.7	31.5	19.7	100.0
All lender debt in class	3.1	2.7	3.0	2.9	3.0
All operator debt	1.0	.4	.9	.6	3.0
Other individuals:					
Own debt	38.4	16.2	27.8	17.6	100.0
All lender debt in class	14.5	14.0	11.5	11.4	12.9
All operator debt	5.0	2.1	3.6	2.3	12.9
All other lenders:					
Own debt	24.1	11.5	48.8	15.7	100.0
All lender debt in class	.9	.9	1.9	1.0	1.2
All operator debt	.3	.1	.6	0.2	1.2
All lenders:					
All lender debt in class	100.0	100.0	100.0	100.0	100.0
All operator debt	34.0	15.0	31.1	19.9	100.0

Source: 1988 Farm Costs and Returns Survey, USDA.

Figure 3

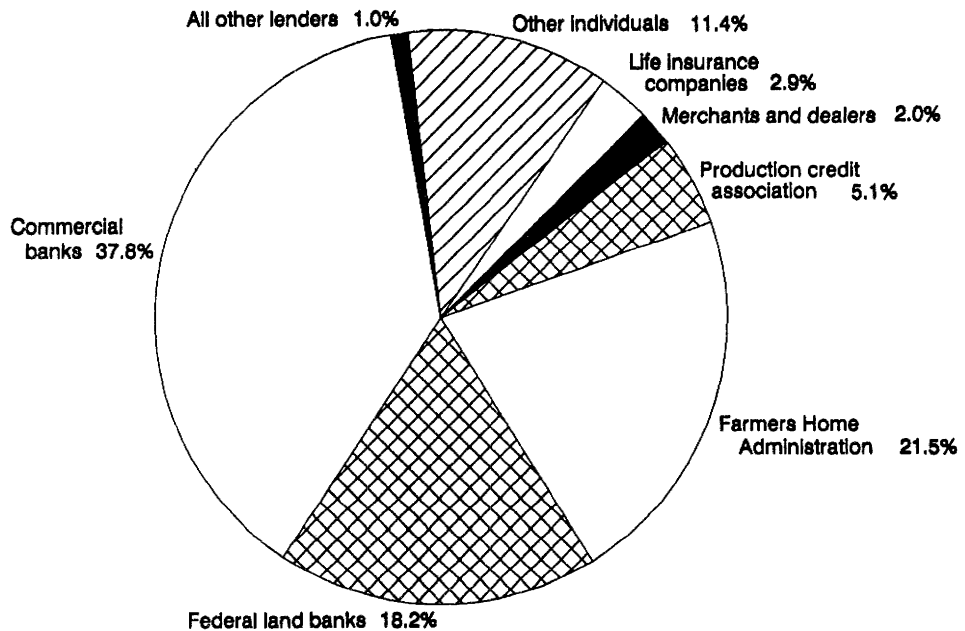
Distribution of farm operator debt by financial position and lender



Source: 1988 Farm Costs and Returns Survey, USDA.

Figure 4

Distribution of debt owed by farms in a vulnerable financial position by lender



Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix I--Assessing Farm Financial Performance

The financial performance of farm operations can be measured by evaluating the relationship between income and leverage position, as measured by debt and assets. Cash-based income measures reveal the ability of a farm business or household to meet current debt service commitments and pay family living expenses. Net farm income provides a longer term assessment of earnings that reveals a farm's ability to generate profits.

Solvency, as measured by the debt/asset ratio, reflects owner equity in the farm business and financial risk associated with the operation. Several studies have illustrated that some farm businesses with relatively high debt/asset ratios can generate income needed to service financial obligations, while some operations with little or no yearend liabilities have inadequate earnings. Thus, understanding financial performance requires considering a variety of financial statement data.

Several additional measures may also be used to obtain a perspective about financial performance (liquidity and coverage, solvency, profitability, and financial efficiency). These include a variety of financial ratios, such as the debt/asset and leverage ratios (indicating degree of solvency), the debt coverage ratio (indicating the farm's ability to meet financial commitments), the gross and expense structure ratios (indicating how efficiently resources are being used), and the returns on assets or equity ratios (indicating relative profitability). These and other alternative financial indicators and empirical estimates are presented and discussed for 1988.

Income Measures

The objective of the income statement is to generate a net income figure that reconciles the change in net worth during the calendar year. Farmers and ranchers most often choose the calendar year as the accounting period because it coincides with the tax year. The entity for which the income statement is prepared must be the same as the entity for which the balance sheet is prepared.

The primary focus of financial statements constructed for this report is the farm business. However, separation of farm and nonfarm income, expenses,

assets, and debt is not possible in many situations because of the way records are kept. Moreover, a more complete picture of the financial viability of a farm business requires information about the entire farm household. This is particularly true for smaller, noncommercial enterprises.

Additional insights about farm business earnings require that income and expenses be treated on both a cash- and accrual-accounting basis. Both methods are used in agriculture, although individual proprietorships typically use cash-based income accounting for tax purposes largely because of the method's relative simplicity. For the cash-based approach, timing of payment determines revenues or expenses, while timing of payment makes no difference for the accrual approach. Likewise, expenses are claimed in the year they are paid under a cash system, while expenses are claimed in the year the goods or services are used in production under an accrual system. Under accrual accounting, net income is adjusted for asset depreciation, the value of home consumption of farm production, and the gain or loss in the value of crop and livestock inventories.

The conceptual framework for the derivation of farm operator cash-flow and net income is shown in appendix figure 1. Income generated by farm businesses and households during calendar year 1988 is analyzed through the use of three measures:

Net cash farm income (NCFI). This measure indicates the amount of net cash earnings from all business sources that a farm generates during the year. These funds can be used to repay principal on indebtedness, purchase new machinery or equipment, expand the farm business, or pay for family consumption or other obligations. We define NCFI as gross cash income minus all operating expenses, including interest payments but excluding principal repayments.

Net cash income from all sources (NCIFAS). This income measure indicates the amount of funds available, assuming all principal repayments and family cash withdrawals have been met. These funds can be used for business expansion, further consumption, savings, or other obligations. NCIFAS is derived by adding earnings of the farm household from off-farm sources to NCFI and deducting an estimate of principal repayments on outstanding debt and an allowance for family living expenditures.

Appendix figure 1
Farm operator income statement

Gross cash income

Livestock and poultry sales
 Crop sales including net CCC loans
 Custom work
 Government payments
 Other farm-related income

Less Farm business cash expenses

Feeder livestock
 Breeding fees
 Veterinary fees
 Feed and seed
 Fertilizers and chemicals
 Hired labor
 Fuels and oils
 Repairs and maintenance
 Transportation and storage
 Rent and lease payments
 Machine-hire
 Interest on operating loans
 Utilities
 Other variable expenses
 Property taxes
 Interest on intermediate
 and long-term debt
 Insurance premiums
 Other fixed expenses

Equals Net cash farm income (NCFI)

Net cash farm income

Plus Nonfarm income

Net earnings from off-farm business
 Wages or salaries
 Interest and dividends
 Other off-farm income

Less

Estimated principal repayment
 Estimated family living expenses

Equals Net cash income from all sources (NCIFAS)

Net cash farm income

Less Depreciation

Plus

Net change in crop and livestock inventories
 Value of home consumption
 Imputed rental value of farm dwellings

Equals Net farm income (NFI)

Net farm income (NFI). Net farm income indicates the profit or loss associated with current production. NFI is constructed by adjusting gross cash income to reflect changes in inventory values while incorporating nonmoney income components (an estimated value of home-consumed products and an estimated rental value of onfarm dwellings) and subtracting total operating expenses, including both interest payments and the amount of depreciation that the business has taken on its capital stock.

Estimates of family living expenses and principal payments were developed using secondary

information. The estimate for family living expenses is the nonmetropolitan household mean money income (\$24,967 for 1987) less estimated Federal income tax (\$1,923), State income tax (\$375), and estimated implicit net rental value of farm dwellings (\$4,140). After these adjustments, the family living allowance was estimated to be \$18,529 for the average farm family in 1987. The estimated living allowance for 1988 (\$19,200) equals the 1987 allowance, once adjusted for changes in the annual consumer price index (CPI) (about 4.14 percent). Principal payments were estimated based on the amount of real estate and nonreal estate debt held by farm operators for each lender. The principal

repayment commitments used are consistent with real estate debt repayment in the 10th year of a 30-year schedule, nonreal estate debt repayment in the 3rd year of a 7-year schedule, and interest rates charged by each lender for each debt category.

The estimated percentage of outstanding debt repaid varied by lender. Specific principal repayment levels calculated for use in the analysis were: Federal land banks, 1.37 percent; life insurance companies, 1.77 percent; FmHA, 8.73 percent; commercial banks, 8.73 percent; production credit associations, 12.68 percent; implement dealers, 12.62 percent; co-ops and other merchants, 14.11 percent; individuals, 6.39 percent; and other lenders, 8.59 percent. These figures indicate that lenders with a larger proportion of their total portfolio in real estate have smaller repayment percentages. To calculate the total principal repayment amount for each farm, the above percentages were applied to the amount of outstanding liabilities reported for each lender, and amounts were summed across all lenders.

Solvency Measures

The structure of the balance sheet reflects the equality in the fundamental accounting equation: $\text{assets} = \text{liabilities} + \text{owner equity}$. Assets include everything owned by the farm business of value, including obligations owed by others. Liabilities are monetary commitments to others at a certain point in time. The farm business' balance sheet, as reported by the farm operator, provides the basis for developing solvency measures used in this report. The 1988 FCRS provides information on outstanding debt by type of lender and also allows for distinction between length of original loans (app. fig. 2). Debt/asset and other solvency ratios are constructed from survey data to determine the relationship between claims on the farm business and total assets used in production. Solvency indicators reflect the risk of the farm operator's financial structure or equity of the farm business. Specifically, we measure the debt/asset ratio as total operator debt reported outstanding as of January 1, 1989, divided by the operator's estimate of the current market value of all owned assets of the farm business.

Income and Solvency Classifications

Information drawn from the farm's income and balance sheet statements provides the basis for classifying the farm business and, by extension, farm households into one of four financial performance categories for each of the three net income measures.

Financial statements were constructed for each farm unit. A farm's relative financial condition is based on its combined income and solvency status. The farm is argued to have a relatively strong liquidity or earnings position if its estimated net income measure is positive and a stable solvency position if its estimated indebtedness is no more than 40 percent of the reported value of all assets, expressed as a debt/asset ratio of 0.40 or less.

The combined income/solvency categories provide a perspective on the proportion of farm businesses that faces financial difficulties from the viewpoint of annual earnings and solvency (app. fig. 3). Interpretation of the financial situation faced by farm businesses in each financial health category is as follows:

Favorable. Farms and ranches in a favorable financial position have a positive income and a debt/asset ratio less than 0.40. These profitable, low-leverage operations are able to retain earnings, putting them in a position to take advantage of investment and expansion opportunities.

Marginal income. These businesses have negative incomes and a debt/asset ratio of 0.40 or less. These farms generally face an earnings problem. Any financial difficulties are more likely related to current business decisions and results (crop mix, weather, program participation, prices paid and received, output levels, farm size, and efficiency) rather than to the financial riskiness of past decisions. Current earnings deficiencies can be overcome with increased borrowing or sales of assets, both of which convert equity to cash. The resulting additional debt service burden or decreased equity base could accelerate cash-flow problems and increase financial risk. In some situations, earnings generated by the farm operator's household may be used to supplement farm business deficiencies.

Marginal solvency. These businesses have positive incomes and a debt/asset ratio above 0.40. Farms in this category generate positive returns, despite higher debt service requirements. While not experiencing earnings difficulties at the present time, these farms are susceptible to economic changes that may erode incomes and prevent them from meeting future cash commitments. At current asset values, equity on these farms may be insufficient to serve as security for additional borrowing to meet shortrun cash needs.

Appendix figure 2
Farm operator balance sheet

Assets

Current business:

- Cash and checking accounts
- Notes/accounts receivable
- Marketable bonds
- Hedging account equity
- Savings and time certificates
- Livestock held for sale
- Crops held for sale and feed
- Value in growing crops
- Farm supplies
- Prepaid expenses
- Other current assets

Intermediate business:

- Machinery and equipment
- Breeding livestock
- Securities not marketable
- Movable farm structures
- Other intermediate assets

Long-term (fixed) business:

- Farm real estate
- Permanent buildings and improvements
- Other fixed assets

Liabilities

Current business:

Liabilities with an original term of less than 1 year owed to:

- Production credit associations
- Farmers Home Administration
- Commercial banks
- Federal land banks
- Merchants, dealers, and co-ops
- Life insurance companies
- Other individuals
- Commodity Credit Corporation (storage and drying loans)
- Any other lenders

Intermediate business:

Liabilities with an original term of 1-10 years owed to:

- Production credit associations
- Farmers Home Administration
- Commercial banks
- Federal land banks
- Merchants, dealers, and co-ops
- Life insurance companies
- Other individuals
- Commodity Credit Corporation (storage and drying loans)
- Any other lenders

Long-term (fixed) business:

Liabilities with an original term of more than 10 years owed to:

- Production credit associations
- Farmers Home Administration
- Commercial banks
- Federal land banks
- Merchants, dealers, and co-ops
- Life insurance companies
- Other individuals
- Commodity Credit Corporation (storage and drying loans)
- Any other lenders

Joint distribution of farms by income and solvency position

Income measure	Debt/asset ratio	
	0.0 - 0.40	Above 0.40
Net farm income (NFI)	Positive	Income
Net cash farm income (NCFI)	<i>Favorable</i>	<i>Marginal solvency</i>
Net cash income from all sources (NCIFAS)		
Net farm income (NFI)	Negative	Income
Net cash farm income (NCFI)	<i>Marginal Income</i>	<i>Vulnerable</i>
Net cash income from all sources (NCIFAS)		

Vulnerable. These businesses have negative income and debt/asset ratios above 0.40. These farms are highly leveraged and demonstrate income deficiencies that diminish the viability of their business operations. They do not generate sufficient income either to meet current expenses or to reduce existing indebtedness. The highly leveraged positions of these farms may have resulted from disproportionate reductions in asset values relative to the amount of outstanding liabilities, increased indebtedness to fund past expansion or cash-operating shortfalls, or a combination of these factors. Regardless of the evolution of financial circumstances leading to their current highly leveraged position, these farmers may be forced to rely on debt restructuring/forgiveness to continue operating. But even then, cash earnings may not fully service all debt obligations.

Farms that are in a favorable position by one income measure will not necessarily be in a favorable position by another income measure. For example, a farm may have a good short-term cash position (positive net cash income) as a result of selling

inventories and consuming the farm's capital stock. Yet, a farm may have a poor short-term cash position as a result of holding inventory for sale at a later date. Thus, considering both short-term cash and longer term profit measures is necessary to obtain a comprehensive understanding of financial performance. Moreover, some measures may understate the financial difficulties of highly leveraged operations to the extent that debt repayment is excluded. Placing a farm or ranch in a favorable financial position by one income measure relative to another will depend on the importance of farm earnings in total family income and on the magnitude of nonmonetary adjustments to income.

Financial Ratio Analysis

Ratio analyses, by expressing relationships between the income and balance sheet statements in percentage terms, provide a relative basis for monitoring and comparing the financial strength of farm businesses or farm operators. A limiting constraint for successful use of ratio analysis has been

the lack of well-established standards for comparison and what constitutes acceptable deviation from these norms. However, since ratios conveniently summarize information contained in financial statements, they are used by farmers, lenders, and others with an interest in agricultural financial management. Financial ratios used in this report are described in appendix figure 4.

Debt service coverage ratios and debt servicing ratios indicate a farm's ability to generate sufficient cash to meet financial commitments without disrupting business operations. The ratio of farm business debt service coverage is defined as net cash farm income plus interest payments, divided by debt service costs (interest expense plus principal repayment). The ratio is also calculated in the same manner and considers income from all sources. These ratios indicate the farm's ability to service debt out of annual cash income. The debt service ratio is defined as annual principal plus interest payments, divided by gross cash farm income. This ratio indicates the share of a farm's or ranch's gross income needed to service debt. Low values indicate a greater ability to meet debt commitments.

The debt/asset and leverage ratios are used to measure solvency. The debt/asset ratio is defined as total liabilities divided by total assets. The leverage ratio is defined as farm business liabilities divided by farm business net worth. These ratios indicate the risk associated with the operation's financial structure. Associated with debt is an obligation to pay principal and interest. In addition, high levels of debt relative to owner equity may mean that additional credit is either hard to obtain or is only available at relatively high interest rates. While debt increases a farm's financial risk, if debt service commitments are met by earnings, then benefits may accrue to owners using the debt.

Two measures of returns (rate of return on assets and rate of return on equity) and a profit margin ratio are used to assess profitability of the farm business. These ratios show earnings in relation to

the asset or equity base that is used in production, allowing profitability to be compared across types and sizes of farm operations.

Rate of return on equity equals net farm income minus estimated charges for operator labor and management, divided by net worth. This ratio indicates the relationship between net profits and equity of the farm business. A negative return on equity is a relative measure of financial stress. The absolute size of the ratio roughly measures the rate at which a farm business is adding to or consuming from its own capital stock. Rate of return on assets is defined as net farm income plus interest expenses minus estimated charges for operator labor and management, divided by total assets. This ratio reveals the returns received by the farm operator for both debt and equity capital invested. The profit margin ratio is calculated as net farm income divided by production value and indicates the farm operator's ability to control the level of farm business costs relative to the volume of revenues generated.

Several ratios are calculated to measure a farm's financial efficiency. These include the gross ratio, the ratio of interest expense to gross cash income, the asset turnover ratio, and the debt burden ratio. The gross ratio equals cash operating expenses divided by gross cash income of the farm business. This ratio measures the extent to which the cash income generated by the business is absorbed by the annual costs of production. The lower the ratio is, the more effective the farm operation is in generating returns. Interest expenses divided by gross cash farm income shows the proportion of cash income used for interest payments. This ratio reflects the burden of debt on a farm operator's cash-flow. The asset turnover ratio, which is calculated as the farm production value divided by total farm assets, measures the income generated per dollar of assets used in production. The debt burden ratio is calculated by dividing net cash farm income by total debt outstanding. This ratio indicates the burden placed on net income to retire outstanding debt.

Appendix figure 4
Definition of financial ratios

Ratio	Computation method	Significance
Solvency ratios:		
Leverage	$\frac{\text{Farm business liabilities}}{\text{Farm business net worth}}$	Measures the relative proportion of funds invested by creditors and owners
Debt/asset	$\frac{\text{Farm business liabilities}}{\text{Farm business assets}}$	Indicates the degree of security for the lender and the relative use of the owner's capital
Coverage ratios:		
Times interest earned	$\frac{\text{NFI before interest and taxes}}{\text{Interest payments}}$	Measures the farm business' ability to service debt out of net income
Debt service coverage	$\frac{\text{NCFI} + \text{interest payments}}{\text{Interest} + \text{principal payments}}$	Measures the farm business' ability to repay both interest and principal
Debt servicing	$\frac{\text{Interest} + \text{principal}}{\text{Gross cash farm income}}$	Measures the share of the farm business' gross income needed to service debt

Continued--

Appendix figure 4
Definition of financial ratios--Continued

Ratio	Computation method	Significance
Efficiency ratios:		
Asset turnover	$\frac{\text{Value of farm production}}{\text{Total farm assets}}$	Measures the gross farm income generated per dollar of farm business assets
Debt burden	$\frac{\text{NCFI}}{\text{Total liabilities}}$	Measures the burden placed on net cash farm income to retire outstanding debt
Gross	$\frac{\text{Cash operating expenses}}{\text{Gross cash farm income}}$	Measures the proportion of gross cash farm income absorbed by cash operating expenses
Interest to gross cash income	$\frac{\text{Interest}}{\text{Gross cash farm income}}$	Measures the share of gross cash farm income committed to interest payments
Profitability ratios:		
Return on assets	$\frac{\text{Returns to debt and equity capital}}{\text{Total farm business assets}}$	Measures how efficiently the farm business uses its assets
Return on equity	$\frac{\text{Returns to equity capital}}{\text{Farm business net worth in the farm business}}$	Measures the returns to equity capital employed
Profit margin	$\frac{\text{NFI}}{\text{Value of farm production}}$	Measures profits earned per dollar of the value of farm production

Appendix II--Farm Numbers and Extension of Financial Performance Measures To Include All USDA Farm Numbers

Farm Numbers

The 1988 FCRS gives an expanded number of 1.77 million farms, compared with 1.68 million for 1987 (app. table 1). A farm is defined as any place that sold or normally would have sold \$1,000 or more of agricultural products. Since 1987, the survey's definition of a farm has been identical to the definition used by USDA in determining the official number of farms and land in farms. The official USDA number of farms was estimated to be 2.2 million on June 1, 1988. Based on questions that establish whether a farm might have sold \$1,000 in farm commodities (as opposed to actual sales), 239,000 farms were added to the FCRS farm count in 1988 (app. table 2).

In order to determine whether farms with less than \$1,000 in sales have potential future sales of this magnitude, respondents were asked to list all crop acreage and numbers and species of livestock. These were valued, and farms that had a total value exceeding \$1,000 qualified as farms (also denoted as point farms). As a result of these procedures, the FCRS estimate of farm numbers more closely approximates the official USDA estimate. For example, the 1986 FCRS accounted for 70 percent of the 2.25 million official USDA estimate of farms, while the 1988 FCRS represented 81 percent of the official number of farms.

Most of the FCRS undercount of farm numbers has traditionally been for the small economic classes, particularly for farms that had less than \$10,000 in gross sales. For example, the official USDA farm numbers indicated that 1.12 million farms had sales over \$10,000, while the FCRS indicated 965,700 farms (87 percent of the USDA total). The FCRS expanded estimate of farms with less than \$10,000 in gross sales was 277,000 less than the official USDA estimate. In contrast, the FCRS estimate represented just over 100 percent of the official number of farms with sales over \$100,000. The FCRS compared favorably with the 1987 Census of Agriculture farm number estimates, producing an estimate of farms equal to 99.6 percent of the census number with sales over \$100,000 and 88.9 percent of the number with sales over \$10,000.

The FCRS results on farm numbers showed about 92,000 more farms on January 1, 1988, than on January 1, 1987. This increase was primarily due to changes in area-frame samples initiated in several States for the 1988 FCRS. Comparable sampling frames were used for the FCRS and other NASS (USDA's National Agricultural Statistics Service) surveys in 31 States during the 1988 survey, up from 14 States in 1987 and 7 States in 1986. The change in farm numbers differed across sales classes, with farm numbers increasing in both the larger and smaller classes. The increase in the number of larger farms came from an increase in sales volume, particularly for livestock farms, while the increase in the number of smaller operations, particularly those with sales less than \$5,000, showed the influence of the procedural changes.

To determine statistically significant differences between farm numbers in 1987 and 1988, a t-test was conducted across sales classes (app. table 3). Using the two-tailed, 5-percent confidence cutoff of 1.96, the only significant changes in farm numbers were for farms with sales of \$500,000 or more and the estimate for all farms. If comparable procedures had been used, significant changes would have been unlikely, given that the largest increases occurred for the smallest economic classes, those most affected by procedural changes. This formal test of statistical significance agrees with the more casual observation of absolute changes in farm numbers.

Extension of Financial Performance Measures To Include USDA Farm Number Series

Given that the FCRS accounted for 81 percent of total farm numbers as officially estimated by USDA, a question arises about the number of farms that may be encountering financial problems if the FCRS financial performance indications are extended to the official farm number series. The process used to calculate the number of farms in a favorable, marginal, or vulnerable position for the official farm number series was based on the ratio of USDA farms to FCRS farms by economic class. This ratio, indicating the amount of undercount by farm size, was then used to develop an adjusted expansion factor for each farm, depending on its economic class.

Farms were then reclassified into financial performance categories using the adjusted expansion factors. The data indicated that approximately 112,600 farms were classified as vulnerable, based on their combined net farm earnings and debt/asset ratio

position at the beginning of 1989, as opposed to 101,000 at the beginning of 1988 and 204,000 at the beginning of 1987. The FCRS indicated that about 94,000 farms were in vulnerable position, using the same criteria. In 1987, the FCRS indicated that about 82,000 farms were in a vulnerable position.

Thus, a direct result of incorporating the farm screening procedure used by USDA into the FCRS is a tighter relationship between the estimated number of farms in a difficult financial position as indicated by the FCRS and an extension of these results to the estimate of the official number of farms.

Appendix table 1--Estimated number of farms by economic class ^{1/}

Economic class	1987						1988	
	FCRS ^{2/}		USDA ^{3/}		Census ^{4/}		FCRS ^{2/}	USDA ^{3/}
	Number	Percent	Number	Percent	Number	Percent	----- Number -----	
\$500,000 or more	28,588	1.7	5/	5/	na	na	34,831	5/
\$250,000-\$499,999	66,938	4.0	88,518	4.0	na	na	70,449	92,280
\$100,000-\$249,999	199,123	11.9	212,444	9.6	na	na	207,786	217,517
\$40,000-\$99,999	255,456	15.2	316,453	14.3	na	na	248,665	311,994
\$20,000-\$39,999	197,091	11.7	234,574	10.6	na	na	194,099	248,277
\$10,000-\$19,999	194,449	11.6	241,213	10.9	na	na	209,844	246,080
\$100,000 or more	294,649	17.6	300,963	13.6	295,721	14.2	313,066	309,797
\$10,000-99,999	646,999	38.6	792,240	35.8	763,852	36.6	652,608	806,350
Less than \$10,000	735,491	43.4	1,119,758	50.6	1,028,186	49.2	803,780	1,080,993
All farms	1,677,136	100.0	2,212,960	100.0	2,087,759	100.00	1,769,454	2,197,140

na = Not available.

^{1/} Numbers may not add due to rounding. ^{2/} Farm Costs and Returns Survey, USDA. ^{3/} USDA, National Agricultural Statistics Service. ^{4/} 1987 Census of Agriculture, U.S. Department of Commerce.

^{5/} The values for the two largest economic classes are combined and reported in the \$250,000-\$499,999 category.

Appendix table 2--Distribution of FCRS farm operations by farm qualification status

Economic class	1988			1987		
	Qualified by sales	Qualified by points	Total	Qualified by sales	Qualified by points	Total
	<u>Number</u>					
\$250,000 or more	105,280	0	105,280	95,526	0	95,526
\$100,000-\$249,999	207,213	574	207,787	198,713	410	199,123
\$40,000-\$99,999	247,064	1,601	248,665	253,964	1,492	255,456
\$20,000-\$39,999	191,024	3,076	194,100	194,797	2,294	197,091
\$10,000-\$19,999	201,491	8,353	209,844	187,812	6,637	194,449
\$5,000-\$9,999	202,818	30,297	233,115	193,904	22,167	216,071
\$1,000-4,999	375,343	195,322	570,665	357,494	161,926	519,420
All farms	1,530,233	239,221	1,769,454	1,482,210	194,926	1,677,136

Appendix table 3--Distribution of expanded number of farms by economic class

Economic class	Expanded number of farms		C.V. ^{1/}		Change, 1987-88		Estimated t-statistic
	1987	1988	1986	1987	Number	Percent	
	-----	Number	-----	Percent	Number	Percent	Number
\$500,000 or more	28,588	34,830	6	5	6,243	22	2.72
\$250,000-\$499,999	66,938	70,449	5	4	3,511	5	.85
\$100,000-\$249,999	199,123	207,786	3	3	8,664	4	1.08
\$40,000-\$99,999	255,456	248,665	3	3	-6,791	-3	-.62
\$20,000-\$39,999	197,091	194,100	4	5	-2,991	-2	-.24
\$10,000-\$19,999	194,449	209,844	5	5	15,396	8	1.05
\$5,000-\$9,999	206,688	215,965	5	5	9,277	5	.59
Less than \$5,000	528,803	587,814	4	4	59,011	11	1.91
All farms	1,677,136	1,769,454	2	2	92,319	6	1.96

^{1/} The coefficient of variation (C.V.) provides an indication for the reliability of the estimate. The smaller the C.V., the greater the reliability of the estimate.
Source: Farm Costs and Returns Surveys, USDA.

Appendix table 4--Estimated distribution of 1988 USDA farm numbers by net farm income and solvency position

Item	Income/solvency position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
		Percent		
All farms	67.39	19.61	7.78	5.22
Economic class:				
\$250,000 or more	59.48	15.90	16.73	7.89
\$100,000-\$249,999	60.78	15.55	16.50	7.17
\$40,000-\$99,999	63.40	16.90	12.17	7.53
\$20,000-\$39,999	61.29	24.82	7.87	6.03
\$10,000-\$19,999	69.33	21.70	5.80	3.16
\$5,000-\$9,999	71.26	21.17	3.97	3.59
Less than \$5,000	71.26	19.58	4.71	4.46
Production specialty:				
Cash grains	61.97	19.15	12.00	6.88
Tobacco	77.55	11.27	6.08	5.10
Cotton	70.26	14.30	9.88	5.56
Other field crops	72.59	11.00	9.71	6.70
Vegetables, fruit, nuts	70.77	17.11	6.69	5.44
Nursery, greenhouse	66.89	19.72	5.34	8.05
Beef, hogs, sheep	68.93	22.12	4.93	4.03
Poultry	59.99	8.74	21.65	9.62
Dairy	64.03	15.26	14.74	5.98
Other livestock	53.80	34.32	6.67	5.20
Region:				
Northeast	70.97	19.27	6.11	3.65
Lake States	58.50	21.75	12.75	7.00
Corn Belt	64.95	20.63	7.86	6.56
Northern Plains	63.26	16.88	13.18	6.68
Appalachian	75.58	16.59	5.24	2.60
Southeast	72.81	18.82	5.02	3.35
Delta	76.95	13.74	5.57	3.74
Southern Plains	60.28	27.84	6.46	5.42
Mountain	69.40	15.67	9.01	5.91
Pacific	64.75	18.91	8.60	7.74

Appendix table 5—Estimated distribution of 1988 USDA farm numbers by net cash farm income and solvency position

Item	Income/solvency position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
All farms	43.72	43.28	6.03	6.97
Economic class:				
\$250,000 or more	63.81	11.57	18.09	6.53
\$100,000-\$249,999	63.74	12.58	18.27	5.40
\$40,000-\$99,999	63.06	17.24	13.27	6.43
\$20,000-\$39,999	56.65	29.45	6.79	7.11
\$10,000-\$19,999	50.11	40.92	3.94	5.03
\$5,000-\$9,999	46.49	45.94	1.35	6.21
Less than \$5,000	23.74	67.10	.85	8.31
Production specialty:				
Cash grains	53.47	27.65	11.37	7.51
Tobacco	53.15	35.67	3.25	7.93
Cotton	65.35	19.21	10.10	5.34
Other field crops	41.94	41.65	5.37	11.03
Vegetables, fruit, nuts	46.31	41.56	3.31	8.82
Nursery, greenhouse	44.14	42.47	3.28	10.12
Beef, hogs, sheep	37.24	53.80	3.05	5.90
Poultry	48.44	20.29	17.99	13.28
Dairy	64.18	15.10	16.97	3.75
Other livestock	23.23	64.90	2.17	9.70
Region:				
Northeast	39.92	50.32	4.54	5.22
Lake States	48.05	32.20	10.36	9.39
Corn Belt	51.39	34.19	7.17	7.25
Northern Plains	58.13	22.01	13.26	6.60
Appalachian	43.82	48.34	3.07	4.76
Southeast	37.14	54.48	3.15	5.22
Delta	41.79	48.90	4.56	4.75
Southern Plains	35.21	52.91	5.46	6.42
Mountain	43.50	41.58	5.90	9.02
Pacific	30.90	52.76	3.15	13.18

Appendix table 6--Estimated distribution of 1988 USDA farm numbers by net cash income from all sources and solvency position

Item	Income/solvency position			
	Favorable	Marginal income	Marginal solvency	Vulnerable
	<u>Percent</u>			
All farms	48.39	38.61	6.41	6.58
Economic class:				
\$250,000 or more	61.13	14.25	14.35	10.27
\$100,000-\$249,999	58.07	18.25	11.94	11.73
\$40,000-\$99,999	52.25	28.05	7.57	12.13
\$20,000-\$39,999	51.05	35.06	4.38	9.51
\$10,000-\$19,999	46.38	44.65	4.81	4.16
\$5,000-\$9,999	47.40	45.04	3.19	4.37
Less than \$5,000	43.30	47.53	5.68	3.48
Production specialty:				
Cash grains	52.88	28.24	9.41	9.47
Tobacco	38.36	50.46	4.24	6.94
Cotton	58.27	26.30	7.88	7.56
Other field crops	47.70	35.90	7.48	8.93
Vegetables, fruit, nuts	52.18	35.69	7.55	4.57
Nursery, greenhouse	60.69	25.92	6.92	6.47
Beef, hogs, sheep	46.64	44.40	4.52	4.44
Poultry	48.88	19.85	17.56	13.71
Dairy	49.50	29.79	8.79	11.92
Other livestock	47.51	40.62	6.73	5.15
Region:				
Northeast	52.61	37.63	4.68	5.08
Lake States	47.92	32.33	10.34	9.41
Corn Belt	48.92	36.66	6.36	8.06
Northern Plains	50.29	29.85	8.79	11.07
Appalachian	42.21	49.95	4.14	3.69
Southeast	46.48	45.15	4.70	3.68
Delta	44.39	46.30	5.03	4.28
Southern Plains	52.71	35.41	4.33	7.54
Mountain	51.08	34.00	7.35	7.57
Pacific	51.46	32.20	11.31	5.03

Appendix III--Survey Design and Respondent Characteristics

Survey Design

Data for this report were obtained from the 1988 FCRS conducted in February and March 1989 by NASS. The FCRS is an integrated survey that combines multiple versions of a questionnaire to simultaneously obtain data for cash receipts and other farm revenues, production expenses, capital purchases, farm asset and inventory values, liabilities owed to various lenders, and other financial data; specific production practices in sufficient detail to develop enterprise budgets for cost of production analysis; and type of operation and operating characteristics.

The FCRS is a complex multiframe probability-based survey. Since the FCRS is a probability sample, each respondent represents a number of other farms of a similar size and type. Estimates based on a sample differ from data that would have been obtained if a complete enumeration had been taken. These differences result from sampling variability.

Sampling variation that occurs by chance can be measured to provide a perspective on data reliability. Survey estimates are also subject to a variety of potential nonsampling errors. Steps were taken to minimize nonsampling errors by pretesting survey forms; training survey statisticians and enumerators on survey design, content, and use; and undertaking a comprehensive data edit and analysis effort at both State and national levels. Both computerized and hands-on review efforts were used to ensure completeness and logical consistency of questionnaires. Respondents and enumerators were contacted to verify data as a last resort.

The sample consists of two frames: a list frame of operators stratified by economic size and other attributes and an area frame consisting of all land segments in a State stratified by land use type. The area frame contains all U.S. land units, and a probability sample from it would provide unbiased estimates. However, a relatively small proportion of farm or ranch operators account for the majority of expenses, receipts, and other economic items. Thus, sampling these large agricultural producers with a list frame is more efficient. The area frame accounts for incompleteness in a list frame. The multiple-frame approach to sampling uses desirable attributes of both frames.

The FCRS used 12 questionnaire versions for 1988 to obtain detailed whole-farm data for all survey respondents plus enterprise-specific data for flax, oat, sugar beet, sugarcane, rice, and swine production. Two questionnaire versions were devoted entirely to detailed revenue, expenditure, and financial data. The enterprise-specific questionnaire versions contained aggregate expense and financial data in addition to detailed enterprise production questions for the six types of operations.

One version of the questionnaire collected only aggregate expense and financial data, while another version collected aggregate farm data plus additional information related to the characteristics of the farm operator, the spouse, and the farm household. There were 26,000 combined list- and area-frame survey contacts expected for the 1988 FCRS. Contacts among the survey versions were as follows: aggregate, 2,001 farms; expenditures, 11,972 farms; operator resources, 6,000 farms; flax, 399 farms; oats, 1,200 farms; sugar beets, 1,257 farms; sugarcane, 171 farms; rice, 1,098 farms; and hogs, 1,902 farms. A farm was defined as an establishment that either sold or normally would have sold at least \$1,000 worth of agricultural products during the previous year.

Two national survey statisticians (persons responsible for monitoring survey activities at the State level) training schools were held from January 10-13 and January 24-27, 1989, followed by State-level enumerator training schools. Data enumeration began after the State training schools and lasted until March 31, 1988.

The completion rate was 73 percent for the survey as a whole, identical to the rate in 1988. The refusal rate was 19 percent, about the same as in previous surveys. The completion rate varied considerably by frame and questionnaire version. The area-frame completion rate was 78.8 percent, while the list frame had a 71-percent completion rate. The lower response rate for the list frame likely reflects its focus on larger enterprises. By version, the highest completion rates were for the detailed expenditure (84.4 percent) and farm operator resource area-frame sample (84 percent). The lowest response rate was for the hog version (63 percent).

About 31 percent of interviews took less than 1 hour to complete; 1.6 percent of interviews took 4 hours or longer. Questionnaires designed to obtain both whole-farm financial data as well as detailed enterprise data tended to take more time to complete than did other survey versions.

Appendix table 7--Completion rate and length of interview, 1988 FCRS

Survey version	Completion rate	Length of interview (hours)					Average time
		Under 1	1-2	2-3	3-4	Over 4	
		----- Percent -----					Minutes
Expenditure A ^{1/}	84.4	58.8	35.8	4.6	0.4	0.4	64
Expenditure B ^{2/}	70.1	31.0	51.3	14.4	2.5	.8	89
Flax COP ^{3/}	74.7	19.9	57.9	19.2	2.6	.4	98
Oat COP ^{3/}	72.9	22.6	57.3	17.3	2.1	.7	95
Sugarbeet COP ^{3/}	75.8	7.7	27.6	35.1	17.3	12.2	157
Sugarcane COP (LA) ^{3/}	79.5	6.7	44.9	37.1	7.9	3.4	128
Sugarcane COP (TX) ^{3/}	75.0	17.6	23.5	29.4	14.7	14.7	150
Rice COP ^{3/}	72.8	12.2	46.8	32.7	6.0	2.3	117
Hog COP ^{3/}	63.0	11.3	45.4	31.0	8.0	4.2	124
Farm operator A ^{1/}	84.0	48.2	45.4	5.6	.4	.4	70
Farm operator B ^{2/}	69.8	23.4	55.6	17.2	2.6	.8	95
Trial aggregate	74.4	32.8	51.6	13.3	1.5	.7	86
All versions	73.0	30.7	48.0	16.3	3.4	1.6	93

^{1/} Area frame based on Agricultural Economic Survey (AES) segments.

^{2/} Area frame based on June Enumerative Survey (JES) segments.

^{3/} Cost of production (COP) versions.

Operating Characteristics

The FCRS provides information on the financial characteristics, tenure, business organization, capital expenditures, production expenses, receipts, resource base, and production practices of farms and ranches. In addition to the data for farm businesses, some data are obtained for the farm operator and the farm household. These data include characteristics such as age, education, number of dependents, primary occupation, and nonfarm income. These data provide a more comprehensive picture of the distributional attributes of farm sector participants. This section presents selected economic characteristics of farm operations drawn from the 1988 FCRS and, where appropriate, compares them with other secondary sources.

Production Specialties Represented

Farmers were asked to classify their operation based on the percentage of the total gross sales provided by major commodity groups during 1988. All major types of farms were reported by respondents (app. fig. 5). Farms specializing in crop production accounted for 38.6 percent of farms, and livestock producers accounted for 61.4 percent (app. table 8). This represented a decline in the proportion of farms that identified themselves as crop operations. Since 1985, farms identifying themselves as primary crop operations have declined 9 percent. The proportion of farmers classifying their operations as beef, hog, or

sheep farms totaled 48.7 percent, a continuation of the increases shown in the past 3 years. The 1988 results reflect both the increased number of farms captured by the survey and the generally favorable earnings situation for livestock commodities in 1988. The proportion of farms classifying themselves as dairy operations decreased in 1988, perhaps reflecting effects of the dairy-herd buyout program and higher relative earnings for other commodities produced on farms with dairy enterprises. The proportion of farmers classifying their farms as cash grain operations fell to 19.3 percent from 21.7 percent in 1987. Since 1985, the proportion of farms identifying themselves as a cash grain farm has decreased by about 25 percent. Beef, hog, or sheep farms have increased by a similar amount, showing how changes in production practices or prices can alter how a farm may be classified. The most common types of farms continued to be beef, hog, or sheep and cash grain farms.

Appendix table 9 illustrates how the distribution of farms by production specialty may change when based on a current-sales definition. The most recent shift in farm types and the change between 1985 and 1988 were greatest for cash grain and livestock farms. Farm types characterized by a specialized and relatively fixed production technology, such as vegetable farms, nurseries, and poultry operations, have remained fairly stable as a percentage of total farm numbers.

Appendix figure 5
Definition of farm types for the 1988 FCRS

Production specialty:

Cash grains

Tobacco

Cotton

Other field crops

Vegetables, fruit, and nuts

Nursery and greenhouse products

Beef, hogs, or sheep

Poultry

Dairy

Other livestock

Commodities:

Corn, sorghum, small grains, flax, soybeans for beans, cowpeas for peas, and dry edible and seed beans, peas, and rice

Tobacco

Cotton

Peanuts, Irish potatoes, sunflowers, sweetpotatoes, sugarcane, broomcorn, popcorn, sugar beets, mint, hops, seed crops, hay, silage, and forage

All vegetable and melon crops, citrus and noncitrus tree fruit, other small fruit, berries, grapes, and nuts

Nursery and greenhouse products, and Christmas trees

Cattle, calves, hogs, sheep, goats, and wool and mohair (excluding dairy cattle)

Chickens, eggs, turkeys, ducks, and poultry products

Milk and cream plus sale of dairy cows, heifers, calves, and dairy bulls

Mules, horses, foals, and ponies; fur farms; bees and honey; fish; and other uncategorized products

Appendix table 8--Distribution of farms by production specialty, 1988

Production specialty	Share of farms
Cash grains	19.3
Tobacco	4.3
Cotton	1.2
Other field crops	7.2
Vegetables, fruit, nuts	4.7
Nursery, greenhouse	2.0
Beef, hogs, sheep	48.7
Poultry	1.5
Dairy	8.1
Other livestock	3.1
All crop	38.6
All livestock	61.4

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 9--Distribution of farms by type of farm ^{1/}

Farm type	1988 FCRS	1987 FCRS	1986 FCRS	1985 FCRS	1982 Census of Agriculture
			<u>Percent</u>		
Crop	38.6	40.9	40.1	42.3	46.1
Cash grains	19.3	21.7	23.4	25.7	25.7
Field crops ^{2/}	17.7	12.2	10.0	10.8	11.3
Vegetables, fruit, nuts	4.7	5.0	5.1	4.3	5.2
Nursery, greenhouse	2.0	2.0	1.6	1.5	1.6
Livestock	61.4	59.1	59.9	57.6	53.9
Beef, hogs, sheep	48.7	43.0	42.5	39.1	40.4
Dairy	8.1	9.2	11.7	11.3	7.3
Poultry	1.5	1.7	1.8	2.1	1.9
Other livestock	3.1	5.2	3.9	5.1	4.3

^{1/} Numbers may not add due to rounding.

^{2/} Includes tobacco, cotton, and other crop farms.

Distribution of Farms Among Production Regions

The most common farm types varied considerably among regions (app. table 10). Cash grain farms, while accounting for 19.3 percent of farms nationwide, constituted 43.1 percent of farms in the Northern Plains, 41.4 percent in the Corn Belt, and 24.9 percent in the Lake States. These three regions accounted for 73.4 percent of all cash grain operations, with the Corn Belt having 40.4 percent of this farm type. Dairy farms were concentrated in the Lake States (31.3 percent of farms) and Northeast (26.2 percent). Together, these two regions accounted for 65.5 percent of all dairy farms. Vegetable, fruit, and nut farms were located primarily in the Pacific, Northeast, and Southeast regions. The majority of tobacco farms (90 percent) were located in the Appalachian region, but represented only 24.7 percent of the region's total number of farms. Half of the farms in this region were beef, hog, or sheep operations. At least one in five farms in all regions was a beef, hog, or sheep operation. Concentrations of these farms also occurred in the Delta and Southern Plains.

While all farm types except tobacco and cotton may be found in every region, each had dominant farm types that reflect relatively stable production patterns. Thus, the same farm types tend to be prominent within a region's agriculture over time. In the Corn Belt and Northern Plains for example, cash grain and beef, hog, or sheep operations accounted for nearly 90 percent of farms in both 1988 and 1987. In both regions, there was more change between these farm types than among these and other types of farms present in the region. These changes may be characteristic of changes in prices received or unanticipated variations in production, such as those caused by drought, rather than planned changes in production practices.

Nationally, farms with sales less than \$10,000 accounted for 45.4 percent of all farms. These smaller farm operations were especially prominent as a percentage of all farms in the Appalachian (66 percent), Southeast (64.1 percent), and Delta (61.1 percent) regions. Appalachian, Southern Plains, and Corn Belt regions had the largest absolute number of farms with sales less than \$10,000, and together accounted for nearly half of all farms in this category. In comparison, these three regions had 46.9 percent of all farms. At the opposite extreme, the Pacific, Mountain, and Northern Plains had the largest share of farms with sales over \$500,000. The Pacific region

also had the largest absolute number of farms in this size group, followed by the Corn Belt. In all economic classes between \$20,000 and \$500,000, the Corn Belt had the largest absolute number of farms, while the Northern Plains had the highest percentage share. This was particularly evident for economic classes between \$40,000 and \$250,000, a farm size associated with cash grain production.

Distribution of Income and Expenses by Production Specialty

The distribution of crop cash receipts between crop and livestock farms showed very little change from 1987 results, with crop farms having 1 percent less in cash receipts from crop commodities. Livestock farms earned 55.4 percent of 1988 gross cash farm income, an increase of 5 percent in the share of gross income earned in 1987 (app. table 11). Livestock farms, which accounted for 61.4 percent of all farms in 1988, earned a less than proportionate share of gross earnings due to the relatively small economic size of a large percentage of livestock operations (particularly beef, hog, or sheep since they were 57 percent of farms with less than \$10,000 in gross sales). Livestock receipts were also slightly more concentrated on livestock farms in 1988, increasing from 92.3 percent in 1987 to 93.5 percent in 1988. Both cattle and hog receipts were slightly lower on crop farms.

The results for the 1988 distribution of cash receipts illustrate the relative specialization in production of some commodity groups. Less than 2 percent of nursery and greenhouse or vegetable, fruit, and nut receipts were generated by livestock farms. Conversely, less than 1 percent of dairy receipts was earned by crop farms. These distributions have held fairly consistent over time, reflecting the tendency for grain farms to have some livestock and for livestock farms to sell rather than feed all grain produced.

Crop farms received 69.4 percent of cash payments from commodity programs in 1988, and livestock farms received the remainder. Government payments were also much more important as a source of gross income to crop farms, accounting for more than 13 percent of gross cash income compared with 4.6 percent for livestock farms.

Just as crop farms accounted for a smaller share of farms in 1988, they accounted for a smaller percentage of farm operating expenses. Crop farms had a smaller share of all expense categories except hired labor and feed expenses than in 1987.

Appendix table 10--Distribution of farms by production specialty between regions, January 1, 1989

Region and unit	Cash grains	Tobacco	Cotton	Other field crops	Vegetables, fruit, nuts	Nursery, greenhouse	Beef, hogs, sheep	Poultry	Dairy	Other livestock	All farms
	<u>Percent</u>										
Northeast:											
Percent in region	3.1	d	d	18.1	12.9	22.4	3.6	8.1	23.3	12.1	7.2
Percent of type	8.4	d	d	18.2	8.5	6.2	24.6	1.8	26.2	5.3	100.0
Percent of all farms	.6	d	d	1.3	.6	.4	1.8	.1	1.9	.4	7.2
Lake States:											
Percent in region	13.5	d	d	12.3	8.7	11.8	5.5	d	40.5	7.8	10.4
Percent of type	24.9	d	d	8.5	3.9	2.2	25.8	d	31.3	2.3	100.0
Percent of all farms	2.6	d	d	.9	.4	.2	2.7	d	3.3	.2	10.4
Corn Belt:											
Percent in region	40.5	d	d	5.3	2.2	12.0	17.9	d	13.1	9.6	18.8
Percent of type	41.4	d	d	2.0	.6	1.3	46.3	d	5.6	1.6	100.0
Percent of all farms	7.8	d	d	.4	.1	.2	8.7	d	1.1	.3	18.8
Northern Plains:											
Percent in region	19.5	d	d	5.2	d	d	8.6	d	3.6	d	8.7
Percent of type	43.1	d	d	4.4	d	d	48.4	d	3.4	d	100.0
Percent of all farms	3.7	d	d	.4	d	d	4.2	d	.3	d	8.7
Appalachian:											
Percent in region	5.2	89.8	4.4	10.3	6.1	9.4	16.4	23.9	6.6	21.2	15.7
Percent of type	6.3	24.7	.3	4.7	1.8	1.2	50.9	2.4	3.4	4.2	100.0
Percent of all farms	1.0	3.9	.1	.7	.3	.2	8.0	.4	.5	.7	15.7
Southeast:											
Percent in region	2.3	4.5	9.8	11.4	11.8	16.1	10.2	28.5	1.0	12.4	8.3
Percent of type	5.4	2.3	1.4	9.9	6.7	3.8	59.6	5.3	1.0	4.7	100.0
Percent of all farms	.5	.2	.1	.8	.6	.3	5.0	.4	.1	.4	8.3
Delta:											
Percent in region	4.0	d	20.4	3.0	d	d	8.0	d	1.5	3.5	5.8
Percent of type	13.5	d	4.1	3.7	d	d	67.8	d	2.1	1.9	100.0
Percent of all farms	.8	d	.2	.2	d	d	3.9	d	.1	.1	5.8
Southern Plains:											
Percent in region	6.3	d	53.7	9.2	2.6	d	17.8	d	4.7	17.1	12.4
Percent of type	9.8	d	5.0	5.4	1.0	d	69.7	d	3.0	4.3	100.0
Percent of all farms	1.2	d	.6	.7	.1	d	8.7	d	.4	.5	12.4
Mountain:											
Percent in region	3.5	d	5.3	17.3	4.6	d	5.8	d	2.0	7.3	5.5
Percent of type	12.4	d	1.1	22.8	4.0	d	51.3	d	3.0	4.2	100.0
Percent of all farms	.7	d	.1	1.2	.2	d	2.8	d	.2	.2	5.5
Pacific:											
Percent in region	2.1	d	5.3	7.9	47.3	19.4	6.2	d	3.6	d	7.3
Percent of type	5.6	d	.8	7.8	30.3	5.2	41.4	d	4.0	d	100.0
Percent of all farms	.4	d	.1	.6	2.2	.4	3.0	d	.3	d	7.3
Total:											
Percent of all farms	19.3	4.3	1.2	7.2	4.7	2.0	48.7	1.5	8.1	3.1	100.0

d = Data insufficient for disclosure.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 11--Distribution of selected sources of income and expense items between crop and livestock farms 1/

Item	Farm type	
	Crop	Livestock
	Percent	
Gross cash farm income	44.6	55.4
Crop receipts	90.0	10.0
Grain, soybeans, rice 2/	84.5	15.5
Cotton	96.9	3.1
Vegetables	96.9	3.1
Fruit, nuts	98.7	1.3
Nursery, greenhouse	99.8	.2
All other crops 3/	89.4	10.6
Livestock receipts	6.5	93.5
Cattle, calves	8.5	91.5
Hogs	13.8	86.2
Dairy	.6	99.4
All other livestock 4/	3.6	96.4
Government payments	69.4	30.6
Custom work, machine-hire	61.8	38.2
All other farm-related	34.9	65.1
Cash farm operating expenses	41.9	58.1
Livestock purchased	8.3	91.7
Feed	6.2	93.8
Seed	72.2	27.8
Fertilizers, chemicals	70.3	29.7
Energy, petroleum	55.1	44.9
Hired labor	63.9	36.1
Custom work	66.5	33.5
Rent	71.6	28.4
Real estate interest	46.9	53.1
Nonreal estate interest	45.9	54.1
Property tax	45.1	54.9
All other farm-related	38.0	62.0

1/ Numbers may not add due to rounding.

2/ Includes peanuts, flax, and sunflowers.

3/ Includes crops under marketing contract.

4/ Includes all livestock contracted out.

Source: 1988 Farm Costs and Returns Survey, USDA.

Cash and share rent, general farm business-related, and fertilizer and chemical expenses were the largest categories of expenses for crop farms. Feed and purchased livestock were the largest components of total expenses on livestock farms. Interest expenses were a larger share of total cash expenses on crop farms (10.2 percent) than on livestock farms (8.4 percent). In both cases, interest as a share of total expenses dropped from its 1987 level.

Selected Structural Characteristics of Survey Population

Selected characteristics of farms and farm operators are provided in appendix tables 12-17 by economic class, production value, acreage operated, farm type, region, and tenure of the operator. Average farm size reported in 1988 (acreage operated) was 468 acres, excluding land rented on an animal-unit-per-month basis (AUM basis), compared with 448 acres

reported in 1987. Average acreage operated increased with farm size, regardless of whether size was measured by sales or production value. The largest farms in terms of acreage operated were cotton at 879 acres, cash grain at 613 acres, and beef, hog, and sheep at 553 acres. If AUM land rented for grazing were included, beef, hog, and sheep farms would be the second largest, at 743 acres. On average, livestock farms rented 190 acres of AUM land. The smallest farms in terms of acreage operated were nurseries and greenhouses, which averaged 60 acres per farm. In contrast to other farm types, nurseries and greenhouses owned almost all their acreage. The largest farms were located in the Mountain States, 1,462 acres (excluding AUM land) and 2,799 acres (including AUM land); Northern Plains, 1,101 acres (excluding AUM land); and Southern Plains, 757 acres (excluding AUM land). The smallest farms in terms of acreage were in the Northeast and Appalachian regions. When

classified by tenure, farm size varied much less than for any other measurement attribute, except for the full-owner-operated farm, which operates well below half the acreage of any other tenure group.

Total harvested cropland and the types of crops harvested varied considerably by farm size, operation type, and area of the country. For all farms, total harvested acreage per farm was 136 acres, compared with 140 acres in 1987. Harvested acreage increased across economic sales classes and ranged from a low of 14 acres on farms with less than \$10,000 in gross sales to 891 acres for farms with sales over \$500,000. Wheat, corn, and soybean production were relatively more important as a percentage of harvested acreage on farms with gross sales from \$100,000 to \$500,000. Measuring farm size by acreage operated indicates that wheat accounted for the largest share of acreage on the bigger farm operations. Cotton was a larger share of total acreage on farms with sales over \$500,000 than for smaller farms, particularly those with sales of \$40,000 or less. Farms with sales of less than \$10,000 harvested, on average, an acre or so of the major row crops like corn, wheat, or soybeans. These small farm operations also specialized in producing crops such as tobacco or fruit. Grains and soybeans were the predominant crops on cash grain and dairy farms. Cotton was grown almost exclusively on farms specializing in cotton production. Nursery and fruit, nuts, and vegetables were also grown almost entirely by specialized farm operations. The distribution of average harvested acreage of major crops by region tended to follow prior information about acreage harvested. Corn and soybeans were a large share of total harvested acreage in the Corn Belt and Lake States, while wheat and other grains in combination with corn and soybeans were a very large share of harvested acreage in the Northern Plains and Delta. Cotton was a large share in Southern Plains and Delta. Other crops, such as fruit, nuts, vegetables, nursery, and greenhouse products, were a large share in the Pacific and Northeast regions.

Gross income and expenses were positively related with farm size, regardless of measure. Average gross income ranged from a low of \$4,054 on farms of less than \$10,000 in gross sales to nearly \$1 million for farms in the largest economic class. Farms with sales of less than \$20,000, on average, reported cash operating expenses that exceeded income, indicating that a large portion of this group of farms would have negative net cash incomes. The average net cash income of farms with sales over \$500,000 exceeded \$213,000 per farm, down from \$284,000 in 1987. Farms with sales of less than \$20,000

accounted for 57 percent of all farms. This group of smaller farm operations had 5.9 percent of livestock sales and 3.4 percent of crop sales. These farms received 3.9 percent of Government payments. The relatively small share of crop sales and program payments earned by these smaller operations is consistent with their overall harvested acreage, especially their harvested acreage of program commodities, such as corn, wheat, and cotton.

Crop and livestock sales were concentrated on larger farm operations. The 2 percent of farms with sales over \$500,000 had 33 percent of livestock sales and 32 percent of crop sales. Farms with sales of \$100,000-\$249,999 had 27 percent of crop sales and 36 percent of Government payments.

Crop sales were most highly concentrated on cash grain and vegetable, fruit, and nut farms, together accounting for 57 percent of total crop sales. Nursery and greenhouse operations had another 14 percent of total crop sales. Beef, hog, or sheep and dairy operations had 89 percent of total livestock sales. Nearly 57 percent of Government payments were earned by the 19 percent of farms classified as grain farms. Livestock and dairy farms earned another 30 percent of program payments. The Corn Belt had both the largest share of livestock (19.7 percent) and crop sales (20.2 percent) and earned the largest share of payments (31.3 percent).

These earnings are consistent with the region's focus on grain and livestock production and the fact that the Corn Belt has the highest percentage of both grain and livestock farms of any region. The Pacific region had the second largest share of crop sales (18.2 percent) but earned only 3.8 percent of payments. This reflects this region's heavier focus on production of vegetables, fruit, and other nonprogram commodities. Livestock sales tended to be relatively concentrated on operations that were farmed either by full owners or farmers that owned at least half of the land operated. Crop sales were more concentrated on operations where the farmer owned either all of the land operated or less than 40 percent of the land operated. Government payments were slightly less concentrated in the full owner or full tenant class than were crop sales. Part owners tended to have a larger share of payments than crop sales, suggesting a higher rate of program participation by part owners than by full owners.

While farms in the lowest economic class reported, on average, low sales and high expenses, indicating negative net cash income, these farms had 50 percent

of off-farm income earned by farm operators. Other larger farms earned much smaller shares of off-farm income with, for example, the largest 2 percent of farms with sales over \$500,000 having 2 percent of off-farm income.

Over 67 percent of farms with sales less than \$10,000 did not consider farming their primary occupation. This result is consistent with the large proportion of off-farm income earned by these farmers. The percentage of operators who considered farming their primary occupation increased dramatically with farm size. More than 9 out of 10 operators of farms with sales over \$100,000 considered farming their primary occupation, with the highest percentage being on farms with sales of \$250,000-\$499,999. These farmers also reported working the most hours per week at their farm business of any size class.

Dairy and cotton farms had the highest proportions (92 and 78 percent) of operators who declared farming their primary occupation. Dairy farmers also reported working the most hours per week, followed by cotton producers. Altogether, dairy producers worked nearly 3,500 hours per year on their farm operations, a result consistent with prior years' reported levels. Other field crop, other livestock, and tobacco farmers reported working the fewest hours per week (23 and 24 hours, respectively). These farm types also had the largest percentage of farm operators reporting something other than farming

as their primary occupation. The Northern Plains reported the largest percentage of full-time farm operators (80 percent), while the Appalachian, Southeast, and Delta regions had the lowest percentages. The Appalachian, the Southeast, and the Delta regions also reported the fewest hours worked per week. In a somewhat analogous result, full owners had the lowest share (46 percent) of operators who declared farming their primary occupation, followed by farmers who owned 81-99 percent of acreage operated (65 percent). Full owners tended, on average, to be older, to work fewer hours on the farm, and to have earned nearly 67 percent of off-farm income. Part owners were more likely to declare farming their primary occupation. The 24 percent of operators who owned between 1 and 60 percent of their acreage had larger harvested acreage of crops and accounted for 41 percent of crop sales and 47 percent of Government payments. These producers averaged 37-44 hours per week working on their farms or ranches, a result consistent with earning 19 percent of off-farm income.

The average reported age of operators in 1988 was 53 years, the same as reported in 1987. The 1987 Census of Agriculture reported an average farm operator age of 52 years. As with prior surveys, farmers with sales over \$40,000 tended to be younger than average, while operators of smaller farms were older.

Appendix table 12--Characteristics of farm operators on January 1, 1989, by economic class

Item	Economic class							
	\$500,000 or over	\$250,000- \$499,999	\$100,000- \$249,999	\$40,000- \$99,999	\$20,000- \$39,999	\$10,000- \$19,999	\$9,999 or less	All farms
	<u>Number</u>							
Farms:								
Number	34,674	70,216	206,462	247,727	193,584	209,765	801,660	1,764,088
	<u>Percent</u>							
Share of all farms	1.97	3.98	11.70	14.04	10.97	11.89	45.44	100.00
Farms in economic class:								
Individual	48.38	65.09	83.92	91.29	90.81	95.56	97.10	91.64
Partnership	22.39	22.15	11.64	6.68	6.77	3.88	2.30	5.87
Family corporation	24.20	10.72	3.88	1.43	2.02	.36	.46	2.03
Nonfamily corporation	4.82	1.78	.56	.60	.40	.20	.08	.42
Cooperative	.20	.25	0	.01	.01	0	.06	.04
	<u>Acres</u>							
Acres operated per farm:								
Owned	2,160	847	534	381	258	158	77	274
Cash rented	1,520	612	329	205	97	59	9	143
Share rented	315	269	210	100	46	13	3	64
AUM rented	910	407	280	139	30	33	7	97
Total operated, less AUM	3,934	1,684	1,051	664	375	224	87	468
Acres harvested per farm:								
Corn	235	167	99	41	16	5	1	32
Wheat	147	123	84	42	19	4	1	26
Soybeans	173	133	83	37	16	5	1	27
Cotton	54	24	16	4	1	1	0	5
Other grains	76	55	35	16	7	3	1	11
Other crops	206	98	74	54	34	26	10	36
Total harvested	891	600	390	194	93	43	14	136
	<u>Dollars</u>							
Per farm:								
Assets	2,377,449	1,045,194	594,060	389,481	308,721	245,809	184,663	359,575
Debt	456,332	183,046	108,396	57,030	30,386	17,709	12,855	48,232
Cash operating expenses	785,896	227,366	107,227	50,204	25,843	14,926	6,731	51,766
Gross cash income	999,752	295,886	141,440	62,659	27,944	14,438	4,054	63,406
	<u>Percent</u>							
Percentage of all farm:								
Livestock sales	33.16	17.77	25.11	13.65	4.43	2.91	2.96	100.00
Crop sales	31.89	20.86	26.79	12.81	4.27	1.81	1.59	100.00
Government payments	13.63	20.61	36.49	19.33	6.08	2.48	1.38	100.00
Off-farm income	1.97	2.75	8.34	9.49	10.36	16.96	50.12	100.00
	<u>Number</u>							
Farm operator average:								
Age	49	49	48	50	53	55	55	53
Hours worked per week	59	59	55	49	35	28	17	32
	<u>Percent</u>							
Operators in economic class:								
Farming	91.56	94.34	93.24	86.15	63.80	48.60	31.59	55.70
Hired manager	6.33	2.64	.94	.84	.57	1.04	.82	1.02
Other	2.12	3.02	5.82	13.01	35.62	50.37	67.59	43.28

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 13--Characteristics of farm operators on January 1, 1989, by net value of production

Item	Net value of production					
	\$300,000 or more	\$225,000- \$299,999	\$150,000- \$224,999	\$75,000- \$149,999	Less than \$75,000	All farms
	<u>Number</u>					
Farms:						
Number	52,953	33,205	66,604	175,403	1,435,923	1,764,088
	<u>Percent</u>					
Share of all farms	3.00	1.88	3.78	9.94	81.40	100.00
Farms in value of production class:						
Individual	52.82	63.78	77.78	85.15	95.15	91.64
Partnership	24.48	21.67	15.19	10.67	3.80	5.87
Family corporation	19.10	10.63	5.73	3.65	.83	2.03
Nonfamily corporation	3.51	3.42	1.27	.52	.18	.42
Cooperative	.09	.50	.03	.01	.03	.04
	<u>Acres</u>					
Acreage operated per farm:						
Owned	1,810	781	654	512	159	274
Cash rented	1,253	669	384	285	62	143
Share rented	292	316	231	180	27	64
AUM rented	1,000	475	213	254	30	97
Total operated, less AUM	3,274	1,693	1,265	951	240	468
Acreage harvested per farm:						
Corn	207	143	121	86	12	32
Wheat	156	144	100	69	10	26
Soybeans	166	134	100	70	10	27
Cotton	59	26	27	8	1	5
Other grains	81	56	46	26	4	11
Other crops	190	83	79	74	22	36
Total harvested	858	584	471	333	59	136
	<u>Dollars</u>					
Per farm:						
Assets	1,957,606	869,837	899,046	533,005	242,636	359,575
Debt	369,351	177,006	125,571	99,238	23,594	48,232
Cash operating expenses	564,529	198,058	148,123	94,949	19,729	51,766
Gross cash income	758,506	268,659	198,857	121,500	19,647	63,406
	<u>Percent</u>					
Percentage of all farm:						
Livestock sales	32.30	6.69	10.64	20.80	29.58	100.00
Crop sales	42.32	9.20	13.44	17.06	17.98	100.00
Government payments	21.17	9.23	15.98	24.54	29.08	100.00
Off-farm income	3.19	1.31	3.06	6.84	85.60	100.00
	<u>Number</u>					
Farm operator average:						
Age	49	48	50	48	54	53
Hours worked per week	57	59	57	56	26	32
	<u>Percent</u>					
Operators in value of production class:						
Farming	91.93	94.52	95.11	92.68	47.12	55.70
Hired manager	4.87	3.62	1.04	.69	.85	1.02
Other	3.20	1.86	3.85	6.63	52.02	43.28

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 14--Characteristics of farm operators on January 1, 1989, by acreage operated

	<u>Acreage operated</u>						All farms
	100 or less	101-250	251-500	501-1,000	1,001-2,000	More than 2,000	
	<u>Number</u>						
Number of farms	768,207	408,069	261,358	173,848	91,645	60,962	1,764,088
	<u>Percent</u>						
Share of all farms	43.55	23.13	14.82	9.85	5.20	3.46	100.00
Farms in acreage class:							
Individual	96.28	92.53	91.21	85.43	79.66	64.67	91.64
Partnership	2.68	5.51	6.16	11.07	12.77	22.09	5.87
Family corporation	.71	1.50	2.26	3.29	6.83	10.39	2.03
Nonfamily corporation	.31	.34	.37	.19	.65	2.82	.42
Cooperative	.01	.12	.01	.02	.10	.04	.04
	<u>Acres</u>						
Acreege operated per farm:							
Owned	44	130	236	370	610	3,534	274
Cash rented	4	28	87	179	435	2,369	143
Share rented	1	13	49	167	365	501	64
AUM rented	21	26	15	72	199	1,785	97
Total operated, less AUM	39	164	362	702	1,379	6,325	468
Acreege harvested per farm:							
Corn	2	15	50	102	128	95	32
Wheat	1	4	15	50	154	293	26
Soybeans	1	10	37	84	138	81	27
Cotton	0	1	2	13	33	34	5
Other grains	0	4	9	26	60	95	11
Other crops	7	25	50	65	93	227	36
Total harvested	12	58	163	339	605	825	136
	<u>Dollars</u>						
Per farm:							
Assets	203,990	261,896	404,523	559,776	724,474	1,661,846	359,575
Debt	19,227	27,626	59,734	97,669	133,421	233,308	48,232
Cash operating expenses	17,024	31,660	64,096	104,394	151,567	271,173	51,766
Gross cash income	19,819	37,899	80,463	132,630	189,410	323,439	63,406
	<u>Percent</u>						
Percentage of all farm:							
Livestock sales	10.94	16.14	23.97	18.83	12.29	17.83	100.00
Crop sales	15.27	11.65	13.20	22.32	18.94	18.62	100.00
Government payments	1.76	8.14	18.08	28.98	23.44	19.59	100.00
Off-farm income	49.19	19.38	10.70	12.17	3.75	4.82	100.00
	<u>Number</u>						
Farm operator average:							
Age	53	54	53	51	49	52	53
Hours worked per week	19	33	44	49	51	53	32
	<u>Percent</u>						
Operators in acreage class:							
Farming	34.72	57.52	75.10	85.84	88.43	89.53	55.70
Hired manager	.84	1.24	.82	.74	1.78	2.21	1.02
Other	64.43	41.24	24.08	13.42	9.79	8.26	43.28

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 15--Characteristics of farm operators on January 1, 1989, by production specialty

Item	Production specialty										
	Cash grains	Tobacco	Cotton	Other field crops	Vegetables, fruit, nuts	Nursery, greenhouse	Beef, hogs, sheep	Poultry	Dairy	Other livestock	All farms
Number of farms	339,766	76,177	20,112	127,445	83,065	34,760	858,411	27,227	142,027	55,098	1,764,088
Share of all farms	19.26	4.32	1.14	7.22	4.71	1.97	48.66	1.54	8.05	3.12	100.00
Farms in production specialty:											
Individual	90.29	95.73	84.37	92.96	86.82	75.58	93.66	96.02	85.61	93.08	91.64
Partnership	7.10	3.51	11.49	5.55	7.28	11.43	4.58	2.31	11.31	2.39	5.87
Family corporation	2.32	.73	3.59	1.08	4.96	8.79	1.37	1.38	2.88	3.43	2.03
Nonfamily corporation	.26	.03	.55	.41	.90	3.98	.32	.29	.18	1.10	.42
Cooperative	.02	0	0	0	.04	.21	.06	0	.02	0	.04
Acreage operated per farm:											
Owned	283	98	347	225	100	55	346	82	219	69	274
Cash rented	143	36	235	84	37	8	190	21	119	34	143
Share rented	214	12	334	33	8	0	29	6	14	0	64
AUM rented	4	0	0	33	0	0	190	0	6	12	97
Total operated, less AUM	613	148	879	326	141	60	553	108	356	97	468
Acreage harvested per farm:											
Corn	89	8	16	10	4	0	16	7	65	1	32
Wheat	97	3	30	16	4	0	11	4	6	0	26
Soybeans	101	12	51	8	5	1	9	7	9	0	27
Cotton	3	1	331	1	1	0	0	0	0	0	5
Other grains	33	1	42	9	2	0	6	1	13	1	11
Other crops	20	18	25	58	42	2	36	18	81	7	36
Total harvested	342	43	494	102	57	3	77	37	174	9	136
Per farm:											
Assets	379,394	159,792	528,450	314,394	567,506	389,312	331,457	355,989	494,331	316,680	359,575
Debt	67,598	18,606	88,948	47,809	58,837	44,645	33,481	80,931	97,752	28,169	48,232
Cash operating expenses	56,940	20,534	143,495	32,459	76,720	113,371	38,736	64,694	115,579	29,847	51,766
Gross cash income	75,496	26,593	180,901	40,265	94,252	162,534	42,642	112,072	148,271	22,030	63,406
Percentage of all farm:											
Livestock sales	5.50	.23	.16	.51	.12	.01	53.35	2.40	36.00	1.71	100.00
Crop sales	39.69	4.36	5.48	9.55	17.21	13.75	7.88	.28	1.77	.03	100.00
Government payments	56.79	.83	6.57	4.04	1.13	.01	22.22	.26	8.04	.11	100.00
Off-farm income	15.32	3.52	.91	7.86	6.64	3.49	52.57	1.18	3.13	5.38	100.00
Farm operator average:											
Age	51	52	53	54	55	52	54	50	48	49	53
Hours worked per week	35	24	40	23	27	29	28	34	67	23	32
Operators in production specialty:											
Farming	68.95	49.36	77.80	45.75	54.34	51.08	47.49	66.45	91.62	32.67	55.70
Hired manager	1.12	.03	3.36	1.13	1.95	3.62	.78	0	.97	1.91	1.02
Other	29.93	50.61	18.85	53.11	43.70	45.30	51.73	33.55	7.41	65.42	43.28

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 16--Characteristics of farm operators on January 1, 1989, by region

Item	Region										All farms
	Northeast	Lake States	Corn Belt	Northern Plains	Appalachian	Southeast	Delta	Southern Plains	Mountain	Pacific	
	<u>Number</u>										
Number of farms	126,466	183,178	332,293	153,029	275,639	146,536	101,608	219,626	96,432	129,279	1,764,088
	<u>Percent</u>										
Share of all farms	7.17	10.38	18.84	8.67	15.63	8.31	5.76	12.45	5.47	7.33	100.00
Farms in region:											
Individual	88.89	90.98	92.24	92.64	94.37	91.59	92.74	92.80	86.82	87.51	91.64
Partnership	8.59	6.89	5.42	5.51	4.37	5.30	3.97	5.96	6.58	7.99	5.87
Family corporation	1.58	2.04	2.06	1.58	.81	1.67	3.10	1.20	5.46	3.98	2.03
Nonfamily corporation	.86	.09	.28	.24	.43	1.09	.19	.04	1.12	.53	.42
Cooperative	.09	0	0	.03	.01	.36	0	0	.03	0	.04
	<u>Acres</u>										
Acreage operated per farm:											
Owned	118	199	164	569	111	173	141	376	1,016	309	274
Cash rented	48	87	64	348	33	42	74	326	456	136	143
Share rented	5	17	90	224	14	4	66	72	93	65	64
AUM rented	0	0	0	1	0	0	0	3	1,337	314	97
Total operated, less AUM	176	294	306	1,101	163	228	283	757	1,462	504	468
Acreage harvested per farm:											
Corn	25	57	79	59	11	6	3	6	9	2	32
Wheat	4	17	12	126	5	6	14	30	60	29	26
Soybeans	6	28	72	37	14	13	52	2	0	0	27
Cotton	0	0	0	0	1	5	18	20	4	3	5
Other grains	5	12	4	44	1	1	22	12	26	10	11
Other crops	43	46	26	83	21	22	21	23	76	29	36
Total harvested	82	159	192	350	54	53	130	93	176	74	136
	<u>Dollars</u>										
Per farm:											
Assets	540,014	319,868	309,661	356,754	212,127	317,623	241,281	383,406	649,430	569,174	359,575
Debt	43,507	64,203	53,591	69,516	22,830	29,843	28,908	38,370	80,608	74,049	48,232
Cash operating expenses	50,494	58,880	54,350	74,586	23,191	41,170	34,676	47,858	75,532	84,553	51,766
Gross cash income	62,164	74,693	66,103	96,419	29,054	48,536	45,238	54,442	94,337	99,153	63,406
	<u>Percent</u>										
Percentage of all farm:											
Livestock sales	8.94	15.74	19.69	15.15	5.48	4.10	2.06	12.07	8.87	7.90	100.00
Crop sales	5.75	9.20	20.24	10.29	8.32	9.51	5.06	7.18	6.29	18.16	100.00
Government payments	1.85	15.05	31.27	21.06	3.39	2.30	5.46	9.40	6.39	3.83	100.00
Off-farm income	7.54	7.46	15.83	5.22	14.22	9.30	5.17	18.60	5.27	11.37	100.00
	<u>Number</u>										
Farm operator average:											
Age	51	52	52	52	54	55	54	54	53	53	53
Hours worked per week	38	43	35	43	24	22	24	29	33	28	32
	<u>Percent</u>										
Operators in region:											
Farming	49.85	67.51	61.20	80.18	47.21	45.02	45.43	48.44	57.94	50.49	55.70
Hired manager	1.72	.33	.97	.65	.97	.89	1.17	.49	1.63	2.40	1.02
Other	48.43	32.15	37.83	19.16	51.82	54.08	53.40	51.07	40.43	47.11	43.28

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 17--Characteristics of farm operators on January 1, 1989, by tenure

Item	Tenure							Full owner	All farms
	Full tenant	1-20 percent	21-40 percent	41-60 percent	61-80 percent	81-99 percent			
<u>Number</u>									
Farms:									
Number	151,922	133,472	144,901	145,620	141,037	116,580	930,557	1,764,088	
<u>Percent</u>									
Share of all farms	8.61	7.57	8.21	8.25	7.99	6.61	52.75	100.00	
Farms in tenure class:									
Individual	86.40	91.55	91.50	89.80	88.46	87.77	93.78	91.64	
Partnership	9.35	5.70	7.13	7.27	8.43	8.30	4.22	5.87	
Family corporation	3.57	2.56	1.26	2.63	3.09	3.25	1.42	2.03	
Nonfamily corporation	.67	.19	.05	.30	.01	.66	.52	.42	
Cooperative	.01	0	.05	0	.02	.02	.06	.04	
<u>Acres</u>									
Acreage operated per farm:									
Owned	0	90	236	394	573	679	236	274	
Cash rented	358	513	365	299	187	61	0	143	
Share rented	216	244	185	87	40	13	0	64	
AUM rented	18	102	37	49	100	203	112	97	
Total operated, less AUM	587	875	791	762	772	727	216	468	
Acreage harvested per farm:									
Corn	53	71	72	60	51	34	8	32	
Wheat	50	64	63	48	37	32	6	26	
Soybeans	52	86	62	45	30	20	6	27	
Cotton	18	9	13	3	4	5	1	5	
Other grains	24	28	22	19	15	16	3	11	
Other crops	34	47	57	56	58	67	20	36	
Total harvested	231	306	288	232	196	173	43	136	
<u>Dollars</u>									
Per farm:									
Assets	246,037	275,232	386,298	429,961	511,662	574,697	325,033	359,575	
Debt	33,161	58,380	81,999	82,321	78,146	71,351	31,214	48,232	
Cash operating expenses	80,863	74,788	80,126	76,489	83,108	69,437	28,464	51,766	
Gross cash income	99,258	91,484	94,677	93,676	98,140	88,642	35,493	63,406	
<u>Percent</u>									
Percentage of all farm:									
Livestock sales	9.80	8.04	11.29	13.60	15.98	11.70	29.58	100.00	
Crop sales	18.11	15.37	14.03	11.20	8.98	6.55	25.77	100.00	
Government payments	14.22	14.27	17.67	15.02	12.56	8.64	17.63	100.00	
Off-farm income	5.21	6.01	6.33	6.61	6.87	5.71	63.27	100.00	
<u>Number</u>									
Farm operator average:									
Age	42	47	48	51	54	54	56	53	
Hours worked per week	40	37	40	44	43	41	24	32	
<u>Percent</u>									
Operators in tenure class:									
Farming	66.15	64.83	68.26	67.48	67.75	64.56	45.95	55.70	
Hired manager	1.48	.90	.38	.50	.28	1.68	1.17	1.02	
Other	32.37	34.28	31.36	32.02	31.97	33.76	52.88	43.28	

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix IV--Financial Ratio Tables

Appendix tables 18-20 provide additional estimates of financial ratios by income/solvency position, economic class, production value, acreage operated, production specialty, region, and tenure. The tables support the discussion of differences in average financial ratios across the various categories of farm characteristics presented in the Financial Ratio section of the text.

Appendix table 18--Average financial ratios for farms with gross sales above \$40,000 by economic class

Measure	\$500,000 or over			\$250,000- \$499,999			\$100,000- \$249,999			\$40,000- \$99,999		
	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b
	<u>Ratio</u>											
Solvency measures:												
Debt/asset	0.23	0.19	0.19	0.22	0.18	0.18	0.20	0.18	0.18	0.17	0.15	0.15
Leverage	.30	.24	.24	.29	.21	.21	.25	.22	.22	.20	.17	.17
Liquidity and coverage measures:												
Times interest earned	6.04	8.29	5.12	4.61	4.68	4.08	4.54	4.66	4.10	5.01	5.08	3.76
Debt service coverage	3.92	5.20	3.28	3.04	3.10	2.74	2.90	2.76	2.43	2.64	2.62	1.87
Debt servicing	.08	.07	.08	.12	.10	.11	.13	.12	.13	.14	.13	.15
Efficiency measures:												
Asset turnover	.53	.51	.44	.33	.30	.30	.27	.25	.26	.20	.20	.19
Debt burden	.59	.81	.47	.41	.44	.37	.38	.37	.32	.32	.35	.22
Gross	.74	.70	.79	.72	.75	.77	.71	.73	.76	.72	.74	.80
Interest expense	.05	.04	.05	.07	.06	.07	.08	.07	.08	.08	.07	.09
	<u>Percent</u>											
Profitability measures:												
Profit margin	23.95	29.20	19.25	26.74	22.97	19.47	27.73	26.70	21.86	31.74	29.16	20.99
Return on assets	12.38	14.32	7.84	8.34	5.94	4.81	5.46	4.72	3.68	3.15	2.58	.73
Return on equity	12.84	15.18	7.16	7.57	4.90	3.53	4.24	3.51	2.23	1.91	1.38	-.79

a = Estimates include income and expenses associated with contractors.

b = Estimates exclude income and expenses associated with contractors.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 19--Average financial ratios for farms with gross sales above \$40,000 by production specialty

Measure	Cash grains			Tobacco			Cotton			Other field crops			Vegetables, fruit, nuts			Nursery, greenhouse		
	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b
	<u>Ratio</u>																	
Solvency measures:																		
Debt/asset	0.22	0.20	0.20	0.17	0.16	0.16	0.20	0.18	0.18	0.23	0.20	0.20	0.21	0.11	0.11	0.12	0.13	0.13
Leverage	.29	.25	.25	.21	.19	.19	.25	.22	.22	.30	.25	.25	.26	.12	.12	.13	.15	.15
Liquidity and coverage measures:																		
Times interest earned	4.02	3.89	3.96	6.10	6.29	6.32	4.75	5.19	4.72	5.20	6.07	3.87	2.89	7.54	5.05	18.97	19.74	19.74
Debt service coverage	2.68	2.41	2.45	3.44	3.66	3.68	3.15	3.37	3.11	3.43	3.67	2.32	2.26	4.72	3.17	10.02	10.29	10.29
Debt servicing	.15	.14	.14	.09	.08	.09	.10	.08	.08	.11	.12	.14	.11	.07	.08	.04	.03	.03
Efficiency measures:																		
Asset turnover	.25	.25	.27	.37	.36	.37	.39	.39	.40	.38	.28	.26	.32	.25	.23	.48	.67	.69
Debt burden	.34	.31	.32	.54	.57	.58	.49	.48	.43	.49	.51	.28	.28	.71	.44	1.49	1.65	1.65
Gross	.70	.75	.74	.75	.74	.72	.75	.78	.79	.70	.63	.75	.81	.70	.79	.64	.68	.68
Interest expense	.09	.09	.09	.05	.05	.06	.06	.05	.05	.07	.07	.09	.07	.05	.05	.02	.02	.02
	<u>Percent</u>																	
Profitability measures:																		
Profit margin	28.62	25.07	24.01	26.82	28.32	28.10	22.35	18.95	16.40	29.63	37.52	23.05	12.95	30.07	19.71	39.58	31.00	30.04
Return on assets	5.82	4.71	4.87	6.66	7.28	7.34	7.14	5.38	4.56	9.82	9.66	5.09	3.58	6.08	3.26	14.96	14.71	14.71
Return on equity	4.47	3.21	3.40	5.67	6.36	6.44	6.00	4.43	3.42	9.33	9.51	3.78	1.78	5.53	2.37	15.74	15.67	15.67

See footnotes at end of table.

Continued--

Appendix table 19--Average financial ratios for farms with gross sales above \$40,000 by production specialty--Continued

Measure	Beef, hogs, sheep			Poultry			Dairy			Other livestock		
	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b	1987	1988	1988b
	<u>Ratio</u>											
Solvency measures:												
Debt/asset	0.17	0.15	0.15	0.25	0.23	0.23	0.22	0.20	0.20	0.15	0.12	0.12
Leverage	.21	.18	.18	.34	.30	.30	.27	.26	.26	.18	.14	.14
Liquidity and coverage measures:												
Times interest earned	5.29	6.56	3.86	20.99	20.21	7.91	4.54	4.00	3.94	3.28	-1.86	-2.80
Debt service coverage	3.00	3.65	2.07	11.82	11.24	4.48	2.69	2.59	2.55	1.87	.46	-.05
Debt servicing	.11	.09	.11	.04	.04	.11	.12	.11	.11	.10	.12	.13
Efficiency measures:												
Asset turnover	.28	.30	.27	1.09	1.08	.42	.30	.31	.33	.27	.18	.16
Debt burden	.41	.53	.26	1.82	2.05	.76	.34	.35	.34	.23	-.02	-.11
Gross	.75	.73	.84	.58	.56	.56	.75	.77	.78	.87	1.01	1.08
Interest expense	.07	.05	.06	.02	.02	.06	.07	.06	.06	.06	.07	.07
	<u>Percent</u>											
Profitability measures:												
Profit margin	28.01	29.22	16.65	40.46	43.14	40.06	24.34	19.38	18.06	14.16	-18.77	28.85
Return on assets	6.49	7.36	3.16	40.07	44.45	14.58	4.20	2.80	2.68	3.13	-4.44	-5.56
Return on equity	5.67	6.85	1.90	50.63	54.59	15.79	2.74	.98	.82	1.74	-6.41	-7.68

a = Estimates include income and expenses associated with contractors.

b = Estimates exclude income and expenses associated with contractors.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 20--Average financial ratios for farms with gross sales above \$40,000 by production region

Measure	Northeast			Lake States			Corn Belt			Northern Plains			Appalachian		
	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b
	<u>Ratio</u>														
Solvency measures:															
Debt/asset	0.13	0.13	0.13	0.27	0.23	0.23	0.22	0.21	0.21	0.22	0.21	0.21	0.17	0.20	0.20
Leverage	.15	.16	.16	.37	.31	.31	.29	.26	.26	.29	.27	.27	.21	.25	.25
Liquidity and coverage measures:															
Times interest earned	7.66	6.37	5.74	3.45	3.77	3.39	4.73	3.59	3.30	5.33	5.49	4.45	9.77	7.25	5.90
Debt service coverage	3.68	3.51	3.17	2.44	2.52	2.31	3.31	2.36	2.18	3.09	3.11	2.50	5.23	4.12	3.35
Debt servicing	.09	.08	.09	.14	.13	.14	.12	.12	.13	.12	.11	.12	.08	.08	.11
Efficiency measures:															
Asset turnover	.23	.28	.28	.31	.30	.30	.31	.29	.30	.33	.33	.34	.38	.42	.35
Debt burden	.51	.52	.46	.29	.32	.29	.43	.30	.27	.43	.44	.34	.79	.63	.49
Gross	.71	.75	.76	.75	.74	.76	.69	.78	.80	.70	.71	.77	.64	.70	.70
Interest expense	.05	.05	.05	.09	.08	.08	.07	.08	.08	.07	.07	.07	.04	.05	.06
	<u>Percent</u>														
Profitability measures:															
Profit margin	32.04	24.33	21.33	21.33	21.46	18.13	27.89	19.97	17.04	31.57	29.97	22.59	37.09	30.22	28.20
Return on assets	4.64	3.44	2.64	3.95	3.72	2.87	6.77	3.64	3.00	8.48	7.64	5.32	11.69	10.49	7.77
Return on equity	4.07	2.50	1.57	1.73	1.86	.75	5.74	1.79	.98	7.85	6.88	3.93	12.18	10.61	7.19

See footnotes at end of table.

Continued--

Appendix table 20--Average financial ratios for farms with gross sales above \$40,000 by production region--Continued

Measure	Southeast			Delta			Southern Plains			Mountain			Pacific		
	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b	1987a	1988a	1988b
	<u>Ratio</u>														
Solvency measures:															
Debt/asset	0.17	0.13	0.13	0.21	0.17	0.17	0.15	0.14	0.14	0.20	0.13	0.13	0.20	0.14	0.14
Leverage	.20	.15	.15	.26	.21	.21	.18	.16	.16	.24	.15	.15	.25	.16	.16
Liquidity and coverage measures:															
Times interest earned	5.48	5.08	9.66	6.32	8.15	6.41	5.89	7.44	4.64	3.45	7.90	4.61	4.18	6.04	4.30
Debt service coverage	3.31	3.17	5.95	3.46	4.98	3.89	3.11	4.22	2.61	2.01	4.45	2.42	2.95	3.70	2.66
Debt servicing	.08	.08	.06	.10	.07	.09	.11	.08	.09	.15	.09	.13	.10	.09	.09
Efficiency measures:															
Asset turnover	.40	.30	.37	.37	.50	.40	.25	.31	.28	.22	.24	.20	.35	.27	.26
Debt burden	.50	.45	.94	.50	.85	.64	.44	.64	.36	.23	.64	.30	.39	.52	.35
Gross	.79	.79	.68	.72	.71	.70	.73	.71	.81	.80	.65	.77	.78	.74	.81
Interest expense	.05	.05	.04	.06	.04	.06	.06	.05	.05	.10	.06	.08	.06	.05	.06
	<u>Percent</u>														
Profitability measures:															
Profit margin	20.76	18.90	11.77	30.28	29.54	28.15	31.77	29.31	18.03	23.46	38.51	24.66	19.66	25.76	17.58
Return on assets	7.00	4.33	.62	9.87	12.75	9.16	6.73	7.55	3.63	4.91	8.78	4.35	5.94	6.00	3.61
Return on equity	6.19	3.39	.62	9.77	12.88	8.55	6.03	7.15	2.60	3.46	8.56	3.45	4.71	5.35	2.58

a = Estimates include income and expenses associated with contractors.

b = Estimates exclude income and expenses associated with contractors.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix V--Distribution of Farms By Returns on Equity

Appendix tables 21-24 present additional information on the distribution of farms by rate of returns on equity and selected farm characteristics, such as acreage operated, production specialty, region, and tenure arrangement. These results are discussed in the Farm Operator Rates of Return section of the text.

Appendix table 21--Distribution of farms, debt, and assets by rate of return on equity and acreage operated

Acreage operated	Item	Farm business returns on equity							Insolvent farms	All farms
		0.20 or over	0.10 to 0.19	0.05 to 0.09	-0.05 to 0.04	-0.10 to 0.06	-0.20 to 0.11	-0.21 or less		
		<u>Percent</u>								
2001 or more	Operators	0.36	0.43	0.35	1.48	0.36	0.20	0.24	0.04	3.46
	Debt	2.54	1.82	1.67	5.20	1.82	1.47	1.85	.35	16.72
	Assets	1.15	1.55	1.54	9.31	1.11	.70	.56	.04	15.97
1001-2000	Operators	.67	.48	.65	1.92	.45	.40	.58	.03	5.20
	Debt	2.54	1.82	1.21	4.19	1.23	1.27	1.94	.18	14.37
	Assets	1.01	1.07	1.24	5.05	.93	.58	.58	.02	10.47
501-1000	Operators	.97	1.13	1.18	3.93	.74	.88	1.00	.02	9.85
	Debt	3.30	2.68	2.30	5.54	1.47	1.89	2.66	.12	19.96
	Assets	1.20	1.66	1.78	7.96	1.05	.85	.81	.01	15.34
251-500	Operators	1.48	.95	1.37	6.46	1.53	1.56	1.42	.05	14.82
	Debt	2.98	1.31	1.42	4.81	1.77	2.59	3.24	.23	18.35
	Assets	1.15	1.07	1.59	9.16	1.38	1.40	.89	.03	16.67
101-250	Operators	.99	.90	2.39	11.17	2.76	2.20	2.67	.05	23.13
	Debt	1.50	1.09	1.33	4.09	1.65	1.10	2.29	.20	13.25
	Assets	.62	.65	1.61	10.40	1.68	.96	.91	.02	16.85
100 or less	Operators	2.20	2.12	6.38	20.21	3.71	3.64	5.22	.06	43.55
	Debt	2.71	.92	2.18	5.20	1.32	2.05	2.63	.36	17.36
	Assets	1.18	.91	3.08	15.82	1.44	1.18	1.06	.03	24.70
All farms	Operators	6.68	5.99	12.32	45.19	9.55	8.88	11.14	.25	100.00
	Debt	15.57	9.64	10.11	29.03	9.25	10.36	14.61	1.43	100.00
	Assets	6.32	6.92	10.84	57.69	7.60	5.67	4.82	.15	100.00

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 22--Distribution of farms, debt, and assets by rate of return on equity and production specialty

Production specialty	Item	Farm business returns on equity							Insolvent farms	All farms
		0.20 or over	0.10 to 0.19	0.05 to 0.09	-0.05 to 0.04	-0.10 to 0.06	-0.20 to 0.11	-0.21 or less		
Percent										
Cash grains	Operators	2.00	1.92	2.39	7.30	1.78	1.50	2.30	0.09	19.26
	Debt	4.19	3.31	2.77	6.69	2.59	2.97	4.17	.30	26.99
	Assets	1.51	2.21	2.49	9.97	1.70	1.27	1.13	.03	20.32
Tobacco	Operators	.26	.22	.53	1.90	.47	.29	d	d	4.32
	Debt	.27	.13	.14	.48	.14	.23	d	d	1.67
	Assets	.12	.14	.21	1.08	.19	.09	d	d	1.92
Cotton	Operators	.15	.07	.21	.44	.08	.05	.13	.01	1.14
	Debt	.27	.27	.37	.51	.08	.15	.39	.06	2.10
	Assets	.13	.16	.36	.69	.13	.06	.15	.01	1.68
Other field crops	Operators	.61	.44	1.60	3.03	.44	.53	.55	.03	7.22
	Debt	1.76	.61	.54	2.44	.35	.57	.69	.19	7.16
	Assets	.65	.42	1.10	3.44	.24	.27	.18	.02	6.32
Vegetables, fruit, nuts	Operators	.52	.34	.61	2.05	.35	.36	d	d	4.71
	Debt	.66	.60	.51	2.18	.57	.65	d	d	5.74
	Assets	.56	.38	.77	4.72	.44	.35	d	d	7.43
Nursery, greenhouse	Operators	.27	.12	.33	.69	.17	.10	d	d	1.97
	Debt	.31	.08	.38	.39	.22	.10	d	d	1.82
	Assets	.36	.14	.39	.87	.15	.11	d	d	2.13
Beef, hogs, sheep	Operators	1.59	1.91	5.20	25.53	4.97	4.43	4.97	.06	48.66
	Debt	4.68	2.60	3.22	11.46	3.28	2.92	5.13	.50	33.78
	Assets	1.62	2.22	3.71	29.88	3.29	2.18	1.90	.05	44.86
Poultry	Operators	.75	.08	.06	.32	.04	.16	d	d	1.54
	Debt	1.38	.17	.12	.27	.06	.18	d	d	2.59
	Assets	.69	.09	.05	.32	.09	.18	d	d	1.53
Dairy	Operators	.45	.74	1.01	2.75	.82	1.09	1.15	.04	8.05
	Debt	1.63	1.69	1.92	4.30	1.78	2.31	2.38	.31	16.32
	Assets	.59	1.06	1.56	4.99	1.11	1.02	.71	.03	11.07
Other livestock	Operators	.09	.15	.39	1.19	.43	.37	.50	na	3.12
	Debt	.43	.18	.12	.30	.19	.28	.34	na	1.82
	Assets	.08	.10	.21	1.72	.25	.15	.25	na	2.75
All farms	Operators	6.68	5.99	12.32	45.19	9.55	8.88	11.14	.25	100.00
	Debt	15.57	9.64	10.11	29.03	9.25	10.36	14.61	1.43	100.00
	Assets	6.32	6.92	10.84	57.69	7.60	5.67	4.82	.15	100.00

d = Data insufficient for disclosure.

na = Not available.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 23--Distribution of farms, debt, and assets by rate of return on equity and region

Region	Item	Farm business returns on equity							Insolvent farms	All farms
		0.20 or over	0.10 to 0.19	0.05 to 0.09	-0.05 to 0.04	-0.10 to 0.06	-0.20 to 0.11	-0.21 or less		
		Percent								
Northeast	Operators	0.27	0.36	0.93	3.29	0.71	0.75	d	d	7.17
	Debt	.55	.31	.77	2.47	.81	.60	d	d	6.47
	Assets	.34	.39	.87	7.78	.66	.41	d	d	10.77
Lake States	Operators	.62	.76	1.43	3.57	1.07	1.39	1.50	0.03	10.38
	Debt	1.94	1.64	1.45	3.15	1.40	1.92	2.12	.19	13.82
	Assets	.66	.87	1.29	3.83	.96	.95	.66	.02	9.24
Corn Belt	Operators	1.32	1.22	1.86	8.19	1.97	1.86	2.40	.03	18.84
	Debt	3.00	2.18	1.85	5.51	2.14	2.58	3.55	.13	20.93
	Assets	1.03	1.32	1.79	8.05	1.63	1.31	1.09	.01	16.22
Northern Plains	Operators	.90	.86	1.01	3.12	.73	.82	1.16	.07	8.67
	Debt	2.18	1.53	1.19	3.52	.79	1.03	1.98	.27	12.50
	Assets	.79	1.14	1.20	3.70	.64	.57	.54	.03	8.61
Appalachian	Operators	.69	.69	1.78	8.09	1.63	1.26	1.47	.01	15.63
	Debt	1.41	.40	.53	2.60	.67	.71	1.03	.05	7.40
	Assets	.52	.43	.87	5.87	.71	.44	.37	.01	9.22
Southeast	Operators	.68	.30	1.32	4.26	.63	.57	d	d	8.31
	Debt	.96	.30	.45	1.81	.51	.51	d	d	5.14
	Assets	.62	.24	.83	4.56	.54	.36	d	d	7.34
Delta	Operators	.51	.34	.74	2.83	.46	.39	.48	.01	5.76
	Debt	.66	.29	.18	1.00	.44	.17	.65	.05	3.45
	Assets	.40	.32	.39	2.13	.24	.17	.21	.00	3.86
Southern Plains	Operators	.65	.54	1.34	6.11	1.25	1.14	1.40	.02	12.45
	Debt	1.52	.75	1.04	2.74	1.07	1.00	1.66	.11	9.90
	Assets	.51	.82	1.08	8.47	1.09	.68	.62	.01	13.27
Mountain	Operators	.51	.42	.98	2.25	.49	.36	.42	.04	5.47
	Debt	1.55	1.17	1.51	2.52	.58	.76	.94	.11	9.14
	Assets	.76	.71	1.16	6.00	.51	.39	.34	.01	9.87
Pacific	Operators	.55	.51	.93	3.48	.59	.34	.92	.03	7.33
	Debt	1.80	1.06	1.13	3.70	.85	1.08	1.18	.46	11.25
	Assets	.69	.68	1.36	7.31	.63	.41	.48	.04	11.60
All farms	Operators	6.68	5.99	12.32	45.19	9.55	8.88	11.14	.25	100.00
	Debt	15.57	9.64	10.11	29.03	9.25	10.36	14.61	1.43	100.00
	Assets	6.32	6.92	10.84	57.69	7.60	5.67	4.82	.15	100.00

d = Data insufficient for disclosure.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 24--Distribution of farms, debt, and assets by rate of return on equity and land tenure

Tenure	Item	Farm business returns on equity							Insolvent farms	All farms
		0.20 or over	0.10 to 0.19	0.05 to 0.09	-0.05 to 0.04	-0.10 to 0.06	-0.20 to 0.11	-0.21 or less		
		<u>Percent</u>								
Full tenant	Operators	1.76	0.69	0.40	1.18	0.38	0.75	3.34	0.10	8.61
	Debt	1.96	.45	.39	.74	.19	.37	1.50	.32	5.92
	Assets	.72	.42	.26	3.32	.19	.29	.66	.03	5.89
1-20 percent	Operators	1.10	.93	.89	2.11	.75	.78	.98	.02	7.57
	Debt	2.66	1.00	.42	1.87	.79	.74	1.56	.12	9.16
	Assets	.95	.80	.53	1.87	.59	.52	.52	.01	5.79
21-40 percent	Operators	.60	.64	1.22	2.90	1.13	.83	.88	.02	8.21
	Debt	2.31	1.39	1.40	3.25	1.80	1.20	2.40	.21	13.96
	Assets	.82	.84	1.16	3.55	1.11	.67	.65	.02	8.82
41-60 percent	Operators	.41	.61	.90	3.52	.90	1.05	.81	.05	8.25
	Debt	1.61	1.69	1.49	3.75	1.27	1.84	2.12	.32	14.09
	Assets	.71	1.05	1.21	4.52	.89	.88	.58	.04	9.87
61-80 percent	Operators	.30	.47	.92	3.89	1.04	.80	d	d	7.99
	Debt	1.67	1.32	1.11	4.41	1.44	1.50	d	d	12.95
	Assets	.57	.96	1.33	6.01	1.22	.78	d	d	11.38
81-99 percent	Operators	.34	.27	.74	3.53	.69	.55	d	d	6.61
	Debt	1.15	.86	1.24	3.62	.87	1.15	d	d	9.78
	Assets	.47	.85	1.17	6.60	.75	.48	d	d	10.56
Full owner	Operators	2.18	2.38	7.24	28.07	4.65	4.12	4.06	.06	52.75
	Debt	4.22	2.92	4.06	11.39	2.90	3.56	4.72	.38	34.14
	Assets	2.08	2.00	5.19	31.83	2.85	2.04	1.67	.04	47.68
All farms	Operators	6.68	5.99	12.32	45.19	9.55	8.88	11.14	.25	100.00
	Debt	15.57	9.64	10.11	29.03	9.25	10.36	14.61	1.43	100.00
	Assets	6.32	6.92	10.84	57.69	7.60	5.67	4.82	.15	100.00

d = Data insufficient for disclosure.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix VI--Lender Distributions

Additional information concerning the distribution of debt owed to various lenders is tabulated by debt/asset ratio and financial category in appendix tables 25-26.

Appendix table 25--Distribution of farm operator debt by debt/asset ratio and lender, January 1, 1989

Lender	Debt/asset ratio					All farms
	0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
	Million dollars					
Commercial banks	2,630	14,952	10,657	3,313	2,403	33,955
Federal land banks	958	7,707	5,641	1,343	737	16,386
Farmers Home Administration	323	3,112	4,339	2,658	2,386	12,818
Production credit association	446	2,826	1,465	365	247	5,350
Individuals	722	5,269	3,104	1,307	573	10,975
Life insurance companies	138	1,091	859	320	115	2,522
Merchants and dealers	263	873	563	233	105	2,037
All other lenders	91	280	259	214	198	1,042
All lenders	5,571	36,110	26,887	9,752	6,765	85,085

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 26--Distribution of farm operator debt by net cash farm income and solvency position, January 1, 1989

Lender	Income/solvency position				All farms
	Favorable	Marginal income	Marginal solvency	Vulnerable	
	Percent				
Commercial banks:					
Own debt	28.9	22.9	24.7	23.6	100.0
All lender debt in class	37.9	49.2	33.5	43.5	39.9
All operator debt	11.5	9.1	9.8	9.4	39.9
Federal land banks:					
Own debt	34.8	18.1	28.0	19.1	100.0
All lender debt in class	22.1	18.7	18.3	17.0	19.3
All operator debt	6.7	3.5	5.4	3.7	19.3
Farmers Home Administration:					
Own debt	17.7	9.1	46.7	26.5	100.0
All lender debt in class	8.8	7.4	23.9	18.5	15.1
All operator debt	2.7	1.4	7.0	4.0	15.1
Production credit association:					
Own debt	37.9	23.3	24.5	14.3	100.0
All lender debt in class	7.8	7.9	5.2	4.2	6.3
All operator debt	2.4	1.5	1.5	.9	6.3
Merchants and dealers:					
Own debt	41.3	14.5	29.5	14.8	100.0
All lender debt in class	3.3	1.9	2.4	1.6	2.4
All operator debt	1.0	.3	.7	.4	2.4
Life insurance companies:					
Own debt	34.4	14.3	28.6	22.7	100.0
All lender debt in class	3.4	2.3	2.9	3.1	3.0
All operator debt	1.0	.4	.8	.7	3.0
Other individuals:					
Own debt	37.4	17.2	26.1	19.4	100.0
All lender debt in class	15.9	11.9	11.4	11.5	12.9
All operator debt	4.8	2.2	3.4	2.5	12.9
All other lenders:					
Own debt	24.3	11.3	54.3	10.1	100.0
All lender debt in class	1.0	.7	2.3	.6	1.2
All operator debt	.3	.1	.7	.1	1.2
All lenders:					
All lender debt in class	100.0	100.0	100.0	100.0	100.0
All operator debt	30.4	18.6	29.4	21.6	100.0

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix VII--Farm Operator Combined Cash-Flow and Net Income Statements

Appendix tables 27-34 provide information about the components of net farm income and net cash farm income. This information allows for measurement of the profitability of the farm business as well as the cash-flow position of farms and their households. Farms were classified by debt/asset ratio position within economic size, production specialty, region, occupational specialty, organizational structure, land tenure, and operator age categories.

Appendix table 27--Combined farm income and cash-flow statement for all farms, January 1, 1989

All farms	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
Number of farms	Number	844,458	267,013	412,795	161,637	50,645	27,540	1,764,088	
Percent of farms	Percent	47.86	15.13	23.39	9.16	2.87	1.56	100.00	
Farm income:									
Livestock sales	Dollars	12,966	35,874	47,123	54,951	62,443	52,632	30,313	
Crop sales	do.	14,507	27,444	36,908	35,035	41,568	52,558	24,959	
Net change in CCC loans	do.	23	-850	-1,855	-2,387	-2,084	-2,133	-863	
Government payments	do.	2,212	5,418	8,070	10,074	9,101	10,364	5,113	
Other farm income	do.	1,832	5,374	4,583	5,861	15,495	8,967	3,885	
Gross cash farm income	do.	31,540	73,260	94,829	103,535	126,523	122,388	63,406	
Nonmoney income	do.	6,931	8,483	7,591	7,344	5,647	3,003	7,260	
Value of inventory change	do.	372	2,919	5,421	6,098	2,049	-2,983	2,459	
Gross farm income	do.	38,842	84,662	107,841	116,977	134,219	122,408	73,125	
Estimated contractor income	do.	4,805	9,988	11,059	17,709	26,667	16,295	9,042	
Gross farm income including contractors	do.	43,647	94,650	118,900	134,686	160,887	138,703	82,167	
Operating expenses excluding interest	do.	23,452	54,040	69,666	77,255	95,205	96,741	47,030	
Cash income before interest is deducted	do.	8,087	19,220	25,163	26,280	31,318	25,647	16,376	
Percent of farms with negative cash income	Percent	45.87	39.83	35.98	36.76	35.25	41.81	41.44	
Interest expense	Dollars	404	3,145	8,768	14,748	14,231	16,333	4,736	
Cash income after interest is deducted	do.	7,683	16,075	16,396	11,531	17,087	9,313	11,640	
Percent of farms with negative cash income	Percent	46.62	45.20	48.15	49.19	51.73	53.14	47.25	
Total expenses including depreciation	Dollars	26,924	64,335	87,443	101,050	117,398	120,038	57,591	
Contractor expenses	do.	1,353	5,527	3,227	8,289	7,959	2,729	3,270	
Total expenses including contractors	do.	28,277	69,862	90,670	109,339	125,357	122,767	60,861	
Net cash farm income including contractors	do.	11,136	20,536	24,228	20,951	35,795	22,879	17,413	
Percent of farms with negative NCFI	Percent	46.71	45.05	47.26	48.17	51.21	52.62	46.95	
Net farm income	Dollars	11,918	20,326	20,397	15,927	16,821	2,370	15,534	
Percent of farms with negative net farm income	Percent	18.36	23.88	30.23	35.83	42.31	53.44	24.81	
Net farm income including contractors	Dollars	15,371	24,788	28,230	25,347	35,530	15,936	21,307	
Percent of farms with negative NFI	Percent	18.42	23.76	29.80	34.48	41.44	52.31	24.55	
Estimated principal repayment	Dollars	0	1,564	6,131	11,624	14,296	19,068	3,444	
Cash income after interest and principal are deducted	do.	7,683	14,511	10,265	-93	2,791	-9,755	8,196	
Percent of farms with negative cash income	Percent	46.62	48.79	56.84	63.57	65.74	72.42	51.85	
Nonfarm income	Dollars	29,256	31,174	28,542	27,009	24,577	20,040	28,895	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	17,739	26,485	19,607	7,716	8,168	-8,914	17,891	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	47.19	40.32	36.81	45.13	61.56	67.19	44.26	

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 28--Combined farm income and cash-flow statement by economic class, January 1, 1989

\$500,000 or more	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	6,389	4,817	14,012	6,036	2,095	1,325	34,674
Percent of farms	Percent	18.42	13.89	40.41	17.40	6.04	3.82	100.00
Farm income:								
Livestock sales	Dollars	302,643	541,435	498,019	603,985	885,203	539,659	511,479
Crop sales	do.	628,935	463,878	356,845	208,918	439,440	541,617	408,146
Net change in CCC loans	do.	5,750	-6,533	-16,441	-7,249	-21,860	-20,348	-9,852
Government payments	do.	23,128	28,547	39,958	47,630	25,164	33,185	35,455
Other farm income	do.	33,485	113,169	24,905	31,765	243,512	60,942	54,525
Gross cash farm income	do.	993,941	1,140,497	903,286	885,048	1,571,459	1,155,055	999,752
Nonmoney income	do.	13,496	12,912	11,745	10,217	9,990	8,729	11,742
Value of inventory change	do.	24,324	29,671	30,598	76,947	-3,659	-72,181	31,385
Gross farm income	do.	1,031,761	1,183,079	945,628	972,212	1,577,790	1,091,603	1,042,879
Estimated contractor income	do.	431,520	229,757	130,488	91,476	425,395	253,674	215,477
Gross farm income including contractors	do.	1,463,281	1,412,836	1,076,116	1,063,688	2,003,184	1,345,277	1,258,356
Operating expenses excluding interest	do.	685,267	823,756	664,278	704,237	1,162,574	922,030	737,207
Cash income before interest is deducted	do.	308,674	316,740	239,008	180,811	408,885	233,025	262,545
Percent of farms with negative cash income	Percent	15.80	12.84	9.17	16.93	28.44	8.32	13.38
Interest expense	Dollars	6,342	30,760	49,631	83,369	72,986	111,689	48,689
Cash income after interest is deducted	do.	302,332	285,980	189,377	97,442	335,899	121,336	213,857
Percent of farms with negative cash income	Percent	15.87	21.63	18.83	29.99	44.91	12.52	21.95
Total expenses including depreciation	Dollars	743,143	921,938	772,561	841,783	1,277,215	1,078,378	842,114
Contractor expenses	do.	80,299	182,171	36,797	18,168	43,694	17,392	61,439
Total expenses including contractors	do.	823,442	1,104,108	809,359	859,951	1,320,909	1,095,770	903,553
Net cash farm income including contractors	do.	653,553	333,566	283,067	170,750	717,600	357,618	367,894
Percent of farms with negative NCFI	Percent	15.02	21.50	17.33	28.00	44.64	9.74	20.70
Net farm income	Dollars	288,618	261,141	173,067	130,429	300,575	13,225	200,766
Percent of farms with negative net farm income	Percent	19.74	30.53	24.16	26.68	46.57	24.10	26.02
Net farm income including contractors	Dollars	639,839	308,728	266,757	203,737	682,275	249,507	354,803
Percent of farms with negative NFI	Percent	17.06	28.91	22.78	24.23	46.30	20.39	24.16
Estimated principal repayment	Dollars	0	11,966	32,460	50,896	66,766	97,834	31,412
Cash income after interest and principal are deducted	do.	302,332	274,014	156,917	46,546	269,133	23,502	182,445
Percent of farms with negative cash income	Percent	15.87	23.63	22.02	39.70	58.25	50.42	27.46
Nonfarm income	Dollars	62,580	22,654	24,619	17,886	8,219	19,726	28,991
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	345,712	277,468	162,335	45,232	258,152	24,028	192,235
Percent of farms with negative income after principal and family living expenses are deducted	Percent	16.28	24.74	23.07	41.13	61.14	49.88	28.52

See footnotes at end of table.

Continued--

Appendix table 28--Combined farm income and cash-flow statement by economic class, January 1, 1989--Continued

\$250,000-\$499,999	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	14,598	12,486	26,671	11,796	2,939	1,726	70,216
Percent of farms	Percent	20.78	17.78	37.98	16.79	4.18	2.45	100.00
Farm income:								
Livestock sales	Dollars	104,051	142,569	149,709	143,249	116,280	104,625	135,354
Crop sales	do.	149,089	126,582	112,700	128,161	110,618	136,617	125,832
Net change in CCC loans	do.	4,419	-4,175	-7,614	-9,812	35	-9,456	-4,595
Government payments	do.	24,173	25,022	26,844	27,570	27,202	42,284	26,481
Other farm income	do.	14,447	12,456	10,547	15,152	10,886	23,898	12,813
Gross cash farm income	do.	296,180	302,453	292,186	304,321	265,020	297,968	295,886
Nonmoney income	do.	8,140	10,334	9,433	8,862	9,705	3,902	9,104
Value of inventory change	do.	9,251	15,714	10,574	1,182	3,279	9,762	9,310
Gross farm income	do.	313,571	328,501	312,193	314,364	278,004	311,632	314,299
Estimated contractor income	do.	6,949	10,914	22,075	50,695	27,022	10,063	21,666
Gross farm income including contractors	do.	320,520	339,415	334,269	365,059	305,026	321,695	335,965
Operating expenses excluding interest	do.	210,824	211,634	205,379	205,729	194,620	216,983	207,517
Cash income before interest is deducted	do.	85,356	90,819	86,807	98,591	70,400	80,985	88,369
Percent of farms with negative cash income	Percent	8.45	9.65	10.82	10.11	17.86	23.25	10.60
Interest expense	Dollars	4,176	9,147	23,494	33,674	41,548	42,034	19,849
Cash income after interest is deducted	do.	81,180	81,672	63,313	64,917	28,852	38,950	68,520
Percent of farms with negative cash income	Percent	10.48	11.52	16.73	20.90	27.89	38.92	16.22
Total expenses including depreciation	Dollars	243,478	244,003	256,604	262,518	257,505	274,397	253,103
Contractor expenses	do.	1,037	4,863	7,346	28,375	22,389	13,458	9,906
Total expenses including contractors	do.	244,515	248,866	263,950	290,894	279,893	287,855	263,009
Net cash farm income including contractors	do.	87,091	87,722	78,042	87,237	33,485	35,556	80,280
Percent of farms with negative NCFI	Percent	10.44	12.92	14.70	19.59	27.04	37.87	15.41
Net farm income	Dollars	70,093	84,498	55,589	51,846	20,499	37,235	61,196
Percent of farms with negative net farm income	Percent	17.18	12.20	24.45	32.73	34.31	30.59	22.72
Net farm income including contractors	Dollars	76,005	90,548	70,319	74,166	25,132	33,840	72,956
Percent of farms with negative NFI	Percent	17.17	13.51	22.44	28.44	33.94	29.54	21.42
Estimated principal repayment	Dollars	0	4,143	14,120	24,118	32,072	38,268	12,435
Cash income after interest and principal are deducted	do.	81,180	77,529	49,193	40,799	-3,220	682	56,085
Percent of farms with negative cash income	Percent	10.48	12.07	20.58	30.68	38.01	51.46	20.15
Nonfarm income	Dollars	25,609	28,779	16,677	15,684	9,263	7,907	19,993
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	87,589	87,108	46,670	37,283	-13,157	-10,611	56,878
Percent of farms with negative income after principal and family living expenses are deducted	Percent	8.86	18.21	22.09	33.69	49.46	55.74	22.57

See footnotes at end of table.

Continued--

Appendix table 28--Combined farm income and cash-flow statement by economic class, January 1, 1989--Continued

\$100,000-\$249,999	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	40,426	37,025	79,816	34,685	8,790	5,720	206,462
Percent of farms	Percent	19.58	17.93	38.65	16.79	4.25	2.77	100.00
Farm income:								
Livestock sales	Dollars	63,853	69,197	63,355	67,015	59,597	66,587	65,044
Crop sales	do.	54,907	55,665	57,972	55,340	57,018	40,409	55,989
Net change in CCC loans	do.	-585	-2,311	-2,233	-4,778	-3,900	666	-2,343
Government payments	do.	12,700	15,583	16,132	19,365	16,556	16,813	15,942
Other farm income	do.	4,960	6,209	7,304	7,451	9,870	8,213	6,808
Gross cash farm income	do.	135,834	144,343	142,529	144,393	139,141	132,688	141,440
Nonmoney income	do.	8,045	10,404	6,820	6,440	5,735	3,918	7,512
Value of inventory change	do.	1,086	5,298	11,368	8,245	5,326	-5,356	7,021
Gross farm income	do.	144,965	160,045	160,717	159,077	150,203	131,249	155,973
Estimated contractor income	do.	7,602	7,289	11,215	9,003	12,771	7,720	9,401
Gross farm income including contractors	do.	152,567	167,333	171,932	168,080	162,973	138,970	165,374
Operating expenses excluding interest	do.	88,927	95,431	97,616	100,486	102,277	98,543	96,229
Cash income before interest is deducted	do.	46,907	48,912	44,914	43,906	36,864	34,145	45,211
Percent of farms with negative cash income	Percent	9.79	10.61	13.97	11.06	15.45	15.04	12.16
Interest expense	Dollars	1,565	5,966	12,546	20,355	21,977	15,037	10,998
Cash income after interest is deducted	do.	45,342	42,947	32,367	23,551	14,887	19,109	34,212
Percent of farms with negative cash income	Percent	11.48	14.63	20.13	22.42	27.26	18.32	18.09
Total expenses including depreciation	Dollars	104,560	117,691	124,894	135,182	139,078	122,233	121,879
Contractor expenses	do.	2,666	4,353	3,497	1,573	6,054	1,784	3,226
Total expenses including contractors	do.	107,226	122,044	128,390	136,755	145,131	124,017	125,105
Net cash farm income including contractors	do.	50,277	45,883	40,086	30,981	21,604	25,045	40,388
Percent of farms with negative NCFI	Percent	11.38	14.04	20.19	21.69	27.08	18.32	17.85
Net farm income	Dollars	40,406	42,353	35,823	23,895	11,125	9,017	34,093
Percent of farms with negative net farm income	Percent	17.78	17.67	22.69	29.00	32.28	34.99	22.64
Net farm income including contractors	Dollars	45,342	45,289	43,542	31,324	17,842	14,953	40,269
Percent of farms with negative NFI	Percent	17.65	16.91	22.13	28.09	31.52	30.77	21.96
Estimated principal repayment	Dollars	0	2,582	8,194	15,203	20,136	21,718	7,644
Cash income after interest and principal are deducted	do.	45,342	40,365	24,173	8,348	-5,249	-2,609	26,568
Percent of farms with negative cash income	Percent	11.48	15.14	27.77	34.69	47.26	39.09	24.62
Nonfarm income	Dollars	22,557	27,279	18,263	14,599	23,147	27,908	20,580
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	48,698	48,444	23,235	3,747	-1,302	6,099	27,948
Percent of farms with negative income after principal and family living expenses are deducted	Percent	14.35	17.11	32.02	46.10	61.90	51.56	30.07

See footnotes at end of table.

Continued--

Appendix table 28--Combined farm income and cash-flow statement by economic class, January 1, 1989--Continued

\$40,000-\$99,999	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	74,680	47,489	76,566	32,084	11,112	5,796	247,727
Percent of farms	Percent	30.14	19.16	30.90	12.95	4.48	2.33	100.00
Farm income:								
Livestock sales	Dollars	26,275	34,663	30,605	28,060	30,589	18,175	29,456
Crop sales	do.	25,160	17,833	22,103	22,967	20,962	29,992	22,451
Net change in CCC loans	do.	-536	-1,074	-1,600	-2,043	-2,187	-1,289	-1,255
Government payments	do.	6,160	6,381	7,212	8,183	10,074	9,287	7,038
Other farm income	do.	3,466	4,855	5,263	6,882	4,841	10,990	4,968
Gross cash farm income	do.	60,524	62,658	63,584	64,050	64,279	67,155	62,659
Nonmoney income	do.	7,179	7,550	6,255	5,430	5,225	3,291	6,559
Value of inventory change	do.	-48	4,725	4,705	4,634	1,831	-2,302	2,974
Gross farm income	do.	67,654	74,933	74,543	74,114	71,336	68,144	72,192
Estimated contractor income	do.	7,467	13,853	13,934	35,080	2,337	8,513	14,061
Gross farm income including contractors	do.	75,122	88,787	88,478	109,194	73,672	76,657	86,253
Operating expenses excluding interest	do.	41,888	44,583	45,779	46,395	51,864	45,358	44,720
Cash income before interest is deducted	do.	18,636	18,076	17,804	17,655	12,416	21,797	17,940
Percent of farms with negative cash income	Percent	15.17	15.39	14.17	15.89	18.97	19.83	15.27
Interest expense	Dollars	882	3,231	7,758	11,325	10,750	10,773	5,484
Cash income after interest is deducted	do.	17,754	14,845	10,046	6,330	1,665	11,024	12,455
Percent of farms with negative cash income	Percent	16.98	20.46	26.67	27.83	46.21	33.21	23.74
Total expenses including depreciation	Dollars	49,501	54,185	60,552	65,336	68,861	62,490	57,038
Contractor expenses	do.	4,513	7,397	3,000	23,623	0	3,225	6,841
Total expenses including contractors	do.	54,014	61,582	63,551	88,958	68,861	65,715	63,878
Net cash farm income including contractors	do.	20,708	21,301	20,981	17,788	4,002	16,312	19,676
Percent of farms with negative NCFI	Percent	17.38	21.28	25.73	26.69	44.41	33.17	23.50
Net farm income	Dollars	18,153	20,748	13,992	8,778	2,474	5,654	15,155
Percent of farms with negative net farm income	Percent	18.57	18.86	24.97	35.72	44.79	39.38	24.49
Net farm income including contractors	Dollars	21,107	27,205	24,926	20,236	4,811	10,942	22,375
Percent of farms with negative NFI	Percent	18.58	19.68	24.62	33.99	41.86	39.35	24.18
Estimated principal repayment	Dollars	0	1,676	5,263	9,737	11,931	16,091	4,120
Cash income after interest and principal are deducted	do.	17,754	13,169	4,783	-3,407	-10,266	-5,067	8,335
Percent of farms with negative cash income	Percent	16.98	21.88	34.68	47.23	57.49	68.61	30.33
Nonfarm income	Dollars	24,409	16,418	19,214	15,097	15,191	19,161	19,529
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	22,963	10,387	4,797	-7,509	-14,275	-5,106	8,664
Percent of farms with negative income after principal and family living expenses are deducted	Percent	25.81	35.27	43.59	58.20	69.26	65.60	40.19

See footnotes at end of table.

Continued--

Appendix table 28--Combined farm income and cash-flow statement by economic class, January 1, 1989--Continued

\$20,000-\$39,999	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	86,416	34,587	45,613	14,395	7,151	5,422	193,584
Percent of farms	Percent	44.64	17.86	23.56	7.43	3.69	2.80	100.00
Farm income:								
Livestock sales	Dollars	12,624	13,140	11,667	12,251	8,098	10,335	12,232
Crop sales	do.	10,134	10,111	11,190	7,487	11,403	10,930	10,251
Net change in CCC loans	do.	-161	-104	-496	-181	11	-2,169	-281
Government payments	do.	2,660	2,132	2,908	3,213	7,092	2,822	2,833
Other farm income	do.	2,271	2,974	2,412	4,002	12,079	1,849	2,909
Gross cash farm income	do.	27,528	28,251	27,682	26,773	38,683	23,766	27,944
Nonmoney income	do.	6,889	7,277	6,101	8,201	2,451	1,032	6,542
Value of inventory change	do.	-1,490	-1,917	1,929	2,740	2,485	6,586	-73
Gross farm income	do.	32,927	33,612	35,712	37,714	43,620	31,384	34,413
Estimated contractor income	do.	2,607	2,596	2,934	13,355	26,187	336	4,289
Gross farm income including contractors	do.	35,534	36,208	38,646	51,068	69,807	31,721	38,702
Operating expenses excluding interest	do.	20,107	23,668	25,016	25,999	27,944	33,203	22,994
Cash income before interest is deducted	do.	7,421	4,583	2,666	773	10,739	-9,437	4,950
Percent of farms with negative cash income	Percent	23.48	25.57	32.06	31.96	34.74	74.08	28.34
Interest expense	Dollars	330	2,441	5,271	7,109	6,476	9,092	2,848
Cash income after interest is deducted	do.	7,091	2,142	-2,605	-6,336	4,263	-18,529	2,101
Percent of farms with negative cash income	Percent	23.48	37.13	52.67	44.59	41.01	81.88	36.65
Total expenses including depreciation	Dollars	24,039	30,884	34,596	36,308	39,538	44,041	29,794
Contractor expenses	do.	490	568	1,714	5,703	19,502	0	1,869
Total expenses including contractors	do.	24,528	31,452	36,311	42,011	59,039	44,041	31,663
Net cash farm income including contractors	do.	9,208	4,170	-1,386	1,316	10,949	-18,192	4,522
Percent of farms with negative NCFI	Percent	23.88	37.21	48.54	44.67	39.14	80.28	35.76
Net farm income	Dollars	8,888	2,728	1,116	1,405	4,082	-12,656	4,619
Percent of farms with negative net farm income	Percent	23.16	26.95	41.28	32.97	37.49	78.79	30.92
Net farm income including contractors	Dollars	11,006	4,755	2,335	9,057	10,768	-12,320	7,039
Percent of farms with negative NFI	Percent	23.67	26.95	40.77	32.30	35.45	78.79	30.91
Estimated principal repayment	Dollars	0	1,252	4,102	5,981	8,876	10,941	2,269
Cash income after interest and principal are deducted	do.	7,091	890	-6,707	-12,317	-4,613	-29,470	-168
Percent of farms with negative cash income	Percent	23.48	39.56	62.85	68.91	42.23	87.75	41.50
Nonfarm income	Dollars	28,526	22,360	31,930	27,642	17,671	11,778	27,291
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	16,416	4,050	6,023	-3,875	-6,142	-36,892	7,923
Percent of farms with negative income after principal and family living expenses are deducted	Percent	37.20	46.87	42.18	62.65	67.33	85.42	44.46

See footnotes at end of table.

Continued--

Appendix table 28--Combined farm income and cash-flow statement by economic class, January 1, 1989--Continued

\$10,000-\$19,999	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	111,622	34,641	44,685	12,160	4,603	2,056	209,765
Percent of farms	Percent	53.21	16.51	21.30	5.79	2.19	.97	100.00
Farm income:								
Livestock sales	Dollars	7,797	8,463	6,788	5,448	4,335	2,561	7,428
Crop sales	do.	3,718	4,147	4,945	4,786	5,738	10,599	4,224
Net change in CCC loans	do.	-33	-79	-211	357	-291	0	-61
Government payments	do.	808	838	1,426	2,066	2,816	1,183	1,065
Other farm income	do.	1,678	2,155	1,758	1,591	2,805	489	1,782
Gross cash farm income	do.	13,968	15,523	14,706	14,247	15,404	14,832	14,438
Nonmoney income	do.	7,545	8,211	7,871	4,800	5,280	3,280	7,474
Value of inventory change	do.	-124	692	2,401	723	3,448	33	677
Gross farm income	do.	21,388	24,425	24,977	19,770	24,132	18,145	22,589
Estimated contractor income	do.	427	9,331	757	4,906	11,647	0	2,469
Gross farm income including contractors	do.	21,815	33,756	25,734	24,676	35,779	18,145	25,058
Operating expenses excluding interest	do.	11,831	16,686	14,974	11,137	12,738	14,554	13,309
Cash income before interest is deducted	do.	2,137	-1,163	-268	3,111	2,666	278	1,129
Percent of farms with negative cash income	Percent	33.85	47.42	44.72	33.85	32.29	37.73	38.41
Interest expense	Dollars	186	984	3,465	6,894	7,093	6,417	1,618
Cash income after interest is deducted	do.	1,951	-2,147	-3,733	-3,783	-4,427	-6,139	-488
Percent of farms with negative cash income	Percent	35.18	54.33	62.09	54.67	49.84	78.39	45.95
Total expenses including depreciation	Dollars	13,769	19,614	20,999	19,626	21,562	22,668	16,872
Contractor expenses	do.	1,020	35	412	0	10,512	0	867
Total expenses including contractors	do.	14,789	19,649	21,411	19,626	32,074	22,668	17,739
Net cash farm income including contractors	do.	1,359	7,149	-3,389	1,123	-3,292	-6,139	1,114
Percent of farms with negative NCFI	Percent	35.38	52.47	61.77	50.65	52.34	78.39	45.50
Net farm income	Dollars	7,619	4,812	3,979	144	2,570	-4,523	5,717
Percent of farms with negative net farm income	Percent	19.18	23.44	35.73	34.16	25.61	63.63	24.85
Net farm income including contractors	do.	7,026	14,108	4,323	5,050	3,705	-4,523	7,319
Percent of farms with negative NFI	Percent	19.38	21.90	35.38	31.90	28.11	63.63	24.56
Estimated principal repayment	Dollars	0	728	2,805	5,711	6,967	7,801	1,278
Cash income after interest and principal are deducted	do.	1,951	-2,875	-6,538	-9,494	-11,394	-13,940	-1,766
Percent of farms with negative cash income	Percent	35.18	57.02	73.80	82.47	74.76	93.51	51.20
Nonfarm income	Dollars	48,744	31,572	35,380	29,389	28,349	20,708	41,217
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	31,495	9,497	9,642	696	-2,245	-12,432	20,251
Percent of farms with negative income after principal and family living expenses are deducted	Percent	50.85	52.54	41.75	37.23	52.30	87.09	48.79

See footnotes at end of table.

Continued--

Appendix table 28--Combined farm income and cash-flow statement by economic class, January 1, 1989--Continued

Less than \$10,000	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	510,328	95,968	125,433	50,481	13,955	5,496	801,660
Percent of farms	Percent	63.65	11.97	15.64	6.29	1.74	.68	100.00
Farm income:								
Livestock sales	Dollars	1,944	2,449	1,958	1,571	1,777	1,166	1,975
Crop sales	do.	1,306	1,165	1,424	1,341	1,257	1,462	1,310
Net change in CCC loans	do.	-1	-4	5	65	0	-7	4
Government payments	do.	145	145	152	198	508	132	155
Other farm income	do.	547	1,004	695	410	204	592	610
Gross cash farm income	do.	3,940	4,759	4,233	3,585	3,747	3,346	4,054
Nonmoney income	do.	6,563	8,272	8,482	8,853	6,180	1,925	7,173
Value of inventory change	do.	246	648	511	484	72	881	352
Gross farm income	do.	10,749	13,679	13,226	12,922	9,998	6,152	11,580
Estimated contractor income	do.	120	868	145	447	70	0	233
Gross farm income including contractors	do.	10,870	14,547	13,371	13,368	10,068	6,152	11,812
Operating expenses excluding interest	do.	5,031	8,044	6,901	6,455	5,778	5,759	5,792
Cash income before interest is deducted	do.	-1,090	-3,285	-2,667	-2,870	-2,032	-2,414	-1,737
Percent of farms with negative cash income	Percent	61.09	70.89	69.97	78.34	66.61	76.46	64.94
Interest expense	Dollars	120	882	2,443	4,515	3,881	3,341	939
Cash income after interest is deducted	do.	-1,210	-4,166	-5,110	-7,385	-5,913	-5,755	-2,676
Percent of farms with negative cash income	Percent	61.59	74.41	82.45	90.06	83.71	86.86	68.74
Total expenses including depreciation	Dollars	5,675	10,552	10,412	12,067	10,304	10,327	7,515
Contractor expenses	do.	26	45	120	19	336	0	48
Total expenses including contractors	do.	5,701	10,598	10,531	12,086	10,639	10,327	7,563
Net cash farm income including contractors	do.	-1,116	-3,344	-5,085	-6,957	-6,178	-5,755	-2,492
Percent of farms with negative NCFI	Percent	61.59	74.28	82.27	89.51	83.71	86.86	68.66
Net farm income	Dollars	5,075	3,127	2,815	854	-305	-4,175	4,065
Percent of farms with negative net farm income	Percent	17.40	29.01	34.17	43.63	55.67	72.90	24.11
Net farm income including contractors	Dollars	5,169	3,950	2,840	1,283	-571	-4,175	4,250
Percent of farms with negative NFI	Percent	17.40	29.01	34.20	43.08	55.67	72.90	24.08
Estimated principal repayment	Dollars	0	672	2,629	5,784	6,074	6,660	1,008
Cash income after interest and principal are deducted	do.	-1,210	-4,838	-7,739	-13,169	-11,987	-12,415	-3,684
Percent of farms with negative cash income	Percent	61.59	81.48	92.22	98.27	100.00	100.00	72.00
Nonfarm income	Dollars	26,044	43,751	40,069	46,089	40,927	24,567	31,869
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	5,634	19,712	13,129	13,720	9,741	-7,047	8,986
Percent of farms with negative income after principal and family living expenses are deducted	Percent	55.29	48.65	36.68	36.21	57.94	67.48	50.51

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989

Cash grains	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	123,208	47,488	103,050	41,623	15,583	8,815	339,766
Percent of farms	Percent	36.26	13.97	30.32	12.25	4.58	2.59	100.00
Farm income:								
Livestock sales	Dollars	3,409	8,143	12,187	16,690	7,665	7,560	8,663
Crop sales	do.	30,561	54,732	63,457	65,567	44,941	61,406	49,665
Net change in CCC loans	do.	-1,229	-4,584	-5,630	-7,294	-6,000	-5,893	-4,115
Government payments	do.	8,567	16,177	18,624	22,675	17,635	18,265	15,077
Other farm income	do.	2,487	14,152	5,610	8,362	8,215	8,678	6,207
Gross cash farm income	do.	43,794	88,620	94,249	106,000	72,456	90,016	75,496
Nonmoney income	do.	5,669	7,948	5,911	5,595	3,246	2,153	5,850
Value of inventory change	do.	2,005	6,404	7,392	5,476	5,064	-5,996	4,612
Gross farm income	do.	51,469	102,973	107,552	117,071	80,767	86,172	85,958
Estimated contractor income	do.	978	4,541	4,029	2,497	1,350	3,129	2,660
Gross farm income including contractors	do.	52,447	107,513	111,580	119,568	82,116	89,302	88,618
Operating expenses excluding interest	do.	27,934	52,680	63,185	72,510	56,185	66,044	49,830
Cash income before interest is deducted	do.	15,860	35,940	31,063	33,490	16,271	23,972	25,667
Percent of farms with negative cash income	Percent	27.76	22.40	25.19	23.20	24.44	32.38	25.64
Interest expense	Dollars	692	4,075	10,407	18,215	12,651	12,428	7,111
Cash income after interest is deducted	do.	15,168	31,865	20,656	15,275	3,620	11,544	18,556
Percent of farms with negative cash income	Percent	29.27	27.57	38.24	36.93	41.07	40.65	33.53
Total expenses including depreciation	Dollars	34,000	66,911	84,230	100,901	76,680	85,218	65,316
Contractor expenses	do.	553	15,503	1,477	957	188	1,109	2,970
Total expenses including contractors	do.	34,554	82,414	85,708	101,858	76,868	86,327	68,287
Net cash farm income including contractors	do.	15,593	20,903	23,208	16,816	4,781	13,565	18,246
Percent of farms with negative NCFI	Percent	29.25	27.36	37.32	35.43	39.98	40.59	32.98
Net farm income	Dollars	17,469	36,062	23,322	16,170	4,087	954	20,641
Percent of farms with negative net farm income	Percent	18.95	22.73	29.12	33.22	35.75	50.80	25.91
Net farm income including contractors	Dollars	17,893	25,099	25,873	17,710	5,248	2,975	20,331
Percent of farms with negative NFI	Percent	18.93	22.28	28.67	31.98	34.75	48.11	25.44
Estimated principal repayment	Dollars	0	1,818	6,020	11,912	11,584	14,643	4,451
Cash income after interest and principal are deducted	do.	15,168	30,047	14,636	3,363	-7,964	-3,099	14,105
Percent of farms with negative cash income	Percent	29.27	28.89	47.26	51.31	51.96	66.59	39.38
Nonfarm income	Dollars	24,947	22,482	23,656	19,534	18,446	14,723	22,984
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	20,915	33,329	19,092	3,697	-8,718	-7,576	17,890
Percent of farms with negative income after principal and family living expenses are deducted	Percent	33.84	34.44	33.55	42.85	65.75	62.37	37.14

See footnotes at end of table.

Continued--

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989--Continued

Tobacco	Unit	No debt	Debt/asset ratio				Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0		
Number of farms	Number	42,923	10,140	14,489	4,650	d	d	76,177
Percent of farms	Percent	56.34	13.31	19.02	6.10	d	d	100.00
Farm income:								
Livestock sales	Dollars	1,038	2,634	2,417	2,307	d	d	1,643
Crop sales	do.	12,542	34,615	39,257	40,555	d	d	23,022
Net change in CCC loans	do.	-3	11	122	-115	d	d	43
Government payments	do.	429	1,303	1,952	2,163	d	d	984
Other farm income	do.	617	710	1,213	3,084	d	d	901
Gross cash farm income	do.	14,623	39,273	44,961	47,994	d	d	26,593
Nonmoney income	do.	5,139	6,257	6,567	5,363	d	d	5,452
Value of inventory change	do.	629	1,250	1,758	1,683	d	d	1,043
Gross farm income	do.	20,391	46,779	53,285	55,039	d	d	33,087
Estimated contractor income	do.	0	0	4,758	10,761	d	d	1,562
Gross farm income including contractors	do.	20,391	46,779	58,043	65,800	d	d	34,649
Operating expenses								
excluding interest	do.	10,802	25,336	31,031	33,184	d	d	18,613
Cash income before interest is deducted	do.	3,822	13,936	13,930	14,810	d	d	7,980
Percent of farms with negative cash income	Percent	32.59	35.19	35.40	41.76	d	d	34.92
Interest expense	Dollars	212	1,474	4,218	5,851	d	d	1,921
Cash income after interest is deducted	do.	3,610	12,462	9,711	8,958	d	d	6,059
Percent of farms with negative cash income	Percent	33.64	45.30	44.20	51.49	d	d	41.10
Total expenses including depreciation	Dollars	11,843	29,543	38,338	43,371	d	d	22,280
Contractor expenses	do.	0	0	3,321	15,637	d	d	1,586
Total expenses including contractors	do.	11,843	29,543	41,659	59,009	d	d	23,866
Net cash farm income including contractors	do.	3,610	12,462	11,148	4,082	d	d	6,035
Percent of farms with negative NCFI	Percent	33.64	45.30	44.20	53.43	d	d	41.22
Net farm income	Dollars	8,549	17,236	14,947	11,667	d	d	10,807
Percent of farms with negative net farm income	Percent	6.21	21.22	22.53	18.38	d	d	15.58
Net farm income including contractors	Dollars	8,549	17,236	16,384	6,791	d	d	10,783
Percent of farms with negative NFI	Percent	6.21	21.22	22.97	20.32	d	d	15.78
Estimated principal repayment	Dollars	0	1,038	3,139	5,305	d	d	1,421
Cash income after interest and principal are deducted	do.	3,610	11,424	6,572	3,653	d	d	4,638
Percent of farms with negative cash income	Percent	33.64	58.52	56.34	67.56	d	d	46.22
Nonfarm income	Dollars	20,140	30,618	30,877	20,923	d	d	23,551
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	d	d	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	4,550	22,842	18,249	5,376	d	d	8,989
Percent of farms with negative income after principal and family living expenses are deducted	Percent	61.94	56.09	34.97	46.36	d	d	56.10

See footnotes at end of table.

Continued--

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989--Continued

Cotton	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0			
Number of farms	Number	8,395	3,085	5,437	1,907	803	486	20,112	
Percent of farms	Percent	41.74	15.33	27.03	9.48	3.99	2.41	100.00	
Farm income:									
Livestock sales	Dollars	2,601	6,431	5,644	3,157	9,824	469	4,301	
Crop sales	do.	75,514	106,494	153,466	159,201	128,822	174,666	113,796	
Net change in CCC loans	do.	27,626	24,695	19,462	15,131	16,427	37,410	23,574	
Government payments	do.	22,567	28,181	37,116	33,434	34,583	47,275	29,468	
Other farm income	do.	5,876	13,201	8,355	16,466	28,611	13,387	9,763	
Gross cash farm income	do.	134,184	179,002	224,043	227,390	218,267	273,206	180,901	
Nonmoney income	do.	8,190	3,711	6,198	2,200	2,734	2,195	6,034	
Value of inventory change	do.	4,580	2,933	5,811	8,534	-203	3,035	4,807	
Gross farm income	do.	146,954	185,646	236,052	238,124	220,798	278,436	191,742	
Estimated contractor income	do.	0	692	12,010	2,959	3,931	0	3,790	
Gross farm income including contractors	do.	146,954	186,337	248,062	241,083	224,729	278,436	195,532	
Operating expenses excluding interest	do.	98,146	121,937	176,952	166,677	179,160	180,066	134,809	
Cash income before interest is deducted	do.	36,038	57,065	47,092	60,713	39,107	93,140	46,093	
Percent of farms with negative cash income	Percent	17.69	15.21	23.50	13.01	22.57	8.40	18.41	
Interest expense	Dollars	2,282	6,970	13,243	20,027	13,700	26,467	8,687	
Cash income after interest is deducted	do.	33,756	50,095	33,848	40,686	25,407	66,673	37,406	
Percent of farms with negative cash income	Percent	18.10	16.58	30.29	36.43	38.68	16.71	23.69	
Total expenses including depreciation	Dollars	115,572	139,278	208,857	201,661	208,339	219,702	158,806	
Contractor expenses	do.	0	92	21	0	0	0	20	
Total expenses including contractors	do.	115,572	139,370	208,878	201,661	208,339	219,702	158,826	
Net cash farm income including contractors	do.	33,756	50,695	45,838	43,645	29,338	66,673	41,176	
Percent of farms with negative NCFI	Percent	18.10	16.51	30.91	36.43	38.68	16.71	23.84	
Net farm income	Dollars	31,382	46,367	27,195	36,463	12,459	58,734	32,936	
Percent of farms with negative net farm income	Percent	12.25	19.31	24.24	38.71	37.21	22.45	20.33	
Net farm income including contractors	Dollars	31,382	46,967	39,184	39,422	16,390	58,734	36,706	
Percent of farms with negative NFI	Percent	12.25	19.24	24.86	38.71	31.94	22.45	20.27	
Estimated principal repayment	Dollars	0	2,817	11,366	15,116	21,170	33,028	6,581	
Cash income after interest and principal are deducted	do.	33,756	47,278	22,482	25,570	4,237	33,645	30,825	
Percent of farms with negative cash income	Percent	18.10	17.95	36.68	43.13	56.14	29.91	27.27	
Nonfarm income	Dollars	27,567	24,528	21,739	10,160	15,191	12,894	23,027	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	42,123	52,605	25,021	16,530	228	27,340	34,651	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	33.43	15.93	32.89	44.40	56.14	51.52	32.99	

See footnotes at end of table.

Continued--

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989--Continued

Other field crops	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0			
Number of farms	Number	64,022	15,616	26,020	15,250	4,120	2,416	127,445	
Percent of farms	Percent	50.23	12.25	20.41	11.96	3.23	1.89	100.00	
Farm income:									
Livestock sales	Dollars	884	2,616	3,936	3,287	4,943	1,943	2,158	
Crop sales	do.	16,586	32,963	57,467	44,901	47,576	62,343	32,197	
Net change in CCC loans	do.	62	-355	-2,133	-1,090	-666	2,000	-562	
Government payments	do.	1,347	2,791	4,430	4,982	4,509	10,118	2,857	
Other farm income	do.	1,957	6,680	5,192	2,947	3,259	15,604	3,616	
Gross cash farm income	do.	20,835	44,695	68,893	55,028	59,621	92,009	40,265	
Nonmoney income	do.	8,252	10,203	10,142	6,942	4,997	4,027	8,535	
Value of inventory change	do.	871	2,527	4,153	5,014	7,667	3,200	2,504	
Gross farm income	do.	29,958	57,425	83,188	66,984	72,285	99,236	51,304	
Estimated contractor income	do.	2,430	6,093	13,979	10,293	6,895	26,278	6,774	
Gross farm income including contractors	do.	32,389	63,518	97,167	77,277	79,180	125,514	58,078	
Operating expenses excluding interest	do.	14,723	32,316	45,664	37,313	49,121	77,168	28,195	
Cash income before interest is deducted	do.	6,112	12,379	23,229	17,714	10,499	14,840	12,070	
Percent of farms with negative cash income	Percent	45.65	49.03	27.22	51.43	28.34	39.87	42.32	
Interest expense	Dollars	450	2,904	8,464	10,765	12,210	14,321	4,264	
Cash income after interest is deducted	do.	5,663	9,476	14,765	6,949	-1,711	519	7,806	
Percent of farms with negative cash income	Percent	46.84	55.24	40.16	67.30	52.60	54.58	49.28	
Total expenses including depreciation	Dollars	17,007	41,004	61,254	53,116	65,420	97,516	36,394	
Contractor expenses	do.	3	19	179	152	4	192	62	
Total expenses including contractors	do.	17,011	41,023	61,433	53,268	65,424	97,707	36,456	
Net cash farm income including contractors	do.	8,090	15,550	28,565	17,090	5,180	26,606	14,518	
Percent of farms with negative NCFI	Percent	46.63	53.97	39.36	66.25	47.49	50.01	48.48	
Net farm income	Dollars	12,951	16,421	21,933	13,868	6,865	1,720	14,910	
Percent of farms with negative net farm income	Percent	9.01	20.38	19.10	43.50	15.70	51.63	17.61	
Net farm income including contractors	Dollars	15,378	22,495	35,734	24,009	13,756	27,806	21,622	
Percent of farms with negative NFI	Percent	8.91	20.13	17.36	42.45	10.56	50.26	16.86	
Estimated principal repayment	Dollars	0	1,891	5,373	9,411	13,373	18,412	3,236	
Cash income after interest and principal are deducted	do.	5,663	7,585	9,392	-2,462	-15,084	-17,893	4,570	
Percent of farms with negative cash income	Percent	46.84	62.77	57.05	71.16	85.15	72.81	55.52	
Nonfarm income	Dollars	32,160	30,730	28,801	33,088	41,213	18,121	31,436	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	18,622	19,114	18,994	11,426	6,929	-18,972	16,806	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	42.43	48.34	36.39	49.94	63.39	63.79	43.90	

See footnotes at end of table.

Continued--

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989--Continued

Vegetables, fruit, and nuts	Unit	No debt	Debt/asset ratio				Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0		
Number of farms	Number	43,431	11,988	17,627	8,132	d	d	83,065
Percent of farms	Percent	52.28	14.43	21.22	9.78	d	d	100.00
Farm income:								
Livestock sales	Dollars	592	1,266	1,121	436	d	d	778
Crop sales	do.	60,266	113,138	133,411	61,642	d	d	88,738
Net change in CCC loans	do.	79	-216	-65	-263	d	d	-110
Government payments	do.	559	723	2,218	3,269	d	d	1,230
Other farm income	do.	2,831	2,986	4,430	5,005	d	d	3,616
Gross cash farm income	do.	64,327	117,897	141,115	70,089	d	d	94,252
Nonmoney income	do.	9,102	13,420	8,597	11,823	d	d	9,912
Value of inventory change	do.	295	3,990	6,813	7,164	d	d	2,896
Gross farm income	do.	73,723	135,307	156,525	89,076	d	d	107,060
Estimated contractor income	do.	5,345	11,921	30,001	5,515	d	d	12,067
Gross farm income including contractors	do.	79,069	147,228	186,527	94,591	d	d	119,127
Operating expenses excluding interest	do.	45,543	84,504	104,939	58,034	d	d	70,805
Cash income before interest is deducted	do.	18,784	33,393	36,177	12,055	d	d	23,447
Percent of farms with negative cash income	Percent	43.45	30.50	32.70	56.68	d	d	40.71
Interest expense	Dollars	727	6,201	11,825	14,657	d	d	5,914
Cash income after interest is deducted	do.	18,058	27,192	24,352	-2,603	d	d	17,532
Percent of farms with negative cash income	Percent	44.10	35.52	49.52	69.60	d	d	47.00
Total expenses including depreciation	Dollars	50,538	103,663	128,802	81,791	d	d	84,730
Contractor expenses	do.	94	66	443	205	d	d	173
Total expenses including contractors	do.	50,632	103,729	129,245	81,996	d	d	84,903
Net cash farm income including contractors	do.	23,309	39,047	53,910	2,707	d	d	29,426
Percent of farms with negative NCFI	Percent	43.65	35.50	40.86	65.64	d	d	44.54
Net farm income	Dollars	23,185	31,644	27,723	7,285	d	d	22,331
Percent of farms with negative net farm income	Percent	17.91	10.96	28.59	44.04	d	d	22.37
Net farm income including contractors	Dollars	28,436	43,499	57,282	12,595	d	d	34,225
Percent of farms with negative NFI	Percent	17.35	10.79	27.43	39.26	d	d	21.34
Estimated principal repayment	Dollars	0	2,281	8,277	11,648	d	d	4,017
Cash income after interest and principal are deducted	do.	18,058	24,911	16,075	-14,251	d	d	13,515
Percent of farms with negative cash income	Percent	44.10	40.80	57.04	78.72	d	d	50.47
Nonfarm income	Dollars	33,451	56,418	41,396	47,556	d	d	40,738
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	d	d	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	32,309	62,129	38,271	14,106	d	d	35,053
Percent of farms with negative income after principal and family living expenses are deducted	Percent	40.87	39.52	35.51	37.80	d	d	39.41

See footnotes at end of table.

Continued--

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989--Continued

Nursery and greenhouse	Unit	No debt	Debt/asset ratio				Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0		
Number of farms	Number	14,407	7,130	8,633	3,353	d	d	34,760
Percent of farms	Percent	41.44	20.51	24.83	9.64	d	d	100.00
Farm income:								
Livestock sales	Dollars	135	29	132	0	d	d	95
Crop sales	do.	170,727	160,648	178,786	72,298	d	d	160,245
Net change in CCC loans	do.	0	0	0	0	d	d	0
Government payments	do.	0	0	58	28	d	d	17
Other farm income	do.	2,324	2,090	2,861	142	d	d	2,177
Gross cash farm income	do.	173,185	162,767	181,837	72,469	d	d	162,534
Nonmoney income	do.	7,678	5,280	9,773	6,468	d	d	7,552
Value of inventory change	do.	1,349	1,115	885	18,552	d	d	2,817
Gross farm income	do.	182,212	169,162	192,495	97,489	d	d	172,902
Estimated contractor income	do.	0	0	0	0	d	d	0
Gross farm income including contractors	do.	182,212	169,162	192,495	97,489	d	d	172,902
Operating expenses excluding interest	do.	106,389	131,303	115,820	67,011	d	d	109,911
Cash income before interest is deducted	do.	66,796	31,465	66,017	5,458	d	d	52,623
Percent of farms with negative cash income	Percent	28.96	51.66	48.41	71.79	d	d	43.07
Interest expense	Dollars	378	2,630	6,949	7,832	d	d	3,460
Cash income after interest is deducted	do.	66,418	28,835	59,068	-2,374	d	d	49,163
Percent of farms with negative cash income	Percent	29.20	52.89	64.83	75.59	d	d	48.52
Total expenses including depreciation	Dollars	112,815	143,928	133,288	80,988	d	d	121,420
Contractor expenses	do.	0	0	0	0	d	d	0
Total expenses including contractors	do.	112,815	143,928	133,288	80,988	d	d	121,420
Net cash farm income including contractors	do.	66,418	28,835	59,068	-2,374	d	d	49,163
Percent of farms with negative NCFI	Percent	29.20	52.89	64.83	75.59	d	d	48.52
Net farm income	Dollars	69,397	25,235	59,207	16,501	d	d	51,482
Percent of farms with negative net farm income	Percent	10.97	42.29	21.47	61.18	d	d	26.08
Net farm income including contractors	Dollars	69,397	25,235	59,207	16,501	d	d	51,482
Percent of farms with negative NFI	Percent	10.97	42.29	21.47	61.18	d	d	26.08
Estimated principal repayment	Dollars	0	1,291	8,360	9,836	d	d	3,683
Cash income after interest and principal are deducted	do.	66,418	27,544	50,708	-12,210	d	d	45,480
Percent of farms with negative cash income	Percent	29.20	54.83	75.46	79.60	d	d	51.95
Nonfarm income	Dollars	28,320	117,900	42,928	34,301	d	d	51,113
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	d	d	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	75,538	126,244	74,436	2,891	d	d	77,393
Percent of farms with negative income after principal and family living expenses are deducted	Percent	35.91	27.87	22.48	62.16	d	d	32.57

See footnotes at end of table.

Continued--

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989--Continued

Beef, hogs, and sheep	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	479,276	128,677	169,923	55,635	16,316	8,584	858,411
Percent of farms	Percent	55.83	14.99	19.79	6.48	1.90	.99	100.00
Farm income:								
Livestock sales	Dollars	14,233	40,925	55,654	80,003	105,465	94,761	33,235
Crop sales	do.	1,814	6,070	7,996	11,287	26,491	19,875	4,939
Net change in CCC loans	do.	-105	-370	-862	-1,476	-1,167	-2,542	-428
Government payments	do.	850	2,870	4,342	6,308	5,591	5,552	2,335
Other farm income	do.	1,190	2,496	2,936	4,013	32,626	6,034	2,560
Gross cash farm income	do.	17,982	51,991	70,067	100,134	169,006	123,680	42,642
Nonmoney income	do.	6,664	7,972	7,497	8,111	6,591	3,884	7,090
Value of inventory change	do.	198	2,537	6,016	7,351	-2,092	6,135	2,180
Gross farm income	do.	24,845	62,499	83,579	115,596	173,505	133,700	51,911
Estimated contractor income	do.	5,514	8,772	5,918	17,016	50,068	36,657	7,986
Gross farm income including contractors	do.	30,359	71,271	89,497	132,612	223,573	170,357	59,898
Operating expenses								
excluding interest	do.	15,554	42,628	57,762	83,379	134,525	106,808	35,537
Cash income before interest is deducted	do.	2,428	9,362	12,304	16,755	34,480	16,872	7,105
Percent of farms with negative cash income	Percent	54.32	51.52	48.70	49.27	52.21	53.50	52.41
Interest expense	Dollars	206	2,509	7,003	12,835	15,468	19,492	3,198
Cash income after interest is deducted	do.	2,222	6,853	5,301	3,920	19,013	-2,619	3,906
Percent of farms with negative cash income	Percent	54.86	56.46	61.92	60.58	68.03	65.34	57.23
Total expenses including depreciation	Dollars	17,800	49,754	70,891	103,692	156,820	132,232	42,453
Contractor expenses	do.	1,090	2,861	1,552	3,332	3,338	2,683	1,651
Total expenses including contractors	do.	18,890	52,615	72,444	107,024	160,158	134,915	44,104
Net cash farm income including contractors	do.	6,646	12,764	9,666	17,603	65,743	31,355	10,242
Percent of farms with negative NCFI	Percent	54.94	56.34	61.51	59.49	68.03	65.01	57.10
Net farm income	Dollars	7,045	12,745	12,688	11,904	16,684	1,467	9,459
Percent of farms with negative net farm income	Percent	20.57	25.62	35.17	38.75	56.96	58.00	26.46
Net farm income including contractors	Dollars	11,469	18,656	17,054	25,588	63,415	35,442	15,794
Percent of farms with negative NFI	Percent	20.67	25.56	34.92	37.08	56.07	57.52	26.33
Estimated principal repayment	Dollars	0	1,326	5,229	11,116	14,583	22,479	2,456
Cash income after interest and principal are deducted	do.	2,222	5,527	72	-7,196	4,430	-25,098	1,450
Percent of farms with negative cash income	Percent	54.86	60.61	70.32	77.52	84.49	83.21	61.10
Nonfarm income	Dollars	30,808	30,784	32,868	33,757	22,090	28,945	31,219
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	13,829	17,111	13,740	7,361	7,319	-15,353	13,469
Percent of farms with negative income after principal and family living expenses are deducted	Percent	52.14	42.51	40.22	44.15	58.92	75.67	48.18

See footnotes at end of table.

Continued--

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989--Continued

Poultry	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	7,486	3,843	7,358	4,960	d	d	27,227
Percent of farms	Percent	27.49	14.11	27.02	18.21	d	d	100.00
Farm income:								
Livestock sales	Dollars	6,668	76,857	48,620	55,254	d	d	47,063
Crop sales	do.	11,945	14,968	33,283	53,376	d	d	34,371
Net change in CCC loans	do.	0	-192	-248	275	d	d	-44
Government payments	do.	187	1,912	938	1,347	d	d	876
Other farm income	do.	14,097	37,295	42,745	35,655	d	d	29,806
Gross cash farm income	do.	32,897	130,841	125,338	145,907	d	d	112,072
Nonmoney income	do.	7,361	13,754	11,825	14,207	d	d	10,586
Value of inventory change	do.	-246	-2,672	2,133	1,395	d	d	245
Gross farm income	do.	40,012	141,923	139,297	161,509	d	d	122,904
Estimated contractor income	do.	115,364	269,555	267,650	311,419	d	d	216,113
Gross farm income including contractors	do.	155,376	411,478	406,947	472,929	d	d	339,017
Operating expenses excluding interest	do.	14,297	106,725	66,182	79,526	d	d	57,212
Cash income before interest is deducted	do.	18,600	24,116	59,156	66,381	d	d	54,860
Percent of farms with negative cash income	Percent	28.14	18.07	26.56	21.69	d	d	26.95
Interest expense	Dollars	609	4,543	8,256	18,971	d	d	7,481
Cash income after interest is deducted	do.	17,991	19,573	50,900	47,409	d	d	47,379
Percent of farms with negative cash income	Percent	28.14	18.45	30.19	31.65	d	d	29.80
Total expenses including depreciation	Dollars	17,735	122,332	87,187	113,430	d	d	73,592
Contractor expenses	do.	73,161	89,610	110,592	208,239	d	d	114,823
Total expenses including contractors	do.	90,897	211,942	197,778	321,669	d	d	188,415
Net cash farm income including contractors	do.	60,194	199,518	207,959	150,590	d	d	148,669
Percent of farms with negative NCFI	Percent	37.79	19.90	29.29	31.05	d	d	32.73
Net farm income	Dollars	22,276	19,591	52,110	48,079	d	d	49,311
Percent of farms with negative net farm income	Percent	7.60	22.97	15.21	16.72	d	d	18.02
Net farm income including contractors	Dollars	64,479	199,536	209,168	151,260	d	d	150,602
Percent of farms with negative NFI	Percent	11.95	24.80	15.15	11.19	d	d	18.87
Estimated principal repayment	Dollars	0	2,094	9,367	13,937	d	d	6,858
Cash income after interest and principal are deducted	do.	17,991	17,479	41,553	33,472	d	d	40,531
Percent of farms with negative cash income	Percent	28.14	18.45	37.02	44.98	d	d	34.49
Nonfarm income	Dollars	18,662	22,635	24,117	21,576	d	d	22,142
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	d	d	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	17,452	20,914	46,470	35,849	d	d	43,472
Percent of farms with negative income after principal and family living expenses are deducted	Percent	24.06	37.91	27.29	35.45	d	d	32.16

See footnotes at end of table.

Continued--

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989--Continued

Dairy	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	35,341	29,954	46,693	21,319	5,966	2,754	142,027
Percent of farms	Percent	24.88	21.09	32.87	15.01	4.20	1.93	100.00
Farm income:								
Livestock sales	Dollars	89,004	114,933	169,676	153,670	165,398	173,341	135,546
Crop sales	do.	4,934	5,877	6,005	5,466	2,074	17,897	5,696
Net change in CCC loans	do.	-503	-973	-1,718	-513	-899	-510	-1,020
Government payments	do.	2,386	4,936	5,943	6,979	7,452	8,164	5,108
Other farm income	do.	2,862	2,315	3,255	3,059	3,003	4,398	2,941
Gross cash farm income	do.	98,685	127,088	183,161	168,661	177,028	203,289	148,271
Nonmoney income	do.	7,728	8,810	8,879	6,781	6,789	3,636	8,074
Value of inventory change	do.	-1,408	739	3,300	4,306	4,439	-7,395	1,580
Gross farm income	do.	105,005	136,637	195,340	179,748	188,256	199,530	157,925
Estimated contractor income	do.	1,217	1,558	1,888	447	0	0	1,319
Gross farm income including contractors	do.	106,221	138,196	197,228	180,196	188,256	199,530	159,244
Operating expenses excluding interest	do.	67,515	90,793	131,079	120,082	134,245	166,186	105,929
Cash income before interest is deducted	do.	31,170	36,295	52,082	48,579	42,783	37,104	42,342
Percent of farms with negative cash income	Percent	17.95	13.01	8.74	4.71	13.09	13.98	11.61
Interest expense	Dollars	1,008	3,820	13,449	19,664	20,513	18,498	9,650
Cash income after interest is deducted	do.	30,162	32,476	38,633	28,916	22,270	18,606	32,692
Percent of farms with negative cash income	Percent	19.02	16.70	17.98	16.89	21.10	19.08	17.96
Total expenses including depreciation	Dollars	77,370	107,132	161,686	154,552	171,606	193,312	129,159
Contractor expenses	do.	0	859	817	235	0	0	485
Total expenses including contractors	do.	77,370	107,992	162,503	154,787	171,606	193,312	129,644
Net cash farm income including contractors	do.	31,378	33,175	39,703	29,127	22,270	18,606	33,526
Percent of farms with negative NCFI	Percent	19.02	16.68	17.88	16.89	21.10	19.08	17.92
Net farm income	Dollars	27,635	29,505	33,654	25,196	16,651	6,218	28,765
Percent of farms with negative net farm income	Percent	17.46	17.07	21.15	27.84	29.39	32.70	20.95
Net farm income including contractors	Dollars	28,851	30,204	34,725	25,408	16,651	6,218	29,599
Percent of farms with negative NFI	Percent	17.46	16.88	20.65	27.84	29.39	32.70	20.74
Estimated principal repayment	Dollars	0	1,980	9,155	16,176	22,183	23,105	7,235
Cash income after interest and principal are deducted	do.	30,162	30,496	29,478	12,740	87	-4,499	25,457
Percent of farms with negative cash income	Percent	19.02	17.10	22.49	36.94	36.41	48.14	23.74
Nonfarm income	Dollars	11,629	10,331	11,136	11,216	15,466	8,860	11,239
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	22,591	21,627	21,414	4,756	-3,647	-14,840	17,495
Percent of farms with negative income after principal and family living expenses are deducted	Percent	35.51	34.87	38.24	52.55	70.33	59.55	40.76

See footnotes at end of table.

Continued--

Appendix table 29--Combined farm income and cash-flow statement by production specialty, January 1, 1989--Continued

Other livestock	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
Number of farms	Number	25,969	9,094	13,566	4,808	d	d	55,098	
Percent of farms	Percent	47.13	16.50	24.62	8.72	d	d	100.00	
Farm income:									
Livestock sales	Dollars	13,941	9,361	19,898	24,119	d	d	16,597	
Crop sales	do.	1,562	2,008	1,371	827	d	d	1,506	
Net change in CCC loans	do.	-24	19	-573	0	d	d	-149	
Government payments	do.	38	156	345	339	d	d	175	
Other farm income	do.	4,079	2,879	3,507	438	d	d	3,900	
Gross cash farm income	do.	19,595	14,423	24,548	25,722	d	d	22,030	
Nonmoney income	do.	11,881	12,345	8,861	7,291	d	d	10,682	
Value of inventory change	do.	-5,006	2,215	-667	6,050	d	d	-2,984	
Gross farm income	do.	26,470	28,983	32,742	39,063	d	d	29,728	
Estimated contractor income	do.	0	0	4,414	0	d	d	1,087	
Gross farm income including contractors	do.	26,470	28,983	37,156	39,063	d	d	30,815	
Operating expenses excluding interest	do.	25,949	24,827	27,613	28,715	d	d	27,253	
Cash income before interest is deducted	do.	-6,354	-10,404	-3,065	-2,993	d	d	-5,223	
Percent of farms with negative cash income	Percent	63.86	63.87	76.39	66.85	d	d	67.38	
Interest expense	Dollars	885	1,841	3,404	4,844	d	d	2,595	
Cash income after interest is deducted	do.	-7,240	-12,245	-6,468	-7,837	d	d	-7,817	
Percent of farms with negative cash income	Percent	63.86	82.17	78.96	77.34	d	d	72.57	
Total expenses including depreciation	Dollars	29,314	30,924	34,888	36,238	d	d	33,134	
Contractor expenses	do.	0	0	240	0	d	d	59	
Total expenses including contractors	do.	29,314	30,924	35,128	36,238	d	d	33,193	
Net cash farm income including contractors	do.	-7,240	-12,245	-2,294	-7,837	d	d	-6,789	
Percent of farms with negative NCFI	Percent	63.86	82.17	77.29	77.34	d	d	72.15	
Net farm income	Dollars	-2,844	-1,941	-2,147	2,825	d	d	-3,406	
Percent of farms with negative net farm income	Percent	29.07	41.33	56.00	39.67	d	d	39.59	
Net farm income including contractors	Dollars	-2,844	-1,941	2,027	2,825	d	d	-2,378	
Percent of farms with negative NFI	Percent	29.07	41.33	55.17	39.67	d	d	39.38	
Estimated principal repayment	Dollars	0	866	4,450	5,401	d	d	2,301	
Cash income after interest and principal are deducted	do.	-7,240	-13,111	-10,918	-13,238	d	d	-10,118	
Percent of farms with negative cash income	Percent	63.86	84.03	85.79	89.03	d	d	75.85	
Nonfarm income	Dollars	50,067	56,699	47,646	42,700	d	d	49,770	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	d	d	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	23,627	24,388	17,528	10,262	d	d	20,452	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	50.31	46.65	34.29	37.61	d	d	45.17	

d = Data insufficient for disclosure.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989

Northeast	Unit	No debt	Debt/asset ratio				Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0		
Number of farms	Number	62,246	21,373	29,869	9,457	d	d	126,466
Percent of farms	Percent	49.22	16.89	23.61	7.47	d	d	100.00
Farm income:								
Livestock sales	Dollars	15,775	50,776	59,208	77,342	d	d	37,789
Crop sales	do.	9,355	27,726	37,769	30,350	d	d	20,577
Net change in CCC loans	do.	-116	-2	-339	-295	d	d	-160
Government payments	do.	566	1,443	2,355	2,366	d	d	1,318
Other farm income	do.	1,291	3,270	4,040	6,208	d	d	2,639
Gross cash farm income	do.	26,871	83,213	103,034	115,972	d	d	62,164
Nonmoney income	do.	10,662	12,313	11,402	10,993	d	d	11,025
Value of inventory change	do.	1,160	4,305	2,122	-550	d	d	1,541
Gross farm income	do.	38,693	99,831	116,557	126,415	d	d	74,729
Estimated contractor income	do.	1,203	7,483	8,494	12,789	d	d	4,819
Gross farm income including contractors	do.	39,896	107,315	125,052	139,204	d	d	79,549
Operating expenses excluding interest	do.	22,663	63,197	70,883	91,162	d	d	46,908
Cash income before interest is deducted	do.	4,208	20,016	32,151	24,809	d	d	15,255
Percent of farms with negative cash income	Percent	57.85	35.15	38.08	40.75	d	d	47.28
Interest expense	Dollars	340	2,491	7,234	13,301	d	d	3,585
Cash income after interest is deducted	do.	3,868	17,525	24,917	11,508	d	d	11,670
Percent of farms with negative cash income	Percent	57.96	38.44	49.15	54.14	d	d	51.68
Total expenses including depreciation	Dollars	25,837	73,575	87,579	115,719	d	d	56,546
Contractor expenses	do.	268	7,371	2,288	10,195	d	d	2,680
Total expenses including contractors	do.	26,104	80,945	89,867	125,914	d	d	59,226
Net cash farm income including contractors	do.	4,803	17,637	31,124	14,102	d	d	13,809
Percent of farms with negative NCFI	Percent	57.64	39.56	49.81	54.30	d	d	51.88
Net farm income	Dollars	12,857	26,257	28,978	10,696	d	d	18,184
Percent of farms with negative net farm income	Percent	21.04	13.53	26.56	38.05	d	d	22.66
Net farm income including contractors	Dollars	13,792	26,369	35,185	13,290	d	d	20,323
Percent of farms with negative NFI	Percent	20.85	14.52	26.91	38.21	d	d	22.83
Estimated principal repayment	Dollars	0	2,063	6,674	16,258	d	d	3,492
Cash income after interest and principal are deducted	do.	3,868	15,462	18,243	-4,750	d	d	8,178
Percent of farms with negative cash income	Percent	57.96	38.80	57.47	68.41	d	d	55.32
Nonfarm income	Dollars	32,323	23,095	26,671	51,240	d	d	30,410
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	d	d	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	16,991	19,356	25,714	27,289	d	d	19,388
Percent of farms with negative income after principal and family living expenses are deducted	Percent	45.09	39.81	32.52	46.50	d	d	42.10

See footnotes at end of table.

Continued--

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989--Continued

Lake States	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0			
Number of farms	Number	68,322	28,062	49,737	28,216	6,794	2,047	183,178	
Percent of farms	Percent	37.29	15.31	27.15	15.40	3.70	1.11	100.00	
Farm income:									
Livestock sales	Dollars	24,294	54,106	54,854	68,942	56,754	86,752	45,938	
Crop sales	do.	14,554	19,364	27,839	27,193	14,099	46,470	21,185	
Net change in CCC loans	do.	-761	-3,165	-4,771	-4,757	-1,558	2,562	-2,826	
Government payments	do.	3,540	7,095	9,184	12,746	7,254	24,873	7,412	
Other farm income	do.	2,411	2,054	2,933	4,744	2,710	12,819	2,985	
Gross cash farm income	do.	44,038	79,454	90,039	108,868	79,259	173,477	74,693	
Nonmoney income	do.	6,655	7,749	7,580	7,230	4,486	3,739	7,049	
Value of inventory change	do.	-1,567	1,641	1,341	4,278	2,258	-7,947	685	
Gross farm income	do.	49,125	88,843	98,960	120,377	86,004	169,269	82,427	
Estimated contractor income	do.	1,104	3,045	3,702	5,316	2,566	1,781	2,817	
Gross farm income including contractors	do.	50,229	91,888	102,662	125,693	88,569	171,050	85,244	
Operating expenses excluding interest	do.	30,241	56,886	63,115	76,924	62,267	122,702	52,661	
Cash income before interest is deducted	do.	13,797	22,568	26,924	31,944	16,992	50,775	22,032	
Percent of farms with negative cash income	Percent	35.82	31.08	29.43	31.44	32.54	8.09	32.25	
Interest expense	Dollars	517	3,462	8,821	16,407	9,145	20,947	6,219	
Cash income after interest is deducted	do.	13,280	19,106	18,103	15,537	7,847	29,829	15,813	
Percent of farms with negative cash income	Percent	36.68	35.20	39.88	44.28	52.68	14.53	38.84	
Total expenses including depreciation	Dollars	35,677	69,852	81,993	104,093	80,134	156,708	67,028	
Contractor expenses	do.	1	7	369	3,272	0	4	606	
Total expenses including contractors	do.	35,678	69,858	82,361	107,365	80,134	156,711	67,634	
Net cash farm income including contractors	do.	14,383	22,144	21,437	17,581	10,413	31,606	18,025	
Percent of farms with negative NCFI	Percent	36.65	35.18	38.08	44.11	51.95	14.53	38.28	
Net farm income	Dollars	13,448	18,992	16,967	16,284	5,869	12,561	15,399	
Percent of farms with negative net farm income	Percent	23.13	26.71	32.39	32.02	51.48	20.71	28.59	
Net farm income including contractors	Dollars	14,551	22,030	20,301	18,328	8,435	14,338	17,610	
Percent of farms with negative NFI	Percent	23.06	25.70	31.56	31.51	51.03	20.28	28.08	
Estimated principal repayment	Dollars	0	1,253	6,049	12,925	11,706	25,057	4,539	
Cash income after interest and principal are deducted	do.	13,280	17,853	12,054	2,612	-3,859	4,772	11,274	
Percent of farms with negative cash income	Percent	36.68	37.00	47.75	57.22	67.82	37.86	44.07	
Nonfarm income	Dollars	22,555	15,329	23,163	19,700	14,254	13,633	20,766	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	16,635	13,982	16,017	3,112	-8,806	-796	12,839	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	37.47	41.86	39.81	42.96	63.17	57.37	40.80	

See footnotes at end of table.

Continued--

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989--Continued

Corn Belt	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	136,027	52,136	94,496	34,877	9,299	5,458	332,293
Percent of farms	Percent	40.93	15.68	28.43	10.49	2.79	1.64	100.00
Farm income:								
Livestock sales	Dollars	14,843	31,730	48,084	47,915	41,830	46,401	31,690
Crop sales	do.	14,288	25,256	37,896	35,683	34,356	33,295	25,842
Net change in CCC loans	do.	-1,024	-2,997	-4,842	-5,276	-9,529	-7,445	-3,209
Government payments	do.	4,195	8,106	11,945	14,116	13,647	14,568	8,489
Other farm income	do.	1,964	3,918	3,930	4,956	5,592	4,708	3,290
Gross cash farm income	do.	34,267	66,013	97,014	97,394	85,897	91,527	66,103
Nonmoney income	do.	6,086	6,624	6,080	5,823	4,242	3,659	6,050
Value of inventory change	do.	-270	3,502	4,810	4,549	1,543	1,340	2,349
Gross farm income	do.	40,083	76,140	107,903	107,766	91,681	96,526	74,501
Estimated contractor income	do.	1,954	685	4,340	3,719	6,636	4,385	2,790
Gross farm income including contractors	do.	42,037	76,824	112,243	111,485	98,318	100,911	77,291
Operating expenses excluding interest	do.	24,829	46,535	70,674	74,468	71,002	78,139	48,650
Cash income before interest is deducted	do.	9,438	19,478	26,339	22,926	14,895	13,388	17,453
Percent of farms with negative cash income	Percent	34.20	28.50	27.43	32.30	37.55	36.73	31.32
Interest expense	Dollars	435	2,690	9,616	15,287	15,624	19,699	5,700
Cash income after interest is deducted	do.	9,003	16,788	16,723	7,639	-729	-6,311	11,753
Percent of farms with negative cash income	Percent	35.64	33.10	43.24	45.25	56.98	46.77	39.19
Total expenses including depreciation	Dollars	29,259	57,185	90,330	98,532	93,963	104,660	61,327
Contractor expenses	do.	730	336	1,615	1,748	4,148	1,785	1,140
Total expenses including contractors	do.	29,989	57,522	91,945	100,280	98,111	106,445	62,467
Net cash farm income including contractors	do.	10,227	17,137	19,448	9,610	1,759	-3,711	13,403
Percent of farms with negative NCFI	Percent	35.62	32.41	42.53	42.30	56.96	46.73	38.56
Net farm income	Dollars	10,824	18,954	17,573	9,234	-2,281	-8,134	13,174
Percent of farms with negative net farm income	Percent	19.98	19.91	32.21	42.11	47.07	59.15	27.17
Net farm income including contractors	Dollars	12,048	19,303	20,297	11,205	207	-5,534	14,824
Percent of farms with negative NFI	Percent	20.06	19.90	31.47	40.00	45.63	54.86	26.66
Estimated principal repayment	Dollars	0	1,271	5,609	10,547	13,762	20,588	4,878
Cash income after interest and principal are deducted	do.	9,003	15,517	11,114	-2,908	-14,491	-26,899	8,128
Percent of farms with negative cash income	Percent	35.64	36.88	52.63	63.84	65.71	75.77	45.13
Nonfarm income	Dollars	20,731	34,126	24,756	22,275	17,707	34,542	24,282
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	10,534	30,442	16,670	167	-15,984	-11,557	13,210
Percent of farms with negative income after principal and family living expenses are deducted	Percent	45.34	37.02	38.83	51.94	61.13	73.92	43.79

See footnotes at end of table.

Continued--

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989--Continued

Northern Plains	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	48,902	23,386	49,458	20,499	6,345	4,439	153,029
Percent of farms	Percent	31.95	15.28	32.31	13.39	4.14	2.90	100.00
Farm income:								
Livestock sales	Dollars	22,109	46,296	68,593	93,632	32,750	93,680	52,927
Crop sales	do.	15,700	26,931	36,525	35,760	39,917	42,996	28,630
Net change in CCC loans	do.	-734	-3,026	-3,959	-3,604	-4,355	-5,470	-2,798
Government payments	do.	6,525	14,311	14,688	16,892	18,988	11,835	12,413
Other farm income	do.	3,795	3,462	5,505	9,005	7,471	7,256	5,247
Gross cash farm income	do.	47,396	87,975	121,352	151,685	94,771	150,296	96,419
Nonmoney income	do.	4,666	5,102	5,201	4,712	4,314	1,964	4,819
Value of inventory change	do.	1,580	9,788	13,143	10,373	-1,737	-8,056	7,332
Gross farm income	do.	53,642	102,865	139,697	166,769	97,347	144,205	108,570
Estimated contractor income	do.	2,140	3,218	5,088	29,450	3,143	35,556	7,927
Gross farm income including contractors	do.	55,782	106,083	144,784	196,220	100,490	179,761	116,496
Operating expenses excluding interest	do.	27,463	57,939	88,451	110,214	71,067	118,043	67,352
Cash income before interest is deducted	do.	19,933	30,036	32,902	41,471	23,704	32,254	29,067
Percent of farms with negative cash income	Percent	22.09	18.48	21.60	16.22	19.51	31.35	20.76
Interest expense	Dollars	556	3,682	9,516	17,677	15,787	13,647	7,234
Cash income after interest is deducted	do.	19,376	26,354	23,386	23,794	7,917	18,607	21,833
Percent of farms with negative cash income	Percent	22.65	22.57	30.92	27.12	46.42	39.02	27.37
Total expenses including depreciation	Dollars	33,661	71,459	109,038	140,388	94,835	137,588	83,646
Contractor expenses	do.	264	413	558	4,340	45	4,744	1,048
Total expenses including contractors	do.	33,925	71,871	109,595	144,728	94,880	142,332	84,695
Net cash farm income including contractors	do.	21,252	29,159	27,916	48,904	11,015	49,419	28,711
Percent of farms with negative NCFI	Percent	22.64	22.57	30.39	26.68	43.46	38.39	26.99
Net farm income	Dollars	19,981	31,406	30,659	26,381	2,512	6,616	24,923
Percent of farms with negative net farm income	Percent	16.03	22.56	23.75	27.97	48.43	39.67	23.15
Net farm income including contractors	do.	21,857	34,211	35,189	51,492	5,611	37,428	31,802
Percent of farms with negative NFI	Percent	15.99	22.33	23.23	25.47	45.16	38.87	22.44
Estimated principal repayment	Dollars	0	1,384	6,417	13,154	13,734	13,821	5,018
Cash income after interest and principal are deducted	do.	19,376	24,970	16,969	10,640	-5,817	4,786	16,815
Percent of farms with negative cash income	Percent	22.65	24.51	38.79	41.79	49.98	66.59	33.12
Nonfarm income	Dollars	17,057	18,873	17,765	15,090	21,367	14,339	17,400
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	17,233	24,643	15,534	6,531	-3,650	-75	15,015
Percent of farms with negative income after principal and family living expenses are deducted	Percent	38.71	34.16	34.20	51.33	67.68	56.19	39.96

See footnotes at end of table.

Continued--

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989--Continued

Appalachian	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
Number of farms	Number	164,327	39,194	49,046	14,681	4,955	3,437	275,639	
Percent of farms	Percent	59.61	14.21	17.79	5.32	1.79	1.24	100.00	
Farm income:									
Livestock sales	Dollars	6,992	15,171	14,854	16,160	35,394	13,992	10,640	
Crop sales	do.	8,384	17,140	21,614	39,544	79,728	47,955	15,419	
Net change in CCC loans	do.	-9	28	-45	-2,382	-770	-155	-152	
Government payments	do.	512	1,695	1,805	3,189	2,681	1,897	1,109	
Other farm income	do.	777	2,806	3,663	5,025	7,810	9,279	2,038	
Gross cash farm income	do.	16,656	36,840	41,891	61,537	124,842	72,968	29,054	
Nonmoney income	do.	6,136	8,947	7,752	6,246	7,853	4,677	6,842	
Value of inventory change	do.	134	349	2,355	3,977	-4,049	-18,206	461	
Gross farm income	do.	22,926	46,136	51,998	71,760	128,647	59,440	36,356	
Estimated contractor income	do.	532	13,257	17,717	19,429	58,234	586	7,443	
Gross farm income including contractors	do.	23,458	59,393	69,716	91,189	186,881	60,026	43,800	
Operating expenses excluding interest	do.	13,634	25,106	33,517	37,563	54,291	38,361	21,116	
Cash income before interest is deducted	do.	3,023	11,734	8,374	23,974	70,551	34,607	7,937	
Percent of farms with negative cash income	Percent	45.98	47.32	54.20	40.11	32.56	50.17	47.13	
Interest expense	Dollars	202	1,224	4,653	7,192	16,712	21,582	2,075	
Cash income after interest is deducted	do.	2,821	10,510	3,721	16,782	53,839	13,025	5,862	
Percent of farms with negative cash income	Percent	46.66	51.52	61.69	51.62	56.49	72.38	50.79	
Total expenses including depreciation	Dollars	15,212	29,219	42,377	48,550	75,474	64,700	25,514	
Contractor expenses	do.	429	4,549	10,631	13,331	41,898	7,324	4,349	
Total expenses including contractors	do.	15,641	33,769	53,008	61,881	117,372	72,025	29,862	
Net cash farm income including contractors	do.	2,924	19,218	10,808	22,881	70,176	6,287	8,957	
Percent of farms with negative NCFI	Percent	46.69	50.32	61.24	51.70	56.49	72.38	50.56	
Net farm income	Dollars	7,714	16,917	9,621	23,210	53,172	-5,260	10,843	
Percent of farms with negative net farm income	Percent	13.28	20.39	32.23	20.02	46.96	59.19	19.20	
Net farm income including contractors	Dollars	7,817	25,624	16,708	29,309	69,509	-11,999	13,938	
Percent of farms with negative NFI	Percent	13.32	19.20	31.96	19.54	46.96	59.08	18.98	
Estimated principal repayment	Dollars	0	967	4,196	7,090	13,577	20,294	1,759	
Cash income after interest and principal are deducted	do.	2,821	9,543	-475	9,692	40,262	-7,269	4,103	
Percent of farms with negative cash income	Percent	46.66	58.13	74.45	68.47	68.35	88.88	55.31	
Nonfarm income	Dollars	23,271	28,123	34,006	29,864	31,006	18,300	26,299	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	6,891	18,466	14,330	20,356	52,068	-8,169	11,202	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	57.90	46.36	43.42	34.75	57.26	84.64	52.77	

See footnotes at end of table.

Continued--

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989--Continued

Southeast	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
Number of farms	Number	89,596	20,208	24,199	10,157	1,465	911	146,536	
Percent of farms	Percent	61.14	13.79	16.51	6.93	.99	.62	100.00	
Farm income:									
Livestock sales	Dollars	6,150	21,312	37,046	22,870	32,108	39,635	14,970	
Crop sales	do.	12,018	75,928	40,434	35,294	79,213	89,383	28,290	
Net change in CCC loans	do.	49	32	-1,385	558	1,940	3,939	-112	
Government payments	do.	434	2,027	3,411	2,775	6,003	9,071	1,417	
Other farm income	do.	1,723	7,555	6,996	6,645	14,974	17,583	3,971	
Gross cash farm income	do.	20,375	106,853	86,503	68,142	134,238	159,612	48,536	
Nonmoney income	do.	7,067	9,950	9,344	8,877	8,058	2,873	7,950	
Value of inventory change	do.	-373	406	2,617	1,785	4,865	1,103	439	
Gross farm income	do.	27,068	117,209	98,465	78,804	147,162	163,587	56,925	
Estimated contractor income	do.	5,560	21,373	37,296	46,147	111,226	228,429	18,237	
Gross farm income including contractors	do.	32,628	138,582	135,761	124,951	258,388	392,016	75,162	
Operating expenses excluding interest	do.	15,280	90,825	68,935	48,648	94,739	144,312	38,468	
Cash income before interest is deducted	do.	5,094	16,028	17,568	19,493	39,500	15,300	10,068	
Percent of farms with negative cash income	Percent	56.37	56.42	44.97	44.48	23.25	52.75	53.32	
Interest expense	Dollars	175	3,713	7,157	9,848	12,865	14,415	2,702	
Cash income after interest is deducted	do.	4,919	12,315	10,412	9,646	26,635	885	7,366	
Percent of farms with negative cash income	Percent	56.93	57.71	54.35	60.24	37.19	62.78	56.68	
Total expenses including depreciation	Dollars	16,702	100,708	83,537	64,710	118,156	167,743	44,605	
Contractor expenses	do.	2,668	1,510	7,023	32,092	83,597	20,524	6,187	
Total expenses including contractors	do.	19,370	102,218	90,560	96,802	201,753	188,267	50,792	
Net cash farm income including contractors	do.	7,811	32,178	40,685	23,701	54,264	208,789	19,415	
Percent of farms with negative NCFI	Percent	57.11	57.68	53.98	57.34	45.05	62.18	56.60	
Net farm income	Dollars	10,367	16,500	14,928	14,094	29,005	-4,155	12,320	
Percent of farms with negative net farm income	Percent	14.60	29.44	37.57	36.05	25.37	64.10	22.34	
Net farm income including contractors	Dollars	13,259	36,364	45,201	28,149	56,634	203,749	24,370	
Percent of farms with negative NFI	Percent	14.58	29.29	37.20	38.01	33.23	63.50	22.46	
Estimated principal repayment	Dollars	0	1,902	5,908	8,826	17,641	16,552	2,129	
Cash income after interest and principal are deducted	do.	4,919	10,413	4,504	820	8,994	-15,667	5,237	
Percent of farms with negative cash income	Percent	56.93	60.56	59.60	70.32	52.62	74.11	58.86	
Nonfarm income	Dollars	25,135	60,990	39,335	25,480	19,486	20,585	32,364	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	10,855	52,203	24,639	7,100	9,280	-14,282	18,401	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	52.99	48.43	29.33	44.87	41.53	33.92	47.66	

See footnotes at end of table.

Continued--

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989--Continued

Delta	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	56,779	16,483	18,088	6,912	1,683	1,663	101,608
Percent of farms	Percent	55.88	16.22	17.80	6.80	1.65	1.63	100.00
Farm income:								
Livestock sales	Dollars	5,847	18,013	14,953	22,544	26,390	1,101	10,840
Crop sales	do.	12,484	24,361	39,856	42,709	41,649	44,306	22,344
Net change in CCC loans	do.	3,294	3,505	4,614	4,450	3,557	5,593	3,684
Government payments	do.	2,979	5,774	6,893	9,838	10,692	10,714	4,850
Other farm income	do.	1,993	5,864	3,388	11,124	3,873	1,868	3,520
Gross cash farm income	do.	26,598	57,518	69,705	90,666	86,161	63,582	45,238
Nonmoney income	do.	5,672	9,227	7,001	5,406	5,060	2,594	6,407
Value of inventory change	do.	1,223	9,385	6,530	1,669	666	2,652	3,536
Gross farm income	do.	33,493	76,130	83,236	97,740	91,886	68,828	55,181
Estimated contractor income	do.	5,198	24,005	10,171	110,832	5,732	0	16,244
Gross farm income including contractors	do.	38,691	100,135	93,407	208,572	97,618	68,828	71,425
Operating expenses excluding interest	do.	17,739	43,092	48,392	59,799	74,247	50,239	31,638
Cash income before interest is deducted	do.	8,859	14,426	21,314	30,867	11,914	13,343	13,600
Percent of farms with negative cash income	Percent	47.30	46.42	48.15	29.33	65.95	54.34	46.51
Interest expense	Dollars	637	3,450	5,208	12,938	14,347	4,775	3,039
Cash income after interest is deducted	do.	8,222	10,976	16,105	17,929	-2,433	8,568	10,562
Percent of farms with negative cash income	Percent	48.35	50.86	58.30	39.12	72.33	63.56	50.55
Total expenses including depreciation	Dollars	20,895	51,589	60,715	84,809	97,315	60,538	39,225
Contractor expenses	do.	5,871	20,546	7,287	69,086	5,236	0	12,697
Total expenses including contractors	do.	26,766	72,135	68,002	153,895	102,550	60,538	51,922
Net cash farm income including contractors	do.	7,549	14,435	18,989	59,675	-1,937	8,568	14,108
Percent of farms with negative NCFI	Percent	49.21	52.86	58.53	43.87	72.33	63.56	51.72
Net farm income	Dollars	12,599	24,541	22,522	12,931	-5,429	8,291	15,956
Percent of farms with negative net farm income	Percent	14.61	22.02	14.59	42.10	39.03	40.31	18.50
Net farm income including contractors	do.	11,925	28,001	25,405	54,677	-4,933	8,291	19,503
Percent of farms with negative NFI	Percent	14.95	24.01	14.82	37.35	39.03	40.31	18.74
Estimated principal repayment	Dollars	0	1,313	3,920	11,184	12,256	19,875	2,200
Cash income after interest and principal are deducted	do.	8,222	9,663	12,185	6,745	-14,689	-11,307	8,362
Percent of farms with negative cash income	Percent	48.35	56.83	70.08	62.57	81.49	81.28	55.65
Nonfarm income	Dollars	24,577	27,001	27,986	33,368	18,397	15,706	25,928
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	13,599	17,464	20,971	20,913	-15,492	-14,801	15,089
Percent of farms with negative income after principal and family living expenses are deducted	Percent	55.26	39.98	37.38	33.90	49.76	86.55	48.57

See footnotes at end of table.

Continued--

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989--Continued

Southern Plains	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	117,772	32,683	42,185	14,700	8,600	3,685	219,626
Percent of farms	Percent	53.62	14.88	19.20	6.69	3.91	1.67	100.00
Farm income:								
Livestock sales	Dollars	12,824	48,475	49,815	42,509	62,873	25,189	29,389
Crop sales	do.	9,685	9,874	23,924	24,034	46,801	21,986	15,068
Net change in CCC loans	do.	641	911	2,332	1,094	1,904	3,303	1,131
Government payments	do.	1,445	3,732	7,396	8,272	10,158	9,322	3,859
Other farm income	do.	1,594	3,620	4,311	3,637	62,104	5,896	4,996
Gross cash farm income	do.	26,189	66,611	87,778	79,547	183,841	65,696	54,442
Nonmoney income	do.	6,592	7,335	6,581	7,516	3,875	1,297	6,567
Value of inventory change	do.	-387	223	2,702	10,044	5,421	12,270	1,435
Gross farm income	do.	32,394	74,169	97,060	97,107	193,137	79,263	62,444
Estimated contractor income	do.	1,143	23,070	1,814	3,909	83,451	23	7,924
Gross farm income including contractors	do.	33,537	97,239	98,874	101,016	276,588	79,286	70,368
Operating expenses excluding interest	do.	20,913	59,573	69,235	74,161	124,647	57,681	44,191
Cash income before interest is deducted	do.	5,276	7,038	18,543	5,386	59,194	8,015	10,251
Percent of farms with negative cash income	Percent	56.19	52.23	41.23	49.73	34.97	62.84	51.57
Interest expense	Dollars	350	3,055	7,968	11,160	12,451	15,462	3,667
Cash income after interest is deducted	do.	4,926	3,982	10,574	-5,773	46,742	-7,447	6,584
Percent of farms with negative cash income	Percent	56.43	64.62	55.83	55.62	38.67	65.82	56.94
Total expenses including depreciation	Dollars	23,679	68,012	83,821	91,861	145,698	77,515	52,073
Contractor expenses	do.	2	4,147	933	40	2,785	123	911
Total expenses including contractors	do.	23,681	72,159	84,754	91,901	148,483	77,638	52,984
Net cash farm income including contractors	do.	6,067	22,906	11,456	-1,905	127,408	-7,546	13,598
Percent of farms with negative NCFI	Percent	56.79	64.53	55.82	54.93	38.67	65.82	57.07
Net farm income	Dollars	8,715	6,157	13,240	5,246	47,439	1,748	10,371
Percent of farms with negative net farm income	Percent	25.68	41.55	38.20	40.41	37.61	75.98	32.74
Net farm income including contractors	Dollars	9,856	25,080	14,121	9,114	128,105	1,648	17,384
Percent of farms with negative NFI	Percent	26.03	41.53	38.17	39.40	37.12	75.98	32.84
Estimated principal repayment	Dollars	0	1,809	5,854	9,694	13,197	16,897	2,842
Cash income after interest and principal are deducted	do.	4,926	2,173	4,720	-15,467	33,545	-24,344	3,742
Percent of farms with negative cash income	Percent	56.43	68.64	61.98	71.50	56.73	78.77	60.71
Nonfarm income	Dollars	55,182	33,107	31,213	25,851	20,457	8,039	43,179
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	40,909	16,080	16,733	-8,816	34,802	-35,505	27,721
Percent of farms with negative income after principal and family living expenses are deducted	Percent	44.08	35.05	31.74	54.00	72.36	82.97	42.79

See footnotes at end of table.

Continued--

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989--Continued

Mountain	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0			
Number of farms	Number	39,008	15,556	26,995	8,743	3,243	2,887	96,432	
Percent of farms	Percent	40.45	16.13	27.99	9.06	3.36	2.99	100.00	
Farm income:									
Livestock sales	Dollars	21,325	44,268	65,560	73,493	240,194	11,401	49,204	
Crop sales	do.	17,239	24,694	37,501	62,751	18,642	47,084	29,181	
Net change in CCC loans	do.	-292	-255	-334	-1,266	179	-6,659	-561	
Government payments	do.	3,201	5,480	8,394	11,085	5,703	8,366	5,976	
Other farm income	do.	3,742	30,756	8,891	7,219	15,925	12,802	10,537	
Gross cash farm income	do.	45,215	104,943	120,012	153,281	280,643	72,995	94,337	
Nonmoney income	do.	8,755	8,154	9,422	8,053	10,104	1,497	8,609	
Value of inventory change	do.	7,360	2,048	14,844	16,058	6,682	-484	9,129	
Gross farm income	do.	61,330	115,145	144,279	177,392	297,428	74,008	112,075	
Estimated contractor income	do.	52,610	3,887	34,537	26,810	4,672	8,066	34,406	
Gross farm income including contractors	do.	113,940	119,032	178,816	204,202	302,100	82,073	146,481	
Operating expenses excluding interest	do.	35,127	56,769	83,281	117,819	256,879	46,806	67,404	
Cash income before interest is deducted	do.	10,088	48,174	36,732	35,463	23,764	26,189	26,933	
Percent of farms with negative cash income	Percent	41.70	42.46	36.24	36.85	30.56	51.74	39.78	
Interest expense	Dollars	518	5,973	13,839	23,621	20,197	8,685	8,128	
Cash income after interest is deducted	do.	9,570	42,201	22,893	11,842	3,568	17,504	18,805	
Percent of farms with negative cash income	Percent	43.45	48.80	45.85	60.60	40.42	62.11	47.00	
Total expenses including depreciation	Dollars	41,257	73,695	107,863	153,822	288,004	59,989	84,201	
Contractor expenses	do.	8,741	39,063	7,211	108	5	0	11,866	
Total expenses including contractors	do.	49,998	112,759	115,074	153,930	288,009	59,989	96,067	
Net cash farm income including contractors	do.	53,440	7,025	50,219	38,544	8,234	25,570	41,345	
Percent of farms with negative NCFI	Percent	43.40	48.18	45.17	59.48	40.16	58.95	46.48	
Net farm income	Dollars	20,073	41,450	36,416	23,571	9,424	14,019	27,874	
Percent of farms with negative net farm income	Percent	16.26	24.35	18.04	35.32	35.75	57.02	21.67	
Net farm income including contractors	Dollars	63,942	6,274	63,742	50,273	14,091	22,085	50,414	
Percent of farms with negative NFI	Percent	16.23	24.38	17.51	34.42	35.50	56.79	21.42	
Estimated principal repayment	Dollars	0	2,401	8,285	15,321	24,255	11,935	5,269	
Cash income after interest and principal are deducted	do.	9,570	39,800	14,608	-3,479	-20,687	5,569	13,536	
Percent of farms with negative cash income	Percent	43.45	53.58	55.30	67.95	84.96	69.21	52.79	
Nonfarm income	Dollars	37,427	54,533	52,123	53,649	46,822	21,493	44,847	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	31,946	47,400	43,508	26,985	19,172	-1,381	35,004	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	37.53	37.29	37.93	23.88	44.78	59.71	36.88	

See footnotes at end of table.

Continued--

Appendix table 30--Combined farm income and cash-flow statement by region, January 1, 1989--Continued

Pacific	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	61,480	17,932	28,721	13,393	5,397	2,357	129,279
Percent of farms	Percent	47.55	13.87	22.21	10.35	4.17	1.82	100.00
Farm income:								
Livestock sales	Dollars	13,553	35,866	43,611	53,915	79,749	145,171	32,670
Crop sales	do.	48,570	51,912	88,926	36,943	71,728	185,059	60,249
Net change in CCC loans	do.	-9	203	-65	199	-100	-1,861	-8
Government payments	do.	1,853	2,762	3,981	3,448	2,121	4,348	2,674
Other farm income	do.	1,950	3,689	5,210	4,674	1,937	22,290	3,568
Gross cash farm income	do.	65,918	94,432	141,664	99,180	155,435	355,006	99,153
Nonmoney income	do.	9,715	13,901	11,112	13,387	7,799	5,374	10,827
Value of inventory change	do.	141	790	6,663	9,172	4,531	3,214	2,855
Gross farm income	do.	75,773	109,123	159,438	121,738	167,766	363,594	112,835
Estimated contractor income	do.	7,637	8,311	17,450	3,442	10,645	12,717	9,694
Gross farm income including contractors	do.	83,411	117,434	176,888	125,181	178,411	376,310	122,529
Operating expenses excluding interest	do.	51,353	74,803	107,664	76,067	132,742	301,134	77,627
Cash income before interest is deducted	do.	14,565	19,628	34,000	23,113	22,693	53,872	21,526
Percent of farms with negative cash income	Percent	55.60	53.94	43.81	68.16	56.22	34.21	53.69
Interest expense	Dollars	846	5,044	13,222	17,470	15,478	23,615	6,926
Cash income after interest is deducted	do.	13,719	14,584	20,777	5,642	7,215	30,258	14,600
Percent of farms with negative cash income	Percent	56.11	61.97	63.43	79.76	76.74	63.17	61.99
Total expenses including depreciation	Dollars	56,663	88,846	133,270	99,753	155,428	338,284	91,867
Contractor expenses	do.	481	15	275	37	250	20	306
Total expenses including contractors	do.	57,144	88,860	133,546	99,790	155,678	338,304	92,173
Net cash farm income including contractors	do.	20,876	22,881	37,952	9,048	17,610	42,955	23,988
Percent of farms with negative NCFI	Percent	55.94	61.91	57.93	77.18	74.26	62.45	60.30
Net farm income	Dollars	19,110	20,277	26,168	21,985	12,338	25,310	20,968
Percent of farms with negative net farm income	Percent	18.47	15.58	35.03	47.20	41.34	39.72	26.07
Net farm income including contractors	Dollars	26,267	28,574	43,342	25,391	22,733	38,007	30,356
Percent of farms with negative NFI	Percent	18.27	15.34	34.29	44.43	38.87	39.01	25.37
Estimated principal repayment	Dollars	0	2,516	10,192	13,106	15,665	33,933	5,243
Cash income after interest and principal are deducted	do.	13,719	12,068	10,585	-7,464	-8,450	-3,675	9,357
Percent of farms with negative cash income	Percent	56.11	64.06	69.99	84.67	83.58	79.21	64.82
Nonfarm income	Dollars	37,427	54,533	52,123	53,649	46,822	21,493	44,847
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	31,946	47,400	43,508	26,985	19,172	-1,381	35,004
Percent of farms with negative income after principal and family living expenses are deducted	Percent	37.53	37.29	37.93	23.88	44.78	59.71	36.88

d = Data insufficient for disclosure.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 31--Combined farm income and cash-flow statement by land tenure, January 1, 1989

Full tenant	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	59,246	16,716	41,452	17,209	8,311	8,989	151,922
Percent of farms	Percent	38.99	11.00	27.28	11.32	5.47	5.91	100.00
Farm income:								
Livestock sales	Dollars	15,876	36,709	41,455	53,117	67,922	54,698	34,510
Crop sales	do.	47,462	50,282	51,859	44,589	80,426	52,691	50,759
Net change in CCC loans	do.	840	2,191	2,051	-106	1,316	-3,038	1,009
Government payments	do.	4,925	8,992	9,890	12,512	11,808	12,996	8,441
Other farm income	do.	1,982	5,481	2,982	5,244	21,781	9,520	4,539
Gross cash farm income	do.	71,086	103,656	108,237	115,356	183,254	126,868	99,258
Nonmoney income	do.	1,170	5,349	2,457	2,233	974	409	2,046
Value of inventory change	do.	1,586	-1,999	7,474	9,418	6,937	-3,448	3,680
Gross farm income	do.	73,842	107,006	118,169	127,007	191,164	123,829	104,984
Estimated contractor income	do.	3,277	10,580	7,875	6,880	37,018	1,559	7,487
Gross farm income including contractors	do.	77,119	117,586	126,044	133,887	228,182	125,388	112,471
Operating expenses excluding interest	do.	49,772	79,322	83,171	88,804	178,673	111,332	77,252
Cash income before interest is deducted	do.	21,314	24,334	25,066	26,553	4,581	15,536	22,006
Percent of farms with negative cash income	Percent	29.88	28.85	35.24	16.50	41.04	45.40	31.24
Interest expense	Dollars	681	2,636	3,864	7,426	9,096	11,189	3,611
Cash income after interest is deducted	do.	20,633	21,698	21,201	19,126	-4,515	4,347	18,395
Percent of farms with negative cash income	Percent	31.53	29.88	41.46	24.00	49.15	47.40	35.11
Total expenses including depreciation	Dollars	53,933	91,128	96,462	104,240	195,891	128,575	87,510
Contractor expenses	do.	922	5,743	239	220	197	5	1,093
Total expenses including contractors	do.	54,855	96,871	96,701	104,460	196,088	128,580	88,603
Net cash farm income including contractors	do.	22,988	26,535	28,837	25,786	32,306	5,901	24,790
Percent of farms with negative NCFI	Percent	31.45	29.86	41.32	21.10	47.52	47.23	34.61
Net farm income	Dollars	19,909	15,878	21,707	22,767	-4,727	-4,745	17,473
Percent of farms with negative net farm income	Percent	31.55	30.29	38.00	27.61	46.18	57.12	35.04
Net farm income including contractors	Dollars	22,264	20,715	29,343	29,427	32,094	-3,192	23,868
Percent of farms with negative NFI	Percent	31.39	30.15	37.82	27.50	43.81	56.93	34.76
Estimated principal repayment	Dollars	0	1,033	3,218	6,617	8,843	11,836	2,926
Cash income after interest and principal are deducted	do.	20,633	20,665	17,983	12,509	-13,358	-7,489	15,469
Percent of farms with negative cash income	Percent	31.53	29.91	46.03	34.35	50.30	59.80	38.32
Nonfarm income	Dollars	19,051	18,022	17,196	14,227	13,448	17,192	17,469
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	20,483	19,486	15,979	7,536	-19,110	-9,498	13,738
Percent of farms with negative income after principal and family living expenses are deducted	Percent	44.45	38.91	39.89	45.33	71.20	61.55	45.17

See footnotes at end of table.

Continued--

Appendix table 31--Combined farm income and cash-flow statement by land tenure, January 1, 1989--Continued

1-20 percent	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	48,194	21,786	39,571	15,419	4,478	4,024	133,472
Percent of farms	Percent	36.10	16.32	29.64	11.55	3.35	3.01	100.00
Farm income:								
Livestock sales	Dollars	12,242	28,753	46,132	67,027	38,379	12,768	32,206
Crop sales	do.	24,471	32,605	64,853	79,336	64,474	106,265	47,917
Net change in CCC loans	do.	-194	-1,647	-3,566	-6,147	-2,978	-3,463	-2,311
Government payments	do.	3,238	6,551	15,153	18,882	15,687	6,880	9,646
Other farm income	do.	1,171	4,567	4,998	6,805	9,223	9,292	4,025
Gross cash farm income	do.	40,928	70,829	127,570	165,903	124,786	131,742	91,484
Nonmoney income	do.	8,077	7,709	6,253	5,427	6,071	1,907	6,916
Value of inventory change	do.	173	3,234	9,321	16,649	2,298	7,261	5,573
Gross farm income	do.	49,177	81,772	143,143	187,979	133,155	140,911	103,973
Estimated contractor income	do.	4,280	7,435	10,293	20,935	1,839	3,493	8,396
Gross farm income including contractors	do.	53,458	89,207	153,436	208,914	134,993	144,404	112,370
Operating expenses excluding interest	do.	30,477	53,878	92,149	128,564	94,703	110,781	68,487
Cash income before interest is deducted	do.	10,451	16,951	35,421	37,339	30,083	20,961	22,997
Percent of farms with negative cash income	Percent	44.02	48.68	30.16	24.60	17.21	59.31	37.99
Interest expense	Dollars	797	2,784	8,420	17,571	17,453	14,809	6,300
Cash income after interest is deducted	do.	9,653	14,168	27,002	19,767	12,630	6,152	16,696
Percent of farms with negative cash income	Percent	44.13	52.46	35.19	32.68	29.12	62.03	41.55
Total expenses including depreciation	Dollars	35,572	63,444	112,062	159,425	122,857	132,882	82,969
Contractor expenses	do.	2,541	5,307	1,468	3,997	0	0	2,681
Total expenses including contractors	do.	38,113	68,751	113,530	163,422	122,857	132,882	85,649
Net cash farm income including contractors	do.	11,393	16,296	35,826	36,705	14,469	9,645	22,412
Percent of farms with negative NCFI	Percent	44.09	51.45	35.10	30.06	28.93	62.03	41.03
Net farm income	Dollars	13,605	18,328	31,082	28,554	10,297	8,029	21,005
Percent of farms with negative net farm income	Percent	19.46	29.98	33.19	29.14	26.92	68.62	28.10
Net farm income including contractors	Dollars	15,345	20,456	39,906	45,492	12,136	11,522	26,720
Percent of farms with negative NFI	Percent	19.29	29.94	32.41	24.86	23.61	68.44	27.19
Estimated principal repayment	Dollars	0	1,416	5,397	13,500	15,297	19,231	4,484
Cash income after interest and principal are deducted	do.	9,653	12,752	21,605	6,267	-2,667	-13,079	12,212
Percent of farms with negative cash income	Percent	44.13	54.85	42.28	43.17	51.73	78.97	46.53
Nonfarm income	Dollars	22,212	21,835	24,574	25,343	27,679	7,814	22,962
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	12,665	15,387	26,979	12,410	5,813	-24,466	15,974
Percent of farms with negative income after principal and family living expenses are deducted	Percent	42.39	44.42	38.49	34.41	52.22	74.26	41.93

See footnotes at end of table.

Continued--

Appendix table 31--Combined farm income and cash-flow statement by land tenure, January 1, 1989--Continued

21-40 percent	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
Number of farms	Number	38,032	27,365	50,408	18,200	8,925	1,972	144,901	
Percent of farms	Percent	26.24	18.88	34.78	12.56	6.15	1.36	100.00	
Farm income:									
Livestock sales	Dollars	22,304	42,622	48,562	65,926	30,868	51,768	41,683	
Crop sales	do.	23,359	37,724	51,777	46,444	34,433	58,391	40,016	
Net change in CCC loans	do.	-350	-2,299	-3,676	-4,552	-6,863	1,758	-2,775	
Government payments	do.	5,635	8,150	13,592	15,527	16,252	22,014	10,997	
Other farm income	do.	1,615	4,040	4,730	6,896	11,010	27,867	4,756	
Gross cash farm income	do.	52,563	90,237	114,985	130,241	85,701	161,798	94,677	
Nonmoney income	do.	7,514	7,494	7,316	8,562	4,103	7,074	7,357	
Value of inventory change	do.	1,745	7,186	5,158	8,253	864	-33,961	4,237	
Gross farm income	do.	61,822	104,917	127,459	147,056	90,668	134,911	106,271	
Estimated contractor income	do.	925	14,403	7,357	24,215	2,779	15,126	8,941	
Gross farm income including contractors	do.	62,747	119,320	134,816	171,271	93,447	150,037	115,211	
Operating expenses excluding interest	do.	39,110	71,123	85,828	99,344	68,260	111,121	71,749	
Cash income before interest is deducted	do.	13,453	19,114	29,157	30,897	17,441	50,677	22,928	
Percent of farms with negative cash income	Percent	39.23	38.03	27.58	28.33	38.25	14.75	33.19	
Interest expense	Dollars	1,105	4,089	10,767	18,127	13,742	32,806	8,378	
Cash income after interest is deducted	do.	12,348	15,024	18,390	12,770	3,699	17,871	14,551	
Percent of farms with negative cash income	Percent	39.77	45.31	42.26	45.10	56.60	26.20	43.20	
Total expenses including depreciation	Dollars	45,679	84,136	106,983	128,910	92,817	156,554	89,134	
Contractor expenses	do.	5	551	2,740	8,807	987	1,000	2,239	
Total expenses including contractors	do.	45,684	84,687	109,722	137,717	93,804	157,554	91,373	
Net cash farm income including contractors	do.	13,267	28,876	23,007	28,178	5,491	31,997	21,252	
Percent of farms with negative NCFI	Percent	39.76	43.34	40.64	45.52	54.36	25.78	42.17	
Net farm income	Dollars	16,143	20,781	20,476	18,145	-2,149	-21,643	17,137	
Percent of farms with negative net farm income	Percent	17.87	35.68	28.34	33.80	51.54	29.50	29.11	
Net farm income including contractors	Dollars	17,063	34,633	25,093	33,554	-358	-7,517	23,839	
Percent of farms with negative NFI	Percent	17.79	33.48	27.01	33.70	49.45	28.45	28.05	
Estimated principal repayment	Dollars	0	1,841	6,948	13,040	13,882	35,019	5,734	
Cash income after interest and principal are deducted	do.	12,348	13,183	11,442	-270	-10,183	-17,148	8,817	
Percent of farms with negative cash income	Percent	39.77	47.30	53.70	56.17	61.73	68.53	49.84	
Nonfarm income	Dollars	25,448	21,875	21,902	21,477	14,460	17,409	22,255	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	18,595	15,859	14,144	2,007	-14,923	-18,939	11,871	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	35.63	47.22	36.81	54.71	80.19	78.07	43.95	

See footnotes at end of table.

Continued--

Appendix table 31--Combined farm income and cash-flow statement by land tenure, January 1, 1989--Continued

41-60 percent	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
Number of farms	Number	49,878	24,948	46,343	18,118	4,785	1,548	145,620	
Percent of farms	Percent	34.25	17.13	31.82	12.44	3.28	1.06	100.00	
Farm income:									
Livestock sales	Dollars	20,925	45,176	67,054	80,179	57,943	171,755	49,952	
Crop sales	do.	21,220	23,570	46,266	43,023	17,747	48,992	32,487	
Net change in CCC loans	do.	-943	-1,390	-3,882	-3,862	-2,688	-7,877	-2,449	
Government payments	do.	5,128	7,768	12,789	13,155	9,548	18,277	9,302	
Other farm income	do.	1,633	3,267	6,115	8,753	3,946	9,382	4,384	
Gross cash farm income	do.	47,963	78,391	128,342	141,249	86,495	240,529	93,676	
Nonmoney income	do.	6,934	8,660	7,764	8,323	6,409	5,266	7,632	
Value of inventory change	do.	582	4,943	9,159	4,888	1,232	-7,533	4,530	
Gross farm income	do.	55,479	91,994	145,265	154,459	94,136	238,262	105,838	
Estimated contractor income	do.	1,275	2,365	5,693	17,349	1,380	131,887	6,260	
Gross farm income including contractors	do.	56,754	94,360	150,959	171,808	95,515	370,149	112,097	
Operating expenses excluding interest	do.	34,447	56,849	92,099	107,165	70,488	175,756	68,367	
Cash income before interest is deducted	do.	13,515	21,543	36,243	34,083	16,007	64,773	25,309	
Percent of farms with negative cash income	Percent	49.21	35.44	29.83	32.90	29.25	15.47	37.64	
Interest expense	Dollars	467	2,846	12,242	21,650	16,189	33,224	8,122	
Cash income after interest is deducted	do.	13,048	18,696	24,001	12,433	-182	31,549	17,187	
Percent of farms with negative cash income	Percent	50.42	36.57	37.76	45.17	42.56	26.84	42.86	
Total expenses including depreciation	Dollars	40,655	68,622	117,170	142,439	94,241	220,578	86,135	
Contractor expenses	do.	663	98	1,744	8,897	2	6,293	1,973	
Total expenses including contractors	do.	41,319	68,720	118,915	151,336	94,242	226,871	88,108	
Net cash farm income including contractors	do.	13,660	20,963	27,950	20,886	1,196	157,143	21,474	
Percent of farms with negative NCFI	Percent	50.23	36.47	37.57	45.41	41.95	26.16	42.72	
Net farm income	Dollars	14,824	23,372	28,095	12,020	-105	17,685	19,703	
Percent of farms with negative net farm income	Percent	27.78	22.48	26.93	46.70	45.00	35.42	29.60	
Net farm income including contractors	Dollars	15,435	25,639	32,044	20,472	1,273	143,278	23,990	
Percent of farms with negative NFI	Percent	27.76	21.60	26.35	44.19	44.83	19.75	28.78	
Estimated principal repayment	Dollars	0	1,660	7,686	15,904	17,821	28,146	5,594	
Cash income after interest and principal are deducted	do.	13,048	17,036	16,315	-3,471	-18,003	3,403	11,593	
Percent of farms with negative cash income	Percent	50.42	39.78	45.52	62.86	83.86	38.41	49.56	
Nonfarm income	Dollars	25,592	22,442	21,874	20,980	19,732	27,392	23,122	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	19,441	20,279	18,989	-1,691	-17,471	11,595	15,515	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	40.93	30.03	38.22	55.98	61.39	23.95	40.56	

See footnotes at end of table.

Continued--

Appendix table 31--Combined farm income and cash-flow statement by land tenure, January 1, 1989--Continued

61-80 percent	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	55,760	25,972	40,841	13,953	2,536	1,975	141,037
Percent of farms	Percent	39.53	18.41	28.95	9.89	1.79	1.40	100.00
Farm income:								
Livestock sales	Dollars	27,130	59,199	74,826	91,265	375,609	106,794	60,574
Crop sales	do.	17,581	33,781	29,547	45,494	27,439	29,344	27,133
Net change in CCC loans	do.	-171	-1,670	-2,923	-3,152	-4,828	-1,434	-1,640
Government payments	do.	3,681	9,309	8,436	19,211	13,812	19,297	8,032
Other farm income	do.	1,963	3,949	4,570	10,109	5,566	8,205	4,042
Gross cash farm income	do.	50,183	104,568	114,457	162,928	417,597	162,205	98,140
Nonmoney income	do.	7,364	9,265	8,538	7,332	9,754	5,272	8,065
Value of inventory change	do.	3,655	6,476	7,823	5,019	4,086	6,244	5,560
Gross farm income	do.	61,202	120,309	130,818	175,279	431,438	173,721	111,765
Estimated contractor income	do.	1,877	2,400	5,655	6,242	943	424	3,462
Gross farm income including contractors	do.	63,079	122,709	136,472	181,521	432,381	174,146	115,227
Operating expenses excluding interest	do.	41,743	79,370	81,900	123,164	363,760	122,142	75,272
Cash income before interest is deducted	do.	8,440	25,198	32,557	39,764	53,838	40,063	22,868
Percent of farms with negative cash income	Percent	47.80	31.93	24.19	26.25	7.85	35.18	35.01
Interest expense	Dollars	695	5,215	11,209	24,881	34,544	19,473	7,836
Cash income after interest is deducted	do.	7,745	19,984	21,348	14,882	19,294	20,590	15,032
Percent of farms with negative cash income	Percent	49.00	44.42	39.10	40.36	27.72	48.26	44.05
Total expenses including depreciation	Dollars	47,917	95,609	105,094	162,533	417,313	152,020	92,696
Contractor expenses	do.	228	804	3,042	2,660	0	0	1,382
Total expenses including contractors	do.	48,145	96,413	108,135	165,193	417,313	152,020	94,078
Net cash farm income including contractors	do.	9,394	21,580	23,961	18,464	20,237	21,015	17,112
Percent of farms with negative NCFI	Percent	48.96	44.39	38.71	39.94	27.72	48.26	43.87
Net farm income	Dollars	13,285	24,700	25,724	12,746	14,126	21,702	19,069
Percent of farms with negative net farm income	Percent	20.12	22.52	32.10	39.17	26.91	29.68	26.17
Net farm income including contractors	Dollars	14,934	26,297	28,337	16,328	15,069	22,126	21,149
Percent of farms with negative NFI	Percent	20.08	22.41	31.45	38.31	26.56	29.68	25.85
Estimated principal repayment	Dollars	0	2,023	7,584	16,659	31,142	30,789	5,208
Cash income after interest and principal are deducted	do.	7,745	17,961	13,764	-1,777	-11,848	-10,199	9,824
Percent of farms with negative cash income	Percent	49.00	46.32	46.31	56.92	40.28	72.56	48.68
Nonfarm income	Dollars	28,064	22,233	24,960	19,464	13,600	17,563	24,834
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	16,609	20,994	19,524	-1,513	-17,449	-11,835	15,457
Percent of farms with negative income after principal and family living expenses are deducted	Percent	46.64	31.73	31.70	54.90	53.31	88.54	41.09

See footnotes at end of table.

Continued--

Appendix table 31--Combined farm income and cash-flow statement by land tenure, January 1, 1989--Continued

81-90 percent	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
Number of farms	Number	46,683	28,266	28,792	7,756	1,936	3,147	116,580	
Percent of farms	Percent	40.04	24.24	24.69	6.65	1.66	2.69	100.00	
Farm income:									
Livestock sales	Dollars	30,816	48,044	82,282	111,436	92,673	14,710	53,660	
Crop sales	do.	18,783	25,761	29,299	39,445	15,485	8,987	24,127	
Net change in CCC loans	do.	2,158	-639	-2,461	-6,934	-3,032	-1,569	-453	
Government payments	do.	4,336	8,000	8,049	10,334	14,191	3,568	6,683	
Other farm income	do.	4,112	4,057	5,459	8,378	3,629	1,039	4,624	
Gross cash farm income	do.	60,203	85,223	122,628	162,659	122,946	26,735	88,642	
Nonmoney income	do.	7,973	8,530	8,708	13,330	4,488	4,442	8,493	
Value of inventory change	do.	2,000	2,242	6,553	3,013	-8,498	132	3,026	
Gross farm income	do.	70,177	95,995	137,890	179,002	118,936	31,309	100,161	
Estimated contractor income	do.	5,366	4,621	29,114	12,030	147	603	11,279	
Gross farm income including contractors	do.	75,543	100,616	167,003	191,031	119,083	31,912	111,439	
Operating expenses excluding interest	do.	41,025	58,849	88,487	111,948	99,244	28,882	62,426	
Cash income before interest is deducted	do.	19,178	26,374	34,141	50,711	23,702	-2,147	26,216	
Percent of farms with negative cash income	Percent	37.54	34.54	28.74	24.74	12.08	60.97	34.00	
Interest expense	Dollars	608	4,356	14,642	21,131	23,455	11,084	7,010	
Cash income after interest is deducted	do.	18,570	22,018	19,499	29,580	247	-13,231	19,205	
Percent of farms with negative cash income	Percent	38.45	39.91	43.56	39.66	56.45	83.36	41.66	
Total expenses including depreciation	Dollars	48,098	72,993	115,441	145,899	128,142	43,132	78,468	
Contractor expenses	do.	357	180	6,915	10,444	0	3	2,589	
Total expenses including contractors	do.	48,455	73,174	122,356	156,344	128,142	43,136	81,057	
Net cash farm income including contractors	do.	23,580	26,458	41,698	31,165	394	-12,631	27,895	
Percent of farms with negative NCFI	Percent	38.40	40.07	40.24	39.57	56.08	83.36	40.84	
Net farm income	Dollars	22,078	23,002	22,449	33,102	-9,206	-11,823	21,693	
Percent of farms with negative net farm income	Percent	16.08	22.54	31.92	28.13	29.61	74.38	24.16	
Net farm income including contractors	Dollars	27,088	27,442	44,648	34,688	-9,059	-11,224	30,382	
Percent of farms with negative NFI	Percent	16.06	22.60	31.50	28.16	29.23	74.38	24.06	
Estimated principal repayment	Dollars	0	2,118	9,305	20,055	22,807	12,625	4,865	
Cash income after interest and principal are deducted	do.	18,570	19,900	10,194	9,525	-22,560	-25,856	14,340	
Percent of farms with negative cash income	Percent	38.45	45.76	52.62	53.00	61.39	96.15	46.63	
Nonfarm income	Dollars	23,674	23,857	24,505	29,607	26,951	45,576	24,964	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	23,044	24,556	15,500	19,932	-14,808	520	20,104	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	41.51	36.81	46.76	36.40	37.37	88.40	42.52	

See footnotes at end of table.

Continued--

Appendix table 31--Combined farm income and cash-flow statement by land tenure, January 1, 1989--Continued

Full owner	Unit	No debt	Debt/asset ratio				Over 1.0	All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0		
Number of farms	Number	546,666	121,960	165,389	70,982	19,674	5,886	930,557
Percent of farms	Percent	58.74	13.10	17.77	7.62	2.11	.63	100.00
Farm income:								
Livestock sales	Dollars	8,370	25,827	29,797	30,209	37,679	47,790	17,001
Crop sales	do.	8,150	20,918	22,463	15,593	33,356	45,701	13,705
Net change in CCC loans	do.	-95	-563	-931	-544	-554	-171	-349
Government payments	do.	992	2,204	2,826	3,561	1,996	3,377	1,709
Other farm income	do.	1,699	6,843	4,262	3,692	21,559	5,954	3,427
Gross cash farm income	do.	19,116	55,229	58,416	52,511	94,036	102,651	35,493
Nonmoney income	do.	7,280	9,058	8,804	7,786	7,625	4,223	7,811
Value of inventory change	do.	-331	1,566	2,215	3,308	1,439	-2,462	672
Gross farm income	do.	26,065	65,852	69,435	63,605	103,100	104,413	43,975
Estimated contractor income	do.	5,860	13,792	12,863	20,932	50,859	31,253	10,406
Gross farm income including contractors	do.	31,925	79,644	82,299	84,537	153,959	135,666	54,381
Operating expenses excluding interest	do.	14,521	39,687	43,393	37,195	43,275	67,017	25,621
Cash income before interest is deducted	do.	4,594	15,542	15,023	15,316	50,761	35,634	9,873
Percent of farms with negative cash income	Percent	48.44	43.97	46.03	50.83	42.82	32.36	47.39
Interest expense	Dollars	238	2,408	6,871	10,593	11,888	17,024	2,843
Cash income after interest is deducted	do.	4,356	13,134	8,152	4,723	38,873	18,610	7,029
Percent of farms with negative cash income	Percent	49.07	49.14	60.68	63.74	60.63	57.25	52.55
Total expenses including depreciation	Dollars	16,727	46,836	55,776	52,902	60,060	89,927	31,752
Contractor expenses	do.	1,652	10,009	4,363	11,762	19,956	10,771	4,445
Total expenses including contractors	do.	18,379	56,845	60,139	64,663	80,016	100,698	36,197
Net cash farm income including contractors	do.	8,565	16,917	16,652	13,893	69,776	39,092	12,990
Percent of farms with negative NCFI	Percent	49.25	49.41	59.73	62.61	61.21	55.39	52.44
Net farm income	Dollars	9,338	19,016	13,659	10,703	43,040	14,486	12,224
Percent of farms with negative net farm income	Percent	16.03	20.16	28.33	37.20	42.57	46.97	21.13
Net farm income including contractors	Dollars	13,546	22,800	22,159	19,873	73,943	34,968	18,185
Percent of farms with negative NFI	Percent	16.15	20.59	28.27	35.93	43.16	46.58	21.16
Estimated principal repayment	Dollars	0	1,296	5,282	8,825	10,315	15,363	2,097
Cash income after interest and principal are deducted	do.	4,356	11,780	2,713	-4,342	26,181	-3,170	4,787
Percent of farms with negative cash income	Percent	49.07	53.70	70.49	79.64	76.58	84.71	56.62
Nonfarm income	Dollars	32,181	42,117	37,814	34,625	35,523	18,878	34,657
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	17,337	34,697	21,326	11,083	42,503	-3,492	20,245
Percent of farms with negative income after principal and family living expenses are deducted	Percent	49.83	42.97	34.77	41.22	54.66	60.22	45.76

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 32--Combined farm income and cash-flow statement by occupational specialty, January 1, 1989

Farming	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0			
Number of farms	Number	440,281	165,023	234,170	96,341	29,184	17,594	982,593	
Percent of farms	Percent	44.80	16.79	23.83	9.80	2.97	1.79	100.00	
Farm income:									
Livestock sales	Dollars	20,359	50,582	74,035	82,929	102,744	74,216	47,773	
Crop sales	do.	21,918	38,236	57,273	53,840	57,081	76,082	38,228	
Net change in CCC loans	do.	39	-1,319	-3,082	-3,807	-3,205	-2,481	-1,452	
Government payments	do.	3,731	8,085	12,926	15,521	14,101	14,100	8,303	
Other farm income	do.	2,563	4,932	6,971	9,021	25,115	12,834	5,498	
Gross cash farm income	do.	48,610	100,517	148,122	157,504	195,835	174,751	98,351	
Nonmoney income	do.	6,553	8,298	7,023	6,345	5,176	3,573	6,843	
Value of inventory change	do.	634	4,537	8,793	8,341	3,417	-5,910	3,955	
Gross farm income	do.	55,796	113,352	163,938	172,190	204,428	172,415	109,150	
Estimated contractor income	do.	8,815	13,695	18,531	27,638	38,534	23,060	14,933	
Gross farm income including contractors	do.	64,611	127,047	182,470	199,828	242,962	195,475	124,083	
Operating expenses excluding interest	do.	33,952	72,613	105,305	115,258	140,669	135,139	70,403	
Cash income before interest is deducted	do.	14,658	27,904	42,817	42,246	55,166	39,611	27,948	
Percent of farms with negative cash income	Percent	35.75	27.72	20.79	19.12	24.47	24.31	28.67	
Interest expense	Dollars	555	4,144	12,238	20,514	19,271	21,651	6,833	
Cash income after interest is deducted	do.	14,102	23,760	30,579	21,732	35,895	17,961	21,115	
Percent of farms with negative cash income	Percent	36.49	33.72	29.07	30.03	40.38	37.26	33.75	
Total expenses including depreciation	Dollars	39,117	86,188	130,880	149,130	171,488	166,412	85,888	
Contractor expenses	do.	2,535	3,723	5,505	12,489	9,298	3,184	4,631	
Total expenses including contractors	do.	41,651	89,911	136,385	161,619	180,786	169,596	90,519	
Net cash farm income including contractors	do.	20,382	33,732	43,606	36,881	65,131	37,838	31,418	
Percent of farms with negative NCFI	Percent	36.63	33.39	28.56	29.61	39.48	36.44	33.56	
Net farm income	Dollars	16,679	27,165	33,059	23,061	32,940	6,003	23,261	
Percent of farms with negative net farm income	Percent	17.60	20.87	26.64	33.36	40.25	40.85	22.94	
Net farm income including contractors	Dollars	22,959	37,136	46,085	38,209	62,176	25,879	33,564	
Percent of farms with negative NFI	Percent	17.70	20.47	25.90	31.79	38.75	39.08	22.51	
Estimated principal repayment	Dollars	0	1,878	7,934	14,994	18,677	24,421	4,668	
Cash income after interest and principal are deducted	do.	14,102	21,882	22,645	6,738	17,218	-6,460	16,447	
Percent of farms with negative cash income	Percent	36.49	35.90	37.07	45.86	52.05	61.28	38.35	
Nonfarm income	Dollars	17,326	16,793	17,418	14,816	13,241	14,558	16,841	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	12,228	19,474	20,863	2,353	11,259	-11,103	14,088	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	55.93	45.62	43.22	54.10	74.13	65.37	51.70	

See footnotes at end of table.

Continued--

Appendix table 32--Combined farm income and cash-flow statement by occupational specialty, January 1, 1989--Continued

Hired manager	Unit	No debt	Debt/asset ratio				Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0		
Number of farms	Number	9,014	2,771	2,648	1,654	d	d	17,960
Percent of farms	Percent	50.18	15.42	14.74	9.20	d	d	100.00
Farm income:								
Livestock sales	Dollars	41,178	121,404	163,443	185,705	d	d	85,283
Crop sales	do.	127,077	185,662	280,572	15,357	d	d	148,789
Net change in CCC loans	do.	341	-919	-8,634	-1,647	d	d	-1,551
Government payments	do.	4,632	5,152	15,747	2,850	d	d	6,483
Other farm income	do.	11,361	159,598	17,997	2,744	d	d	33,712
Gross cash farm income	do.	184,588	470,897	469,125	205,009	d	d	272,716
Nonmoney income	do.	5,668	7,190	8,138	3,851	d	d	6,218
Value of inventory change	do.	-16,723	24,566	8,618	11,827	d	d	-1,975
Gross farm income	do.	173,533	502,653	485,881	220,687	d	d	276,959
Estimated contractor income	do.	16,250	16,675	28,973	559	d	d	17,950
Gross farm income including contractors	do.	189,783	519,328	514,854	221,246	d	d	294,909
Operating expenses excluding interest	do.	143,603	277,820	388,119	112,978	d	d	206,526
Cash income before interest is deducted	do.	40,985	193,077	81,005	92,032	d	d	66,190
Percent of farms with negative cash income	Percent	60.19	15.03	33.74	44.50	d	d	47.46
Interest expense	Dollars	1,147	5,920	33,855	11,948	d	d	9,714
Cash income after interest is deducted	do.	39,838	187,156	47,151	80,083	d	d	56,476
Percent of farms with negative cash income	Percent	60.22	16.45	49.47	66.22	d	d	53.33
Total expenses including depreciation	Dollars	154,816	306,434	482,581	146,470	d	d	236,771
Contractor expenses	do.	0	222,030	0	0	d	d	34,326
Total expenses including contractors	do.	154,816	528,464	482,581	146,470	d	d	271,097
Net cash farm income including contractors	do.	56,088	-18,199	76,124	80,642	d	d	40,100
Percent of farms with negative NCFI	Percent	60.13	17.11	47.38	66.22	d	d	53.07
Net farm income	Dollars	18,717	196,219	3,300	74,217	d	d	40,188
Percent of farms with negative net farm income	Percent	38.44	30.51	33.77	38.75	d	d	35.09
Net farm income including contractors	Dollars	34,967	-9,136	32,274	74,776	d	d	23,812
Percent of farms with negative NFI	Percent	38.34	30.11	33.40	38.75	d	d	34.91
Estimated principal repayment	Dollars	0	5,496	32,387	13,114	d	d	9,024
Cash income after interest and principal are deducted	do.	39,838	181,660	14,764	66,969	d	d	47,452
Percent of farms with negative cash income	Percent	60.22	16.45	61.08	78.38	d	d	58.31
Nonfarm income	Dollars	24,595	31,731	29,176	20,257	d	d	31,013
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	d	d	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	45,233	194,191	24,740	68,026	d	d	59,265
Percent of farms with negative income after principal and family living expenses are deducted	Percent	37.11	9.94	52.09	47.25	d	d	35.54

See footnotes at end of table.

Continued--

Appendix table 32--Combined farm income and cash-flow statement by occupational specialty, January 1, 1989--Continued

Other	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	395,118	99,219	175,791	63,642	19,864	9,613	763,248
Percent of farms	Percent	51.76	12.99	23.03	8.33	2.60	1.25	100.00
Farm income:								
Livestock sales	Dollars	4,069	9,022	9,489	9,202	7,293	8,168	6,525
Crop sales	do.	3,682	5,077	6,149	7,078	10,667	9,282	4,967
Net change in CCC loans	do.	-2	-68	-113	-256	-463	-1,571	-89
Government payments	do.	464	988	1,476	2,017	1,953	2,993	965
Other farm income	do.	799	1,803	1,200	1,158	2,318	1,679	1,103
Gross cash farm income	do.	9,012	16,822	18,199	19,199	21,768	20,551	13,470
Nonmoney income	do.	7,382	8,825	8,342	8,947	6,415	1,520	7,822
Value of inventory change	do.	470	-376	870	2,554	35	2,119	635
Gross farm income	do.	16,864	25,271	27,411	30,701	28,218	24,189	21,928
Estimated contractor income	do.	77	3,637	846	3,124	8,814	4,359	1,252
Gross farm income including contractors	do.	16,941	28,909	28,258	33,825	37,033	28,548	23,180
Operating expenses excluding interest	do.	8,982	16,900	17,390	18,798	18,493	20,663	13,161
Cash income before interest is deducted	do.	31	-79	809	402	3,275	-112	309
Percent of farms with negative cash income	Percent	56.81	60.67	56.30	63.25	49.86	72.73	57.75
Interest expense	Dollars	218	1,407	3,770	6,093	6,942	5,158	1,918
Cash income after interest is deducted	do.	-188	-1,485	-2,961	-5,692	-3,667	-5,271	-1,609
Percent of farms with negative cash income	Percent	57.60	65.10	73.61	77.75	67.32	81.48	64.50
Total expenses including depreciation	Dollars	10,385	21,230	23,638	27,087	28,112	27,529	16,917
Contractor expenses	do.	67	2,482	244	2,147	6,563	1,944	788
Total expenses including contractors	do.	10,452	23,712	23,882	29,234	34,675	29,473	17,705
Net cash farm income including contractors	do.	-178	-330	-2,359	-4,715	-1,415	-2,856	-1,144
Percent of farms with negative NCFI	Percent	57.64	65.21	72.22	75.80	67.32	81.48	64.05
Net farm income	Dollars	6,479	4,041	3,773	3,614	106	-3,340	5,010
Percent of farms with negative net farm income	Percent	18.75	28.71	35.00	39.49	47.68	75.77	26.99
Net farm income including contractors	Dollars	6,489	5,197	4,376	4,591	2,357	-925	5,475
Percent of farms with negative NFI	Percent	18.75	29.04	34.97	38.45	47.68	75.77	26.93
Estimated principal repayment	Dollars	0	930	3,336	6,484	7,820	8,107	1,735
Cash income after interest and principal are deducted	do.	-188	-2,415	-6,297	-12,176	-11,487	-13,378	-3,344
Percent of farms with negative cash income	Percent	57.60	71.13	83.16	90.01	83.96	92.76	69.08
Nonfarm income	Dollars	42,659	55,077	43,380	45,642	41,561	19,961	44,374
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	23,272	33,462	17,883	14,266	10,874	-12,617	21,830
Percent of farms with negative income after principal and family living expenses are deducted	Percent	37.68	32.34	27.98	31.49	45.03	72.25	34.86

d = Data insufficient for disclosure.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 33--Combined farm income and cash-flow statement by organizational structure, January 1, 1989

Individual	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	784,043	238,135	374,786	147,648	47,359	24,601	1,616,572
Percent of farms	Percent	48.50	14.73	23.18	9.13	2.92	1.52	100.00
Farm income:								
Livestock sales	Dollars	9,914	27,451	36,789	44,387	36,920	41,098	23,142
Crop sales	do.	8,969	17,790	25,941	28,392	32,477	32,158	17,019
Net change in CCC loans	do.	15	-644	-1,368	-2,444	-2,119	-355	-695
Government payments	do.	1,805	4,439	6,767	8,762	8,739	8,624	4,286
Other farm income	do.	1,517	3,240	3,926	5,025	8,965	6,516	2,944
Gross cash farm income	do.	22,222	52,275	72,055	84,122	84,983	88,041	46,696
Nonmoney income	do.	6,881	8,294	7,409	7,048	5,594	3,011	7,130
Value of inventory change	do.	431	2,147	4,303	4,347	1,632	45	1,969
Gross farm income	do.	29,534	62,715	83,767	95,516	92,209	91,096	55,795
Estimated contractor income	do.	2,177	6,476	8,313	17,410	17,270	15,098	6,263
Gross farm income including contractors	do.	31,712	69,191	92,080	112,926	109,479	106,194	62,058
Operating expenses excluding interest	do.	17,146	39,375	52,406	62,932	61,866	69,048	34,877
Cash income before interest is deducted	do.	5,076	12,900	19,649	21,189	23,117	18,993	11,819
Percent of farms with negative cash income	Percent	47.19	41.53	37.30	37.54	36.07	41.31	42.76
Interest expense	Dollars	338	2,701	7,359	12,900	12,362	12,218	3,994
Cash income after interest is deducted	do.	4,738	10,199	12,290	8,289	10,755	6,775	7,825
Percent of farms with negative cash income	Percent	47.99	46.65	49.68	50.13	52.86	52.23	48.59
Total expenses including depreciation	Dollars	19,961	47,598	67,032	83,493	80,965	86,463	43,547
Contractor expenses	do.	852	2,545	2,886	8,887	8,449	2,294	2,551
Total expenses including contractors	do.	20,812	50,143	69,918	92,380	89,414	88,757	46,098
Net cash farm income including contractors	do.	6,064	14,131	17,717	16,812	19,576	19,579	11,537
Percent of farms with negative NCFI	Percent	48.11	46.57	48.77	49.11	52.36	52.08	48.31
Net farm income	Dollars	9,573	15,117	16,735	12,024	11,244	4,633	12,248
Percent of farms with negative net farm income	Percent	18.05	24.22	30.21	36.00	43.14	52.88	24.68
Net farm income including contractors	Dollars	10,899	19,049	22,162	20,546	20,064	17,437	15,960
Percent of farms with negative NFI	Percent	18.14	24.12	29.80	34.71	42.24	51.70	24.45
Estimated principal repayment	Dollars	0	1,307	5,230	10,631	12,677	15,771	2,988
Cash income after interest and principal are deducted	do.	4,738	8,892	7,060	-2,342	-1,922	-8,996	4,837
Percent of farms with negative cash income	Percent	47.99	50.56	59.01	64.80	66.42	72.32	53.37
Nonfarm income	Dollars	28,905	30,293	28,916	27,498	24,079	19,923	28,705
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	14,442	19,984	16,776	5,956	2,957	-8,273	14,343
Percent of farms with negative income after principal and family living expenses are deducted	Percent	48.70	41.80	37.45	44.71	63.02	68.88	45.44

See footnotes at end of table.

Continued--

Appendix table 33--Combined farm income and cash-flow statement by organizational structure, Jan. 1, 1989--Continued

Partnership	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0			
Number of farms	Number	44,567	19,235	25,735	9,903	2,208	1,919	103,567	
Percent of farms	Percent	43.03	18.57	24.84	9.56	2.13	1.85	100.00	
Farm income:									
Livestock sales	Dollars	39,761	95,760	120,277	117,697	272,551	177,868	85,142	
Crop sales	do.	50,248	63,358	88,884	103,639	94,622	180,518	70,748	
Net change in CCC loans	do.	969	-2,868	-3,206	-1,762	-1,466	-15,348	-1,397	
Government payments	do.	6,855	13,358	19,662	23,855	17,665	29,583	13,522	
Other farm income	do.	2,238	7,363	8,607	13,176	16,144	22,504	6,490	
Gross cash farm income	do.	100,071	176,970	234,224	256,605	399,515	395,125	174,506	
Nonmoney income	do.	7,309	10,508	8,471	10,956	5,950	3,520	8,441	
Value of inventory change	do.	-2,314	2,239	14,245	25,642	7,482	-50,461	4,636	
Gross farm income	do.	105,066	189,718	256,940	293,203	412,948	348,184	187,584	
Estimated contractor income	do.	1,386	49,356	11,542	10,173	8,503	4,185	13,863	
Gross farm income including contractors	do.	106,452	239,073	268,482	303,376	421,451	352,369	201,446	
Operating expenses excluding interest	do.	67,183	129,279	171,263	198,608	390,630	289,678	128,163	
Cash income before interest is deducted	do.	32,888	47,691	62,960	57,996	8,885	105,446	46,344	
Percent of farms with negative cash income	Percent	28.85	27.73	23.06	33.90	22.43	40.23	27.76	
Interest expense	Dollars	876	4,916	18,077	31,533	36,583	41,550	10,347	
Cash income after interest is deducted	do.	32,012	42,776	44,883	26,463	-27,698	63,896	35,997	
Percent of farms with negative cash income	Percent	28.90	32.68	30.95	38.30	26.78	58.35	31.51	
Total expenses including depreciation	Dollars	76,008	147,710	207,592	248,189	445,322	353,637	151,502	
Contractor expenses	do.	4	13,241	1,891	1,546	1,330	0	3,107	
Total expenses including contractors	do.	76,012	160,951	209,483	249,735	446,652	353,637	154,609	
Net cash farm income including contractors	do.	33,394	78,890	54,534	35,091	-20,525	68,081	46,752	
Percent of farms with negative NCFI	Percent	28.59	31.68	30.33	37.33	25.69	57.64	30.91	
Net farm income	Dollars	29,058	42,008	49,348	45,013	-32,374	-5,453	36,081	
Percent of farms with negative net farm income	Percent	21.12	19.93	29.92	31.17	27.67	59.39	24.89	
Net farm income including contractors	Dollars	30,440	78,122	58,999	53,641	-25,201	-1,268	46,837	
Percent of farms with negative NFI	Percent	20.81	19.72	29.27	29.38	27.15	58.68	24.37	
Estimated principal repayment	Dollars	0	3,010	11,825	20,853	29,564	39,334	6,851	
Cash income after interest and principal are deducted	do.	32,012	39,766	33,058	5,610	-57,262	24,562	29,146	
Percent of farms with negative cash income	Percent	28.90	33.84	33.47	50.63	54.39	67.29	34.28	
Nonfarm income	Dollars	34,445	44,677	23,273	21,793	35,875	23,172	32,181	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	47,257	65,242	37,131	8,203	-40,587	28,533	42,127	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	27.13	32.41	26.85	51.23	39.78	40.92	30.87	

See footnotes at end of table.

Continued--

Appendix table 33--Combined farm income and cash-flow statement by organizational structure, Jan. 1, 1989--Continued

Family corporation	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	11,641	8,309	10,625	3,538	767	956	35,837
Percent of farms	Percent	32.48	23.18	29.64	9.87	2.14	2.66	100.00
Farm income:								
Livestock sales	Dollars	96,750	137,176	204,012	236,380	1,017,304	100,150	171,510
Crop sales	do.	172,608	152,405	229,116	107,884	458,959	317,512	188,285
Net change in CCC loans	do.	-3,004	-1,821	-17,569	-348	-2,547	-21,498	-7,269
Government payments	do.	10,822	15,156	25,730	26,663	10,336	17,007	17,965
Other farm income	do.	14,973	10,627	11,259	14,295	417,399	40,068	22,083
Gross cash farm income	do.	292,149	313,542	452,549	384,875	1,901,451	453,239	392,574
Nonmoney income	do.	10,140	8,140	10,705	9,258	7,648	1,974	9,485
Value of inventory change	do.	3,578	24,212	18,011	12,603	12,497	14,209	14,007
Gross farm income	do.	305,866	345,893	481,265	406,736	1,921,595	469,421	416,066
Estimated contractor income	do.	27,854	20,599	48,679	32,631	669,545	28,666	46,579
Gross farm income including contractors	do.	333,720	366,492	529,944	439,367	2,591,140	498,087	462,645
Operating expenses excluding interest	do.	199,474	237,285	342,793	278,348	1,298,501	423,246	288,021
Cash income before interest is deducted	do.	92,675	76,257	109,756	106,527	602,949	29,993	104,553
Percent of farms with negative cash income	Percent	21.91	24.58	20.98	17.06	35.63	60.44	23.10
Interest expense	Dollars	2,246	9,320	31,180	41,461	49,616	70,351	19,168
Cash income after interest is deducted	do.	90,429	66,936	78,576	65,066	553,333	-40,358	85,385
Percent of farms with negative cash income	Percent	22.11	38.95	37.76	45.20	35.84	69.52	34.49
Total expenses including depreciation	Dollars	220,905	280,000	411,993	352,492	1,403,973	512,076	337,352
Contractor expenses	do.	11,472	1,056	2,350	3,504	0	46	5,015
Total expenses including contractors	do.	232,377	281,056	414,343	355,995	1,403,973	512,121	342,368
Net cash farm income including contractors	do.	106,811	86,480	124,904	94,194	1,222,878	-11,738	126,948
Percent of farms with negative NCFI	Percent	21.96	38.30	36.91	43.97	35.50	59.56	33.65
Net farm income	Dollars	84,962	65,893	69,272	54,244	517,622	-42,655	78,714
Percent of farms with negative net farm income	Percent	20.58	25.15	28.72	44.18	36.49	59.34	27.76
Net farm income including contractors	Dollars	101,343	85,436	115,601	83,371	1,187,167	-14,034	120,277
Percent of farms with negative NFI	Percent	19.63	24.19	28.25	41.38	36.16	58.45	26.78
Estimated principal repayment	Dollars	0	4,156	19,796	24,485	56,256	63,061	12,137
Cash income after interest and principal are deducted	do.	90,429	62,780	58,780	40,581	497,077	-103,419	73,248
Percent of farms with negative cash income	Percent	22.11	39.37	39.43	54.83	43.59	89.78	36.74
Nonfarm income	Dollars	38,304	25,150	31,335	23,043	21,294	18,110	30,778
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	109,533	68,730	70,915	44,424	499,171	-104,508	84,826
Percent of farms with negative income after principal and family living expenses are deducted	Percent	21.61	20.83	36.49	49.89	44.93	80.78	30.71

See footnotes at end of table.

Continued--

Appendix table 33--Combined farm income and cash-flow statement by organizational structure, Jan. 1, 1989--Continued

Nonfamily corporation	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	3,619	1,249	1,582	547	d	d	7,371
Percent of farms	Percent	49.09	16.94	21.45	7.42	d	d	100.00
Farm income:								
Livestock sales	Dollars	68,651	43,330	248,521	597,024	d	d	143,160
Crop sales	do.	264,139	470,556	489,565	114,877	d	d	324,644
Net change in CCC loans	do.	-216	-2,643	10,409	-11,336	d	d	839
Government payments	do.	5,561	5,386	9,030	7,341	d	d	6,167
Other farm income	do.	22,696	347,217	49,763	44,468	d	d	85,220
Gross cash farm income	do.	360,831	863,847	807,288	752,373	d	d	560,030
Nonmoney income	do.	3,853	16,097	15,396	9,435	d	d	8,902
Value of inventory change	do.	11,348	20,513	42,121	83,068	d	d	24,302
Gross farm income	do.	376,032	900,457	864,806	844,876	d	d	593,234
Estimated contractor income	do.	542,896	3,382	401,587	138,276	d	d	369,241
Gross farm income including contractors	do.	918,928	903,839	1,266,393	983,152	d	d	962,475
Operating expenses excluding interest	do.	279,113	457,776	660,484	445,298	d	d	394,507
Cash income before interest is deducted	do.	81,718	406,071	146,805	307,075	d	d	165,523
Percent of farms with negative cash income	Percent	41.21	7.16	37.07	4.11	d	d	29.78
Interest expense	Dollars	2,919	19,601	40,199	36,933	d	d	18,661
Cash income after interest is deducted	do.	78,799	386,470	106,606	270,142	d	d	146,862
Percent of farms with negative cash income	Percent	41.29	7.16	37.45	19.29	d	d	35.06
Total expenses including depreciation	Dollars	301,309	521,489	775,238	549,772	d	d	451,732
Contractor expenses	do.	94,287	485,641	111,693	0	d	d	155,061
Total expenses including contractors	do.	395,596	1,007,130	886,932	549,772	d	d	606,793
Net cash farm income including contractors	do.	527,407	-95,790	396,499	408,417	d	d	361,042
Percent of farms with negative NCFI	Percent	41.05	8.63	36.29	19.29	d	d	34.95
Net farm income	Dollars	74,723	378,968	89,567	295,103	d	d	141,502
Percent of farms with negative net farm income	Percent	34.73	7.24	47.32	20.86	d	d	31.42
Net farm income including contractors	Dollars	523,332	-103,291	379,461	433,379	d	d	355,682
Percent of farms with negative NFI	Percent	34.50	8.71	46.16	20.86	d	d	31.31
Estimated principal repayment	Dollars	0	10,862	34,505	29,710	d	d	13,693
Cash income after interest and principal are deducted	do.	78,799	375,608	72,101	240,432	d	d	133,169
Percent of farms with negative cash income	Percent	41.29	7.34	42.55	23.82	d	d	36.56
Nonfarm income	Dollars	16,875	32,968	7,907	15,122	d	d	17,886
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	d	d	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	76,474	389,376	60,808	236,354	d	d	131,855
Percent of farms with negative income after principal and family living expenses are deducted	Percent	42.63	10.99	47.89	16.79	d	d	35.83

d = Data insufficient for disclosure.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 34--Combined farm income and cash-flow statement by operator age, January 1, 1989

34 years or under	Unit	No debt	Debt/asset ratio					All farms
			0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
Number of farms	Number	45,464	24,183	70,745	39,244	16,805	6,158	202,600
Percent of farms	Percent	22.44	11.93	34.91	19.37	8.29	3.03	100.00
Farm income:								
Livestock sales	Dollars	21,760	40,776	42,417	35,464	33,021	40,889	35,413
Crop sales	do.	23,757	20,692	33,875	26,248	23,137	34,310	27,676
Net change in CCC loans	do.	206	-1,147	-527	-1,811	-705	1,023	-653
Government payments	do.	3,495	5,362	7,534	6,498	7,895	7,977	6,211
Other farm income	do.	2,949	2,796	3,884	3,571	6,359	6,657	3,773
Gross cash farm income	do.	52,166	68,478	87,183	69,970	69,707	90,857	72,420
Nonmoney income	do.	5,226	6,819	5,195	5,369	3,796	1,749	5,208
Value of inventory change	do.	2,696	1,931	7,271	3,681	4,846	-3,614	4,379
Gross farm income	do.	60,087	77,228	99,648	79,019	78,348	88,992	82,008
Estimated contractor income	do.	11,692	3,078	6,774	9,312	4,825	1,995	7,621
Gross farm income including contractors	do.	71,779	80,307	106,422	88,331	83,173	90,987	89,629
Operating expenses excluding interest	do.	38,179	51,402	65,773	47,932	52,815	70,183	53,469
Cash income before interest is deducted	do.	13,986	17,076	21,410	22,038	16,892	20,673	18,951
Percent of farms with negative cash income	Percent	36.54	32.31	40.32	33.80	25.55	38.75	35.98
Interest expense	Dollars	865	2,643	6,129	8,317	9,001	8,262	5,259
Cash income after interest is deducted	do.	13,121	14,432	15,281	13,720	7,891	12,411	13,692
Percent of farms with negative cash income	Percent	37.23	38.93	45.20	45.20	44.70	42.70	42.55
Total expenses including depreciation	Dollars	42,497	62,700	80,734	63,453	68,456	84,313	65,744
Contractor expenses	do.	5,479	812	1,735	3,927	1,718	75	2,838
Total expenses including contractors	do.	47,977	63,512	82,469	67,380	70,174	84,388	68,582
Net cash farm income including contractors	do.	19,333	16,698	20,319	19,106	10,997	14,332	18,475
Percent of farms with negative NCFI	Percent	36.80	38.93	44.98	43.80	44.28	42.59	42.06
Net farm income	Dollars	17,590	14,529	18,914	15,566	9,893	4,679	16,264
Percent of farms with negative net farm income	Percent	25.58	25.80	34.25	37.24	37.94	56.94	32.87
Net farm income including contractors	Dollars	23,802	16,795	23,953	20,951	12,999	6,599	21,047
Percent of farms with negative NFI	Percent	25.34	24.79	33.93	34.66	36.36	56.68	31.95
Estimated principal repayment	Dollars	0	1,303	4,575	7,420	10,666	11,097	4,412
Cash income after interest and principal are deducted	do.	13,121	13,129	10,706	6,300	-2,775	1,314	9,280
Percent of farms with negative cash income	Percent	37.23	42.21	50.18	62.48	66.41	72.43	50.73
Nonfarm income	Dollars	25,369	34,876	20,099	26,645	17,871	18,352	24,075
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	19,290	28,805	11,605	13,745	-4,104	466	14,155
Percent of farms with negative income after principal and family living expenses are deducted	Percent	41.45	38.57	37.90	40.38	65.99	52.52	42.03

See footnotes at end of table.

Continued--

Appendix table 34--Combined farm income and cash-flow statement by operator age, January 1, 1989--Continued

35-44 years	Unit	No debt	Debt/asset ratio					Over 1.0	All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0			
Number of farms	Number	102,885	52,983	107,600	50,159	14,735	10,100	338,462	
Percent of farms	Percent	30.39	15.65	31.79	14.81	4.35	2.98	100.00	
Farm income:									
Livestock sales	Dollars	16,901	35,180	50,607	56,580	96,032	31,271	40,232	
Crop sales	do.	25,668	31,929	40,153	35,580	47,724	66,576	34,903	
Net change in CCC loans	do.	157	-997	-1,869	-2,993	-1,224	-4,048	-1,320	
Government payments	do.	2,269	6,142	8,166	8,827	8,779	9,412	6,218	
Other farm income	do.	2,220	11,808	4,243	6,226	15,343	6,954	5,670	
Gross cash farm income	do.	47,214	84,062	101,299	104,220	166,654	110,164	85,703	
Nonmoney income	do.	6,586	7,647	7,676	7,948	6,309	2,174	7,157	
Value of inventory change	do.	-1,088	4,440	7,274	6,956	1,306	-32	3,763	
Gross farm income	do.	52,712	96,149	116,250	119,123	174,269	112,306	96,623	
Estimated contractor income	do.	22,555	9,283	8,810	21,334	29,172	7,263	15,758	
Gross farm income including contractors	do.	75,267	105,432	125,060	140,457	203,440	119,569	112,382	
Operating expenses excluding interest	do.	34,880	55,024	74,333	78,118	149,991	85,374	63,502	
Cash income before interest is deducted	do.	12,334	29,038	26,967	26,102	16,662	24,790	22,201	
Percent of farms with negative cash income	Percent	47.26	42.12	36.51	40.93	35.57	42.79	41.46	
Interest expense	Dollars	719	3,112	8,437	14,015	15,121	11,396	6,464	
Cash income after interest is deducted	do.	11,615	25,926	18,529	12,086	1,541	13,394	15,738	
Percent of farms with negative cash income	Percent	48.25	48.01	48.22	53.73	52.28	52.48	49.32	
Total expenses including depreciation	Dollars	39,570	66,327	92,279	101,211	172,997	102,383	77,333	
Contractor expenses	do.	3,894	17,859	2,561	7,775	7,421	3,457	6,372	
Total expenses including contractors	do.	43,464	84,185	94,839	108,986	180,418	105,840	83,705	
Net cash farm income including contractors	do.	30,275	17,350	24,779	25,645	23,291	17,199	25,124	
Percent of farms with negative NCFI	Percent	48.34	48.43	47.84	52.36	51.10	52.31	49.03	
Net farm income	Dollars	13,142	29,823	23,971	17,912	1,272	9,924	19,290	
Percent of farms with negative net farm income	Percent	23.29	25.33	26.10	38.03	44.70	48.62	28.37	
Net farm income including contractors	Dollars	31,802	21,247	30,220	31,471	23,022	13,729	28,676	
Percent of farms with negative NFI	Percent	23.25	25.94	25.37	37.23	43.68	46.04	27.99	
Estimated principal repayment	Dollars	0	1,649	6,173	11,530	14,950	14,913	5,026	
Cash income after interest and principal are deducted	do.	11,615	24,277	12,356	556	-13,409	-1,519	10,712	
Percent of farms with negative cash income	Percent	48.25	50.36	60.40	65.06	60.69	62.04	55.89	
Nonfarm income	Dollars	29,073	27,438	32,308	29,748	26,074	12,568	29,322	
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200	
Cash income after adding nonfarm income and deducting family living expenses	do.	21,488	32,515	25,464	11,104	-6,535	-8,151	20,835	
Percent of farms with negative income after principal and family living expenses are deducted	Percent	30.04	33.31	33.85	46.45	64.95	63.38	36.71	

See footnotes at end of table.

Continued--

Appendix table 34--Combined farm income and cash-flow statement by operator age, January 1, 1989--Continued

45-54 years	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	154,064	70,558	116,685	41,100	13,363	5,537	401,306
Percent of farms	Percent	38.39	17.58	29.07	10.24	3.32	1.37	100.00
Farm income:								
Livestock sales	Dollars	12,657	36,258	42,929	65,953	42,573	77,949	32,964
Crop sales	do.	15,888	30,967	35,911	38,388	50,373	55,313	28,358
Net change in CCC loans	do.	-67	-570	-2,595	-673	-3,938	-1,364	-1,099
Government payments	do.	2,258	5,240	7,916	12,071	8,445	14,552	5,808
Other farm income	do.	2,568	3,357	4,546	6,783	8,670	6,579	3,972
Gross cash farm income	do.	33,304	75,252	88,707	122,523	106,123	153,028	70,002
Nonmoney income	do.	7,866	8,758	8,896	8,439	7,023	5,647	8,322
Value of inventory change	do.	1,271	2,215	4,916	7,615	-2,256	-826	3,000
Gross farm income	do.	42,442	86,225	102,519	138,576	110,890	157,849	81,325
Estimated contractor income	do.	3,032	9,094	14,956	11,013	24,700	33,897	9,529
Gross farm income including contractors	do.	45,473	95,319	117,475	149,589	135,590	191,746	90,855
Operating expenses excluding interest	do.	25,624	56,970	66,044	92,262	73,518	126,390	52,698
Cash income before interest is deducted	do.	7,680	18,282	22,663	30,260	32,605	26,638	17,305
Percent of farms with negative cash income	Percent	51.93	41.27	34.85	35.40	47.32	41.44	43.10
Interest expense	Dollars	820	3,165	9,402	17,382	15,689	27,596	6,289
Cash income after interest is deducted	do.	6,860	15,117	13,261	12,878	16,915	-959	11,016
Percent of farms with negative cash income	Percent	54.02	42.99	50.07	45.54	59.35	63.31	50.37
Total expenses including depreciation	Dollars	29,657	67,446	84,386	119,227	98,044	163,103	65,506
Contractor expenses	do.	997	2,281	3,789	6,249	19,467	7,181	3,273
Total expenses including contractors	do.	30,654	69,727	88,175	125,476	117,511	170,285	68,779
Net cash farm income including contractors	do.	8,895	21,930	24,427	17,643	22,148	25,757	17,273
Percent of farms with negative NCFI	Percent	54.33	42.87	47.65	45.46	59.20	62.80	49.74
Net farm income	Dollars	12,784	18,779	18,133	19,349	12,846	-5,254	15,819
Percent of farms with negative net farm income	Percent	19.35	24.21	30.12	30.30	44.91	53.59	25.78
Net farm income including contractors	Dollars	14,819	25,592	29,300	24,113	18,079	21,462	22,076
Percent of farms with negative NFI	Percent	19.58	24.25	29.24	29.32	44.73	53.09	25.51
Estimated principal repayment	Dollars	0	1,628	6,529	14,005	14,843	28,106	4,501
Cash income after interest and principal are deducted	do.	6,860	13,489	6,732	-1,127	2,072	-29,065	6,515
Percent of farms with negative cash income	Percent	54.02	48.83	58.57	62.05	67.18	82.69	56.09
Nonfarm income	Dollars	38,535	33,868	32,104	30,756	35,029	36,574	34,904
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	26,195	28,157	19,636	10,429	17,901	-11,692	22,219
Percent of farms with negative income after principal and family living expenses are deducted	Percent	28.98	32.81	30.70	37.93	49.43	72.42	32.35

See footnotes at end of table.

Continued--

Appendix table 34--Combined farm income and cash-flow statement by operator age, January 1, 1989--Continued

55-64 years	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	225,626	76,498	80,292	24,147	4,834	4,720	416,117
Percent of farms	Percent	54.22	18.38	19.29	5.80	1.16	1.13	100.00
Farm income:								
Livestock sales	Dollars	15,372	39,667	50,934	71,071	65,145	57,029	30,983
Crop sales	do.	15,436	28,448	38,500	41,570	66,031	44,142	24,708
Net change in CCC loans	do.	-354	-927	-2,086	-4,903	-4,417	-3,611	-1,142
Government payments	do.	2,588	6,066	9,349	14,176	16,620	10,463	5,456
Other farm income	do.	1,360	4,248	5,473	7,566	69,273	19,485	4,039
Gross cash farm income	do.	34,402	77,502	102,170	129,480	212,652	127,508	64,046
Nonmoney income	do.	7,304	9,108	7,837	7,761	6,649	2,717	7,705
Value of inventory change	do.	807	2,814	1,809	7,261	6,032	-12,480	1,654
Gross farm income	do.	42,513	89,424	111,816	144,502	225,333	117,745	73,405
Estimated contractor income	do.	2,454	13,594	16,546	39,102	105,317	36,785	10,932
Gross farm income including contractors	do.	44,967	103,018	128,362	183,604	330,650	154,530	84,337
Operating expenses excluding interest	do.	25,633	59,921	70,728	100,560	121,053	99,422	46,931
Cash income before interest is deducted	do.	8,769	17,581	31,442	28,920	91,599	28,086	17,115
Percent of farms with negative cash income	Percent	45.14	40.67	31.52	35.78	31.90	51.82	41.07
Interest expense	Dollars	253	3,840	10,736	20,841	26,145	23,949	4,700
Cash income after interest is deducted	do.	8,516	13,740	20,706	8,079	65,454	4,137	12,415
Percent of farms with negative cash income	Percent	45.45	48.55	45.78	53.01	52.74	63.50	46.81
Total expenses including depreciation	Dollars	29,728	70,922	90,789	132,941	157,837	132,278	57,724
Contractor expenses	do.	1,136	3,762	5,478	22,320	969	6	3,671
Total expenses including contractors	do.	30,864	74,685	96,267	155,261	158,807	132,285	61,395
Net cash farm income including contractors	do.	9,834	23,573	31,774	24,861	169,802	40,915	19,676
Percent of farms with negative NCFI	Percent	45.59	48.50	45.49	51.56	52.74	63.39	46.74
Net farm income	Dollars	12,785	18,501	21,027	11,561	67,495	-14,533	15,681
Percent of farms with negative net farm income	Percent	18.54	22.88	31.44	35.26	37.45	69.26	23.59
Net farm income including contractors	Dollars	14,103	28,334	32,095	28,343	171,843	22,246	22,942
Percent of farms with negative NFI	Percent	18.57	22.72	31.68	33.81	37.45	69.14	23.54
Estimated principal repayment	Dollars	0	1,679	6,765	14,434	23,847	27,118	3,036
Cash income after interest and principal are deducted	do.	8,516	12,061	13,941	-6,355	41,607	-22,981	9,379
Percent of farms with negative cash income	Percent	45.45	50.60	53.38	66.25	73.06	80.56	49.85
Nonfarm income	Dollars	36,940	37,153	24,782	18,613	16,956	20,535	33,152
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	26,256	30,014	19,523	-6,943	39,362	-21,646	23,330
Percent of farms with negative income after principal and family living expenses are deducted	Percent	45.54	40.82	38.97	57.19	66.83	87.06	44.80

See footnotes at end of table.

Continued--

Appendix table 34--Combined farm income and cash-flow statement by operator age, January 1, 1989--Continued

65 years or over	Unit	No debt	Debt/asset ratio					All farms
			0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
Number of farms	Number	316,419	42,791	37,473	6,987	d	d	405,602
Percent of farms	Percent	78.01	10.55	9.23	1.72	d	d	100.00
Farm income:								
Livestock sales	Dollars	8,859	26,549	50,901	32,299	d	d	16,178
Crop sales	do.	8,214	18,103	33,010	38,160	d	d	12,197
Net change in CCC loans	do.	265	-823	-1,517	-2,648	d	d	-69
Government payments	do.	1,719	3,686	6,542	13,185	d	d	2,603
Other farm income	do.	1,522	4,202	5,090	4,785	d	d	2,204
Gross cash farm income	do.	20,579	51,718	94,025	85,781	d	d	33,114
Nonmoney income	do.	6,567	8,886	7,276	6,228	d	d	6,862
Value of inventory change	do.	-236	2,943	5,916	587	d	d	703
Gross farm income	do.	26,910	63,547	107,218	92,596	d	d	40,679
Estimated contractor income	do.	585	9,795	1,714	4,301	d	d	1,727
Gross farm income including contractors	do.	27,494	73,342	108,932	96,897	d	d	42,407
Operating expenses excluding interest	do.	15,008	38,967	72,619	66,929	d	d	24,561
Cash income before interest is deducted	do.	5,571	12,751	21,406	18,852	d	d	8,553
Percent of farms with negative cash income	Percent	44.33	37.38	39.42	34.78	d	d	42.89
Interest expense	Dollars	140	2,194	8,502	19,586	d	d	1,534
Cash income after interest is deducted	do.	5,431	10,557	12,903	-734	d	d	7,019
Percent of farms with negative cash income	Percent	44.68	42.92	52.66	47.32	d	d	45.24
Total expenses including depreciation	Dollars	17,244	45,889	88,579	93,932	d	d	29,076
Contractor expenses	do.	262	1,430	1,379	0	d	d	483
Total expenses including contractors	do.	17,506	47,319	89,958	93,932	d	d	29,559
Net cash farm income including contractors	do.	5,754	18,921	13,239	3,566	d	d	8,263
Percent of farms with negative NCFI	Percent	44.71	41.74	52.53	46.94	d	d	45.09
Net farm income	Dollars	9,666	17,659	18,638	-1,335	d	d	11,603
Percent of farms with negative net farm income	Percent	15.11	22.28	32.29	46.65	d	d	18.10
Net farm income including contractors	Dollars	9,989	26,023	18,973	2,965	d	d	12,847
Percent of farms with negative NFI	Percent	15.17	21.51	32.42	46.53	d	d	18.08
Estimated principal repayment	Dollars	0	1,292	6,347	12,220	d	d	1,015
Cash income after interest and principal are deducted	do.	5,431	9,265	6,556	-12,934	d	d	6,004
Percent of farms with negative cash income	Percent	44.68	47.26	61.18	58.83	d	d	46.88
Nonfarm income	Dollars	19,877	18,575	30,629	16,357	d	d	20,633
Estimated family living expenses	do.	19,200	19,200	19,200	19,200	d	d	19,200
Cash income after adding nonfarm income and deducting family living expenses	do.	6,108	8,641	17,985	-15,777	d	d	7,437
Percent of farms with negative income after principal and family living expenses are deducted	Percent	63.64	61.46	57.66	63.01	d	d	62.90

d = Data insufficient for disclosure.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix VIII--Farm Operator Balance Sheets

Appendix tables 35-42 provide detailed information about the capital structure of farm businesses. Assets and debt as of January 1, 1989, are presented in detail for various classifications of farms such as economic size, production specialty, region, land tenure, occupational specialty, organizational structure, and farm operator age.

Appendix table 35--Farm operator balance sheet for all farms, January 1, 1989

All farms	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
		<u>Number</u>					
Number of farms	844,458	267,013	412,795	161,637	50,645	27,540	1,764,088
		<u>Percent</u>					
Percentage of farms	47.86	15.13	23.39	9.16	2.87	1.56	100.00
		<u>Dollars per farm</u>					
Farm assets	317,977	512,615	390,500	317,029	239,480	158,331	359,575
Land and buildings	215,875	344,750	244,226	200,466	147,333	77,092	236,469
Farm equipment	24,583	57,684	53,429	49,278	39,365	31,612	39,140
Livestock inventory	16,237	35,722	40,198	35,594	34,790	23,888	27,219
Crop inventory	4,424	15,753	15,121	12,243	7,726	5,472	9,469
Purchased inputs	829	2,992	2,796	2,756	2,288	1,230	1,841
Other assets	35,076	39,796	31,625	13,713	7,810	10,655	31,861
Farm operator debt	0	20,863	87,476	166,345	192,559	245,650	48,232
By lender:							
Farm Credit System	0	6,469	33,056	70,807	86,202	122,394	19,588
Commercial bank	0	9,849	36,220	65,935	65,417	87,251	19,248
Other	0	4,545	18,199	29,603	40,941	36,005	9,396
By original term of loan:							
Less than 1 year	0	3,698	9,257	13,763	17,986	18,261	4,788
1-10 years	0	9,110	28,568	49,922	54,578	90,566	15,619
More than 10 years	0	8,055	49,651	102,660	119,996	136,824	27,825
Commodity Credit Corporation crop loans ^{1/}	521	1,731	3,422	5,740	4,031	6,277	2,052
Net worth	317,977	491,752	303,024	150,684	46,921	-87,319	311,343
		<u>Ratio</u>					
Debt/asset ratio	0	0.04	0.22	0.52	0.80	1.55	0.13
		<u>Percent</u>					
Percentage of debt by debt/asset category	0	6.54	42.43	31.60	11.46	7.95	100.00
Percentage of assets by debt/asset category	42.33	21.57	25.41	8.07	1.91	.68	100.00

^{1/} Outstanding CCC crop loans were excluded from both assets and debt.
Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 36--Farm operator balance sheet by economic class, January 1, 1989

\$500,000 or over	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	6,389	4,817	14,012	6,036	2,095	1,325	34,674
<u>Percent</u>							
Percentage of farms	18.42	13.89	40.41	17.40	6.04	3.82	100.00
<u>Dollars per farm</u>							
Farm assets	3,067,102	4,424,519	2,042,847	1,584,271	1,120,571	749,325	2,377,449
Land and buildings	1,714,058	2,031,511	1,212,487	924,655	543,714	328,445	1,294,392
Farm equipment	204,916	866,573	233,802	202,992	168,510	137,723	303,401
Livestock inventory	285,859	360,497	280,585	259,772	291,270	159,266	285,044
Crop inventory	129,105	371,419	91,114	82,559	53,793	22,677	130,694
Purchased inputs	21,494	60,413	25,744	27,221	28,170	12,398	29,671
Other assets	229,255	256,055	170,904	79,946	34,558	65,452	165,383
Farm operator debt	0	156,332	475,609	810,548	885,270	1,251,699	456,332
By lender:							
Farm Credit System	0	35,340	190,059	352,617	271,197	243,098	168,774
Commercial bank	0	71,701	172,437	290,398	455,445	715,614	185,057
Other	0	49,291	113,113	167,532	158,628	292,987	102,501
By original term of loan:							
Less than 1 year	0	33,780	84,409	111,639	192,841	144,001	75,391
1-10 years	0	75,565	132,970	263,204	217,492	766,341	152,473
More than 10 years	0	46,987	258,230	435,704	474,936	341,358	228,468
Commodity Credit Corporation crop loans <u>1/</u>	7,829	10,101	25,001	34,797	22,706	19,507	21,124
Net worth	3,067,102	4,268,186	1,567,238	773,723	235,301	-502,374	1,921,117
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.23	0.51	0.79	1.67	0.19
<u>Percent</u>							
Percentage of debt by debt/asset category	0	4.75	42.11	30.92	11.71	10.48	100.00
Percentage of assets by debt/asset category	23.77	25.85	34.72	11.60	2.84	1.20	100.00

See footnotes at end of table.

Continued--

Appendix table 36--Farm operator balance sheet by economic class, January 1, 1989--Continued

\$250,000-\$499,999	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	14,598	12,486	26,671	11,796	2,939	1,726	70,216
<u>Percent</u>							
Percentage of farms	20.78	17.78	37.98	16.79	4.18	2.45	100.00
<u>Dollars per farm</u>							
Farm assets	1,603,115	1,197,418	923,770	686,062	581,253	346,184	1,045,194
Land and buildings	661,387	762,584	522,255	411,279	376,021	143,741	559,846
Farm equipment	159,768	145,601	156,919	124,128	103,931	67,468	145,573
Livestock inventory	98,206	101,405	105,961	82,439	64,505	46,241	96,384
Crop inventory	30,485	52,928	54,678	28,302	14,015	24,592	42,464
Purchased inputs	7,941	13,691	10,981	6,203	3,842	2,301	9,516
Other assets	129,149	76,837	70,686	31,123	18,938	40,749	74,386
Farm operator debt	0	53,763	214,171	356,735	469,026	511,402	183,046
By lender:							
Farm Credit System	0	21,491	85,839	169,227	222,840	342,720	82,610
Commercial bank	0	17,700	76,920	109,959	165,196	126,916	60,872
Other	0	14,572	51,412	77,548	80,991	41,767	39,564
By original term of loan:							
Less than 1 year	0	12,571	20,108	43,400	52,943	35,182	20,245
1-10 years	0	21,919	75,597	111,202	99,137	185,613	60,007
More than 10 years	0	19,273	118,466	202,132	316,947	290,607	102,794
Commodity Credit Corporation crop loans ^{1/}	13,310	10,696	12,734	23,951	30,642	57,226	16,219
Net worth	1,603,115	1,143,655	709,599	329,327	112,227	-165,218	862,148
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.23	0.52	0.81	1.48	0.18
<u>Percent</u>							
Percentage of debt by debt/asset category	0	5.22	44.44	32.74	10.72	6.86	100.00
Percentage of assets by debt/asset category	31.88	20.37	33.57	11.02	2.32	.81	100.00

See footnotes at end of table.

Continued--

Appendix table 36--Farm operator balance sheet by economic class, January 1, 1989--Continued

\$100,000-\$249,999	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
		<u>Number</u>					
Number of farms	40,426	37,025	79,816	34,685	8,790	5,720	206,462
		<u>Percent</u>					
Percentage of farms	19.58	17.93	38.65	16.79	4.25	2.77	100.00
		<u>Dollars per farm</u>					
Farm assets	699,751	945,037	516,777	401,130	342,994	209,291	594,060
Land and buildings	424,620	676,461	297,349	228,675	186,915	112,520	368,897
Farm equipment	81,576	103,791	88,121	80,441	68,546	35,309	86,063
Livestock inventory	51,807	61,921	59,997	49,879	51,036	27,573	55,759
Crop inventory	25,350	28,309	27,622	21,925	15,550	8,116	25,289
Purchased inputs	3,936	4,949	3,720	3,601	2,425	1,027	3,833
Other assets	75,872	64,823	37,292	15,624	18,119	14,011	44,682
Farm operator debt	0	37,738	118,330	215,118	280,802	281,176	108,396
By lender:							
Farm Credit System	0	12,572	49,045	106,631	159,562	178,535	50,868
Commercial bank	0	15,549	44,771	74,567	71,156	69,576	37,580
Other	0	9,617	24,514	33,921	50,084	33,065	19,948
By original term of loan:							
Less than 1 year	0	8,474	14,164	16,264	17,547	16,114	10,921
1-10 years	0	14,301	40,135	70,900	94,187	71,878	35,993
More than 10 years	0	14,963	64,030	127,955	169,068	193,184	61,482
Commodity Credit Corporation crop loans <u>1/</u>	2,599	6,099	6,682	10,301	4,556	4,691	6,240
Net worth	699,751	907,299	398,447	186,012	62,193	-71,885	485,663
		<u>Ratio</u>					
Debt/asset ratio	0	0.04	0.23	0.54	0.82	1.34	0.18
		<u>Percent</u>					
Percentage of debt by debt/asset category	0	6.24	42.20	33.33	11.02	7.18	100.00
Percentage of assets by debt/asset category	23.06	28.52	33.62	11.34	2.45	.97	100.00

See footnotes at end of table.

Continued--

Appendix table 36--Farm operator balance sheet by economic class, January 1, 1989--Continued

\$40,000-\$99,999	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	74,680	47,489	76,566	32,084	11,112	5,796	247,727
<u>Percent</u>							
Percentage of farms	30.14	19.16	30.90	12.95	4.48	2.33	100.00
<u>Dollars per farm</u>							
Farm assets	484,575	473,835	347,851	257,156	194,511	129,300	389,481
Land and buildings	302,303	339,575	223,431	160,651	122,830	66,485	253,157
Farm equipment	53,290	52,004	49,871	43,384	32,151	31,700	49,250
Livestock inventory	31,265	45,178	33,559	25,874	25,522	14,435	33,292
Crop inventory	10,634	9,462	11,148	9,932	7,542	4,325	10,191
Purchased inputs	1,479	1,882	1,789	1,729	1,639	675	1,673
Other assets	51,548	24,244	24,666	12,132	4,487	3,716	29,670
Farm operator debt	0	22,480	75,268	135,726	156,902	206,885	57,030
By lender:							
Farm Credit System	0	8,431	28,267	68,305	93,180	140,689	26,671
Commercial bank	0	10,140	28,522	48,045	34,084	45,341	19,571
Other	0	3,910	18,479	19,376	29,637	20,854	10,788
By original term of loan:							
Less than 1 year	0	4,326	9,064	11,575	7,388	9,969	5,694
1-10 years	0	8,086	26,807	42,382	50,082	55,420	18,868
More than 10 years	0	10,067	39,398	81,769	99,432	141,496	32,468
Commodity Credit Corporation crop loans ^{1/}	694	841	1,765	2,076	2,317	2,643	1,351
Net worth	484,575	451,355	272,583	121,430	37,609	-77,585	332,451
<u>Ratio</u>							
Debt/asset ratio	0	0.05	0.22	0.53	0.81	1.60	0.15
<u>Percent</u>							
Percentage of debt by debt/asset category	0	7.55	40.79	30.82	12.34	8.48	100.00
Percentage of assets by debt/asset category	37.50	23.32	27.60	8.55	2.24	.77	100.00

See footnotes at end of table.

Continued--

Appendix table 36--Farm operator balance sheet by economic class, January 1, 1989--Continued

\$20,000-\$39,999	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	86,416	34,587	45,613	14,395	7,151	5,422	193,584
<u>Percent</u>							
Percentage of farms	44.64	17.86	23.56	7.43	3.69	2.80	100.00
<u>Dollars per farm</u>							
Farm assets	349,207	405,146	249,611	197,307	132,699	73,574	308,721
Land and buildings	239,687	285,910	176,772	131,431	80,257	32,940	213,392
Farm equipment	28,888	34,628	27,304	24,892	28,897	18,131	28,942
Livestock inventory	17,534	26,568	15,197	22,307	17,413	15,833	18,900
Crop inventory	3,599	4,056	4,954	2,547	764	958	3,743
Purchased inputs	627	814	658	917	181	568	671
Other assets	54,596	29,964	21,724	10,605	5,187	4,693	35,956
Farm operator debt	0	16,309	54,234	95,837	105,305	131,292	30,386
By lender:							
Farm Credit System	0	5,325	20,467	44,493	52,955	48,373	12,394
Commercial bank	0	9,469	25,654	35,854	31,906	74,221	13,660
Other	0	1,514	8,112	15,490	20,444	8,697	4,333
By original term of loan:							
Less than 1 year	0	1,519	3,371	4,092	12,670	14,785	2,252
1-10 years	0	9,338	20,932	19,148	24,315	37,155	9,963
More than 10 years	0	5,452	29,931	72,597	68,320	79,351	18,171
Commodity Credit Corporation crop loans <u>1/</u>	371	265	752	557	104	1,119	467
Net worth	349,207	388,838	195,377	101,470	27,394	-57,718	278,335
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.22	0.49	0.79	1.78	0.10
<u>Percent</u>							
Percentage of debt by debt/asset category	0	9.58	42.05	23.45	12.80	12.10	100.00
Percentage of assets by debt/asset category	50.49	23.44	19.05	4.75	1.58	.66	100.00

See footnotes at end of table.

Continued--

Appendix table 36--Farm operator balance sheet by economic class, January 1, 1989--Continued

\$10,000-\$19,999	No debt	Debt/asset ratio					Over 1.0	All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
<u>Number</u>								
Number of farms	111,622	34,641	44,685	12,160	4,603	2,056	209,765	
<u>Percent</u>								
Percentage of farms	53.21	16.51	21.30	5.79	2.19	0.97	100.00	
<u>Dollars per farm</u>								
Farm assets	281,179	278,786	177,002	148,788	139,673	76,784	245,809	
Land and buildings	193,018	199,538	129,130	100,109	104,520	43,577	171,693	
Farm equipment	22,496	17,529	17,500	17,223	15,425	13,748	20,065	
Livestock inventory	15,318	13,458	14,996	10,065	15,126	3,778	14,520	
Crop inventory	1,175	1,196	2,970	1,369	2,267	381	1,588	
Purchased inputs	431	450	367	222	421	162	406	
Other assets	41,047	45,675	11,875	4,326	1,914	2,014	32,227	
Farm operator debt	0	9,382	37,355	78,539	115,296	114,259	17,709	
By lender:								
Farm Credit System	0	2,484	13,492	39,523	28,111	80,604	6,982	
Commercial bank	0	5,733	19,741	23,801	20,443	21,836	7,194	
Other	0	1,165	4,121	15,215	66,743	11,819	3,533	
By original term of loan:								
Less than 1 year	0	808	1,328	1,959	4,511	4,189	670	
1-10 years	0	4,511	12,942	16,127	41,928	39,994	5,749	
More than 10 years	0	4,062	23,085	60,453	68,858	70,076	11,291	
Commodity Credit Corporation crop loans <u>1/</u>	50	98	382	0	0	0	124	
Net worth	281,179	269,404	139,647	70,249	24,377	-37,475	228,100	
<u>Ratio</u>								
Debt/asset ratio	0	0.03	0.21	0.53	0.83	1.49	0.07	
<u>Percent</u>								
Percentage of debt by debt/asset category	0	8.74	44.93	25.70	14.28	6.32	100.00	
Percentage of assets by debt/asset category	60.86	18.72	15.33	3.50	1.24	.30	100.00	

See footnotes at end of table.

Continued--

Appendix table 36--Farm operator balance sheet by economic class, January 1, 1989--Continued

Less than \$10,000	No debt	Debt/asset ratio					Over 1.0	All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
<u>Number</u>								
Number of farms	510,328	95,968	125,433	50,481	13,955	5,496	801,660	
<u>Percent</u>								
Percentage of farms	63.65	11.97	15.64	6.29	1.74	0.68	100.00	
<u>Dollars per farm</u>								
Farm assets	194,938	202,673	165,497	134,199	93,493	48,548	184,663	
Land and buildings	156,159	153,934	121,363	114,392	82,746	25,969	145,648	
Farm equipment	9,470	13,473	13,671	10,415	7,007	10,808	10,632	
Livestock inventory	5,481	7,423	8,883	4,141	2,572	5,832	6,113	
Crop inventory	401	804	718	283	75	132	484	
Purchased inputs	147	215	161	233	201	50	163	
Other assets	19,700	23,583	19,038	4,563	893	934	18,652	
Farm operator debt	0	8,260	34,940	72,029	73,365	85,518	12,855	
By lender:								
Farm Credit System	0	1,592	8,590	6,125	14,089	35,021	2,406	
Commercial bank	0	5,004	21,321	52,974	39,201	23,229	8,112	
Other	0	1,663	5,029	12,931	20,076	27,269	2,337	
By original term of loan:								
Less than 1 year	0	710	514	406	263	2,305	211	
1-10 years	0	4,189	8,964	17,393	19,051	25,924	3,509	
More than 10 years	0	3,361	25,463	54,230	54,052	57,289	9,135	
Commodity Credit Corporation crop loans ^{1/}	2	18	21	66	0	4	11	
Net worth	194,938	194,413	130,556	62,170	20,128	-36,971	171,808	
<u>Ratio</u>								
Debt/asset ratio	0	0.04	0.21	0.54	0.78	1.76	0.07	
<u>Percent</u>								
Percentage of debt by debt/asset category	0	7.69	42.52	35.28	9.93	4.56	100.00	
Percentage of assets by debt/asset category	67.20	13.13	14.02	4.57	.88	.18	100.00	

^{1/} Outstanding CCC crop loans were excluded from both assets and debt.
Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Cash grains	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	123,208	47,488	103,050	41,623	15,583	8,815	339,766
<u>Percent</u>							
Percentage of farms	36.26	13.97	30.32	12.25	4.58	2.59	100.00
<u>Dollars per farm</u>							
Farm assets	323,859	627,116	388,115	357,727	196,875	144,116	379,394
Land and buildings	205,083	379,305	236,342	232,907	112,872	71,234	234,621
Farm equipment	47,944	139,273	77,646	73,188	49,757	38,843	72,657
Livestock inventory	4,959	9,867	12,211	12,883	11,544	3,150	9,070
Crop inventory	12,622	50,622	25,882	18,601	12,328	8,645	22,571
Purchased inputs	1,255	5,970	2,754	2,792	1,306	1,878	2,576
Other assets	44,108	39,691	29,612	16,674	8,826	7,191	33,157
Farm operator debt	0	23,820	93,280	191,109	158,564	204,022	67,598
By lender:							
Farm Credit System	0	6,059	38,638	90,455	81,764	126,435	30,677
Commercial bank	0	10,642	35,507	63,880	48,463	51,390	23,638
Other	0	7,119	19,134	36,774	28,337	26,197	13,283
By original term of loan:							
Less than 1 year	0	4,625	8,231	14,545	14,015	10,295	5,835
1-10 years	0	9,787	30,028	56,709	46,808	63,789	21,224
More than 10 years	0	9,408	55,020	119,855	97,740	129,938	40,539
Commodity Credit Corporation crop loans <u>1/</u>	1,457	6,671	9,010	16,929	10,089	16,495	7,158
Net worth	323,859	603,296	294,836	166,618	38,312	-59,906	311,796
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.24	0.53	0.81	1.42	0.18
<u>Percent</u>							
Percentage of debt by debt/asset category	0	4.92	41.85	34.63	10.75	7.83	100.00
Percentage of assets by debt/asset category	30.95	23.10	31.02	11.55	2.37	.98	100.00

See footnotes at end of table.

Continued--

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Tobacco	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
		<u>Number</u>					
Number of farms	42,923	10,140	14,489	4,650	d	d	76,177
		<u>Percent</u>					
Percentage of farms	56.34	13.31	19.02	6.10	d	d	100.00
		<u>Dollars per farm</u>					
Farm assets	143,377	220,271	192,166	126,040	d	d	159,792
Land and buildings	100,405	159,286	132,964	86,779	d	d	112,215
Farm equipment	13,508	28,425	23,927	28,159	d	d	18,592
Livestock inventory	3,168	4,665	6,437	3,487	d	d	3,885
Crop inventory	840	2,135	2,795	1,510	d	d	1,468
Purchased inputs	191	305	247	472	d	d	285
Other assets	24,277	25,455	23,714	4,444	d	d	22,005
Farm operator debt	0	13,501	40,816	67,476	d	d	18,606
By lender:							
Farm Credit System	0	6,534	19,816	30,879	d	d	8,994
Commercial bank	0	6,027	17,299	31,102	d	d	7,885
Other	0	940	3,701	5,494	d	d	1,727
By original term of loan:							
Less than 1 year	0	694	1,750	4,458	d	d	962
1-10 years	0	8,777	12,210	11,063	d	d	5,624
More than 10 years	0	4,030	26,856	51,955	d	d	12,020
Commodity Credit Corporation crop loans <u>1/</u>	0	42	261	169	d	d	99
Net worth	143,377	206,770	151,350	58,564	d	d	141,186
		<u>Ratio</u>					
Debt/asset ratio	0	0.06	0.21	0.54	d	d	0.12
		<u>Percent</u>					
Percentage of debt by debt/asset category	0	9.65	41.72	22.13	d	d	100.00
Percentage of assets by debt/asset category	50.55	18.34	22.87	4.81	d	d	100.00

See footnotes at end of table.

Continued--

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Cotton	No debt	Debt/asset ratio					Over 1.0	All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0			
<u>Number</u>								
Number of farms	8,395	3,085	5,437	1,907	803	486	20,112	
<u>Percent</u>								
Percentage of farms	41.74	15.33	27.03	9.48	3.99	2.41	100.00	
<u>Dollars per farm</u>								
Farm assets	500,859	606,269	636,215	394,591	321,094	173,368	528,450	
Land and buildings	284,364	368,620	407,855	210,307	198,589	63,250	314,879	
Farm equipment	87,142	100,358	132,548	94,786	89,896	84,586	102,216	
Livestock inventory	5,111	10,668	9,531	6,881	5,563	996	7,244	
Crop inventory	10,289	8,028	23,468	14,070	10,003	3,686	13,693	
Purchased inputs	1,096	2,925	4,200	2,933	2,918	1,505	2,472	
Other assets	81,881	96,969	58,613	44,187	14,124	19,345	70,115	
Farm operator debt	0	32,569	165,072	208,021	257,563	385,946	88,948	
By lender:								
Farm Credit System	0	10,307	87,424	77,434	133,542	271,628	44,449	
Commercial bank	0	14,339	53,173	76,640	57,834	79,794	28,076	
Other	0	7,923	24,475	53,947	66,187	34,524	16,423	
By original term of loan:								
Less than 1 year	0	5,340	33,372	32,990	30,408	52,332	15,446	
1-10 years	0	19,434	39,359	57,699	107,856	65,859	24,988	
More than 10 years	0	7,796	92,342	117,332	119,299	267,755	48,514	
Commodity Credit Corporation crop loans ^{1/}	25,098	26,116	22,678	13,847	13,221	14,080	22,793	
Net worth	500,859	573,699	471,143	186,570	63,531	-212,578	439,502	
<u>Ratio</u>								
Debt/asset ratio	0	0.05	0.26	0.53	0.80	2.23	0.17	
<u>Percent</u>								
Percentage of debt by debt/asset category	0	5.61	50.16	22.17	11.55	10.48	100.00	
Percentage of assets by debt/asset category	39.56	17.59	32.54	7.07	2.42	.79	100.00	

See footnotes at end of table.

Continued--

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Other field crops	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	64,022	15,616	26,020	15,250	4,120	2,416	127,445
<u>Percent</u>							
Percentage of farms	50.23	12.25	20.41	11.96	3.23	1.89	100.00
<u>Dollars per farm</u>							
Farm assets	258,541	526,774	374,316	272,784	238,445	168,544	314,394
Land and buildings	184,513	383,024	264,873	194,545	160,056	104,509	224,136
Farm equipment	20,831	41,040	49,451	35,418	38,431	37,918	31,789
Livestock inventory	2,689	7,113	7,197	6,482	13,206	9,793	5,080
Crop inventory	6,037	6,774	14,928	7,942	11,446	6,470	8,353
Purchased inputs	299	1,248	2,137	1,639	1,127	700	985
Other assets	34,140	20,230	30,634	12,590	14,179	7,566	27,992
Farm operator debt	0	25,334	84,921	137,647	189,162	252,115	47,809
By lender:							
Farm Credit System	0	12,462	35,828	49,735	78,521	151,335	20,201
Commercial bank	0	9,383	34,336	62,013	47,795	40,247	17,889
Other	0	3,490	14,757	25,899	62,846	60,532	9,719
By original term of loan:							
Less than 1 year	0	2,093	5,888	6,481	9,246	27,780	3,060
1-10 years	0	10,106	25,379	48,205	44,183	95,157	15,421
More than 10 years	0	13,135	53,654	82,962	135,734	129,178	29,329
Commodity Credit Corporation crop loans <u>1/</u>	169	906	2,648	2,461	2,590	2,493	1,162
Net worth	258,541	501,440	289,395	135,136	49,282	-83,571	266,585
<u>Ratio</u>							
Debt/asset ratio	0	0.05	0.23	0.50	0.79	1.50	0.15
<u>Percent</u>							
Percentage of debt by debt/asset category	0	6.49	36.26	34.45	12.79	9.99	100.00
Percentage of assets by debt/asset category	41.31	20.53	24.30	10.38	2.45	1.01	100.00

See footnotes at end of table.

Continued--

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Vegetables, fruit, nuts	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	43,431	11,988	17,627	8,132	d	d	83,065
<u>Percent</u>							
Percentage of farms	52.28	14.43	21.22	9.78	d	d	100.00
<u>Dollars per farm</u>							
Farm assets	393,830	1,262,686	647,126	343,063	d	d	567,506
Land and buildings	296,840	972,556	476,216	259,696	d	d	427,490
Farm equipment	23,562	53,903	54,718	43,803	d	d	37,869
Livestock inventory	1,284	1,270	1,900	1,072	d	d	1,364
Crop inventory	2,556	6,431	21,276	15,227	d	d	8,628
Purchased inputs	299	1,166	2,680	1,172	d	d	1,075
Other assets	61,838	74,959	79,015	22,093	d	d	62,574
Farm operator debt	0	42,014	121,896	173,348	d	d	58,837
By lender:							
Farm Credit System	0	17,198	40,465	93,072	d	d	23,890
Commercial bank	0	15,524	46,821	51,072	d	d	22,241
Other	0	9,292	34,610	29,203	d	d	12,706
By original term of loan:							
Less than 1 year	0	15,339	15,035	4,006	d	d	7,152
1-10 years	0	10,815	34,695	42,861	d	d	16,687
More than 10 years	0	15,861	72,167	126,480	d	d	34,998
Commodity Credit Corporation crop loans <u>1/</u>	146	157	346	1,231	d	d	322
Net worth	393,830	1,220,672	525,230	169,715	d	d	508,669
<u>Ratio</u>							
Debt/asset ratio	0	0.03	0.19	0.51	d	d	0.10
<u>Percent</u>							
Percentage of debt by debt/asset category	0	10.30	43.96	28.84	d	d	100.00
Percentage of assets by debt/asset category	36.28	32.10	24.19	5.91	d	d	100.00

See footnotes at end of table.

Continued--

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Nursery, greenhouse	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	14,407	7,130	8,633	3,353	d	d	34,760
<u>Percent</u>							
Percentage of farms	41.44	20.51	24.83	9.64	d	d	100.00
<u>Dollars per farm</u>							
Farm assets	431,312	440,888	384,436	203,525	d	d	389,312
Land and buildings	319,974	237,495	299,568	136,780	d	d	273,005
Farm equipment	33,237	31,234	25,930	27,610	d	d	29,690
Livestock inventory	15,778	17,053	342	1,642	d	d	10,281
Crop inventory	24,081	67,515	20,324	21,016	d	d	30,924
Purchased inputs	2,237	9,254	5,281	2,828	d	d	4,426
Other assets	33,901	65,851	28,431	13,649	d	d	36,027
Farm operator debt	0	17,622	100,477	118,118	d	d	44,645
By lender:							
Farm Credit System	0	5,539	17,361	18,093	d	d	8,940
Commercial bank	0	10,898	47,766	67,464	d	d	22,180
Other	0	1,185	35,350	32,560	d	d	13,524
By original term of loan:							
Less than 1 year	0	2,028	6,486	1,718	d	d	2,284
1-10 years	0	9,816	39,280	87,343	d	d	22,671
More than 10 years	0	5,779	54,712	29,057	d	d	19,690
Commodity Credit Corporation crop loans <u>1/</u>	0	0	0	0	d	d	0
Net worth	431,312	423,265	283,959	85,407	d	d	344,668
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.26	0.58	d	d	0.11
<u>Percent</u>							
Percentage of debt by debt/asset category	0	8.09	55.89	25.51	d	d	100.00
Percentage of assets by debt/asset category	45.91	23.23	24.52	5.04	d	d	100.00

See footnotes at end of table.

Continued--

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Beef, hogs, sheep	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	479,276	128,677	169,923	55,635	16,316	8,584	858,411
<u>Percent</u>							
Percentage of farms	55.83	14.99	19.79	6.48	1.90	0.99	100.00
<u>Dollars per farm</u>							
Farm assets	321,223	396,761	340,343	289,211	251,033	174,727	331,457
Land and buildings	219,329	267,593	214,089	177,318	155,190	82,879	220,220
Farm equipment	17,488	31,118	35,678	34,972	28,888	28,381	24,590
Livestock inventory	19,801	45,172	51,588	54,174	56,286	48,326	33,103
Crop inventory	1,740	4,597	8,636	8,943	3,644	4,385	4,063
Purchased inputs	582	2,051	2,055	2,811	1,694	881	1,262
Other assets	30,939	38,655	27,240	9,802	5,258	9,047	29,287
Farm operator debt	0	17,048	73,361	150,080	202,578	282,652	33,481
By lender:							
Farm Credit System	0	4,083	23,888	52,895	87,632	107,502	11,510
Commercial bank	0	9,522	33,738	71,685	68,401	122,502	15,277
Other	0	3,443	15,735	25,499	46,545	52,648	6,695
By original term of loan:							
Less than 1 year	0	3,064	10,248	18,872	28,097	30,974	4,555
1-10 years	0	7,940	23,614	42,904	51,611	110,253	10,729
More than 10 years	0	6,044	39,498	88,304	122,870	141,425	18,197
Commodity Credit Corporation crop loans <u>1/</u>	61	275	1,375	1,954	1,004	1,330	506
Net worth	321,223	379,713	266,983	139,132	48,455	-107,925	297,977
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.22	0.52	0.81	1.62	0.10
<u>Percent</u>							
Percentage of debt by debt/asset category	0	7.63	43.37	29.05	11.50	8.44	100.00
Percentage of assets by debt/asset category	54.10	17.94	20.32	5.65	1.43	.52	100.00

See footnotes at end of table.

Continued--

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Poultry	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	7,486	3,843	7,358	4,960	d	d	27,227
<u>Percent</u>							
Percentage of farms	27.49	14.11	27.02	18.21	d	d	100.00
<u>Dollars per farm</u>							
Farm assets	209,397	652,624	446,158	363,020	d	d	355,989
Land and buildings	156,709	487,060	337,910	287,086	d	d	271,097
Farm equipment	16,486	41,103	41,174	33,586	d	d	29,455
Livestock inventory	3,395	22,843	26,605	25,609	d	d	17,077
Crop inventory	496	4,617	1,529	1,698	d	d	1,511
Purchased inputs	1,902	4,144	796	406	d	d	1,448
Other assets	28,975	90,071	35,524	14,635	d	d	33,714
Farm operator debt	0	22,266	97,568	187,071	d	d	80,931
By lender:							
Farm Credit System	0	12,339	44,096	72,972	d	d	32,243
Commercial bank	0	6,781	51,634	105,605	d	d	40,260
Other	0	3,145	1,838	8,494	d	d	8,428
By original term of loan:							
Less than 1 year	0	2,267	1,761	2,379	d	d	1,736
1-10 years	0	11,785	58,945	49,735	d	d	33,356
More than 10 years	0	8,213	36,862	134,957	d	d	45,838
Commodity Credit Corporation crop loans <u>1</u> /	0	154	51	55	d	d	46
Net worth	209,397	630,359	348,590	175,949	d	d	275,058
<u>Ratio</u>							
Debt/asset ratio	0	0.03	0.22	0.52	d	d	0.23
<u>Percent</u>							
Percentage of debt by debt/asset category	0	3.88	32.58	42.11	d	d	100.00
Percentage of assets by debt/asset category	16.17	25.87	33.87	18.57	d	d	100.00

See footnotes at end of table.

Continued--

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Dairy	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
		<u>Number</u>					
Number of farms	35,341	29,954	46,693	21,319	5,966	2,754	142,027
		<u>Percent</u>					
Percentage of farms	24.88	21.09	32.87	15.01	4.20	1.93	100.00
		<u>Dollars per farm</u>					
Farm assets	387,203	635,731	556,716	414,885	352,310	196,102	494,331
Land and buildings	229,213	413,793	293,537	219,324	184,243	88,447	283,186
Farm equipment	53,065	78,418	82,373	67,119	49,383	23,953	69,438
Livestock inventory	55,690	86,854	113,964	86,604	95,012	47,994	87,564
Crop inventory	10,463	16,030	20,949	16,281	8,033	6,750	15,783
Purchased inputs	4,446	4,002	7,107	5,552	8,557	1,532	5,509
Other assets	27,903	32,495	32,285	16,159	7,082	11,344	27,354
Farm operator debt	0	26,379	125,884	220,483	285,694	294,264	97,752
By lender:							
Farm Credit System	0	10,329	55,995	114,126	134,524	199,910	47,246
Commercial bank	0	10,442	41,797	66,893	112,028	66,800	31,986
Other	0	5,608	28,092	39,464	39,142	27,554	18,521
By original term of loan:							
Less than 1 year	0	3,370	10,795	15,069	9,204	5,414	7,013
1-10 years	0	11,357	44,074	68,724	92,950	59,326	32,256
More than 10 years	0	11,651	71,014	136,689	183,540	229,525	58,483
Commodity Credit Corporation crop loans <u>1/</u>	65	409	1,016	1,849	1,130	281	767
Net worth	387,203	609,352	430,832	194,402	66,616	-98,162	396,579
		<u>Ratio</u>					
Debt/asset ratio	0	0.04	0.23	0.53	0.81	1.50	0.20
		<u>Percent</u>					
Percentage of debt by debt/asset category	0	5.69	42.33	33.85	12.27	5.83	100.00
Percentage of assets by debt/asset category	19.49	27.12	37.02	12.59	2.99	.76	100.00

See footnotes at end of table.

Continued--

Appendix table 37--Farm operator balance sheet by production specialty, January 1, 1989--Continued

Other livestock	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	25,969	9,094	13,566	4,808	1,294	368	55,098
<u>Percent</u>							
Percentage of farms	47.13	16.50	24.62	8.72	2.34	0.66	100.00
<u>Dollars per farm</u>							
Farm assets	353,527	426,722	249,382	134,645	106,065	596,629	316,680
Land and buildings	255,124	358,001	138,051	83,559	87,567	223,076	224,160
Farm equipment	12,494	18,699	22,102	15,606	8,457	15,206	16,079
Livestock inventory	37,827	26,343	50,363	18,163	6,392	153,151	37,335
Crop inventory	243	239	808	495	259	182	403
Purchased inputs	507	459	623	147	216	1,466	496
Other assets	41,002	22,689	37,435	7,846	3,174	197,137	34,363
Farm operator debt	0	11,874	53,162	70,630	81,483	754,886	28,169
By lender:							
Farm Credit System	0	2,104	7,945	15,568	4,041	20,171	3,891
Commercial bank	0	4,931	41,085	37,960	56,327	677,872	20,093
Other	0	4,839	4,133	17,101	21,115	56,843	4,184
By original term of loan:							
Less than 1 year	0	1,037	2,464	3,186	1,430	10,670	1,161
1-10 years	0	5,942	14,171	14,990	5,932	668,009	10,380
More than 10 years	0	4,895	36,527	52,454	74,121	76,207	16,628
Commodity Credit Corporation crop loans ^{1/}	38	20	27	0	0	0	28
Net worth	353,527	414,849	196,220	64,016	24,582	-158,257	288,511
<u>Ratio</u>							
Debt/asset ratio	0	0.03	0.21	0.52	0.77	1.27	0.09
<u>Percent</u>							
Percentage of debt by debt/asset category	0	6.95	46.46	21.87	6.79	17.90	100.00
Percentage of assets by debt/asset category	52.61	22.23	19.38	3.71	.78	1.25	100.00

d = Data insufficient for disclosure.

^{1/} Outstanding CCC crop loans were excluded from both assets and debt.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 38--Farm operator balance sheet by region, January 1, 1989

Northeast	No debt	Debt/asset ratio				Over 1.0	All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0		
		<u>Number</u>					
Number of farms	62,246	21,373	29,869	9,457	d	d	126,466
		<u>Percent</u>					
Percentage of farms	49.22	16.89	23.61	7.47	d	d	100.00
		<u>Dollars per farm</u>					
Farm assets	606,972	669,255	397,277	395,036	d	d	540,014
Land and buildings	520,863	453,718	263,007	263,479	d	d	417,967
Farm equipment	26,147	61,055	50,251	52,710	d	d	39,802
Livestock inventory	13,822	40,729	39,447	43,302	d	d	26,856
Crop inventory	3,824	11,923	13,735	10,055	d	d	8,018
Purchased inputs	844	2,556	3,266	2,696	d	d	1,854
Other assets	25,241	31,795	21,740	18,411	d	d	24,400
Farm operator debt	0	26,320	82,823	206,028	d	d	43,507
By lender:							
Farm Credit System	0	11,971	37,448	79,992	d	d	17,794
Commercial bank	0	9,859	26,448	104,726	d	d	18,331
Other	0	4,490	18,928	21,310	d	d	7,383
By original term of loan:							
Less than 1 year	0	2,233	1,581	7,518	d	d	1,380
1-10 years	0	10,335	29,374	67,739	d	d	15,573
More than 10 years	0	13,752	51,869	130,771	d	d	26,554
Commodity Credit Corporation crop loans <u>1/</u>	64	66	187	56	d	d	94
Net worth	606,972	642,935	314,453	189,009	d	d	496,506
		<u>Ratio</u>					
Debt/asset ratio	0	0.04	0.21	0.52	d	d	0.08
		<u>Percent</u>					
Percentage of debt by debt/asset category	0	10.22	44.96	35.41	d	d	100.00
Percentage of assets by debt/asset category	55.32	20.94	17.37	5.47	d	d	100.00

See footnotes at end of table.

Continued--

Appendix table 38--Farm operator balance sheet by region, January 1, 1989--Continued

Lake States	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	68,322	28,062	49,737	28,216	6,794	2,047	183,178
<u>Percent</u>							
Percentage of farms	37.29	15.31	27.15	15.40	3.70	1.11	100.00
<u>Dollars per farm</u>							
Farm assets	253,956	420,068	353,051	353,824	196,329	281,877	319,868
Land and buildings	153,418	271,950	199,715	217,674	110,725	137,381	192,282
Farm equipment	35,991	63,687	64,890	61,410	32,893	47,392	52,009
Livestock inventory	18,461	35,795	39,744	41,867	39,209	23,223	31,323
Crop inventory	8,266	15,660	18,181	15,653	6,963	13,392	13,238
Purchased inputs	2,252	2,915	3,897	3,661	2,054	5,497	3,046
Other assets	33,714	30,061	24,514	12,795	4,485	33,358	26,346
Farm operator debt	0	16,078	84,192	187,462	159,221	366,698	64,203
By lender:							
Farm Credit System	0	2,560	37,545	86,301	91,029	192,416	29,407
Commercial bank	0	7,746	29,165	61,399	41,023	106,633	21,277
Other	0	5,772	17,482	39,761	27,169	67,648	13,520
By original term of loan:							
Less than 1 year	0	3,355	9,573	13,433	6,197	4,254	5,460
1-10 years	0	7,439	25,602	61,972	48,421	100,497	20,556
More than 10 years	0	5,284	49,016	112,056	104,603	261,947	38,187
Commodity Credit Corporation crop loans <u>1/</u>	584	2,741	5,864	11,023	2,160	53,615	4,607
Net worth	253,956	403,990	268,859	166,362	37,108	-84,820	255,664
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.24	0.53	0.81	1.30	0.20
<u>Percent</u>							
Percentage of debt by debt/asset category	0	3.83	35.60	44.97	9.19	6.38	100.00
Percentage of assets by debt/asset category	29.61	20.11	29.96	17.03	2.27	.98	100.00

See footnotes at end of table.

Continued--

Appendix table 38--Farm operator balance sheet by region, January 1, 1989--Continued

Corn Belt	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	136,027	52,136	94,496	34,877	9,299	5,458	332,293
<u>Percent</u>							
Percentage of farms	40.93	15.68	28.43	10.49	2.79	1.64	100.00
<u>Dollars per farm</u>							
Farm assets	258,983	378,475	363,458	298,959	228,073	191,359	309,661
Land and buildings	171,223	247,967	220,152	189,209	139,946	99,536	197,013
Farm equipment	29,704	51,351	61,964	50,764	42,446	36,594	44,955
Livestock inventory	15,656	26,736	31,568	29,483	27,536	24,564	23,849
Crop inventory	7,852	17,867	23,350	16,052	10,698	13,006	14,856
Purchased inputs	1,056	1,982	2,754	2,623	1,320	1,053	1,856
Other assets	29,040	31,414	22,110	9,428	5,719	8,080	24,386
Farm operator debt	0	17,415	86,693	157,355	185,315	274,223	53,591
By lender:							
Farm Credit System	0	3,491	28,850	63,963	86,327	161,309	20,531
Commercial bank	0	10,009	38,323	62,529	72,185	80,076	22,367
Other	0	3,914	19,520	30,863	26,803	32,837	10,694
By original term of loan:							
Less than 1 year	0	3,060	7,605	10,127	11,326	15,153	4,272
1-10 years	0	7,642	28,426	52,298	77,675	92,354	18,463
More than 10 years	0	6,713	50,662	94,930	96,313	166,716	30,857
Commodity Credit Corporation crop loans <u>1/</u>	472	1,879	5,274	11,291	10,624	4,344	3,542
Net worth	258,983	361,060	276,764	141,604	42,758	-82,864	256,070
<u>Ratio</u>							
Debt/asset ratio	0	0.05	0.24	0.53	0.81	1.43	0.17
<u>Percent</u>							
Percentage of debt by debt/asset category	0	5.09	46.00	30.81	9.67	8.40	100.00
Percentage of assets by debt/asset category	34.23	19.17	33.37	10.13	2.06	1.01	100.00

See footnotes at end of table.

Continued--

Appendix table 38--Farm operator balance sheet by region, January 1, 1989--Continued

Northern Plains	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	48,902	23,386	49,458	20,499	6,345	4,439	153,029
<u>Percent</u>							
Percentage of farms	31.95	15.28	32.31	13.39	4.14	2.90	100.00
<u>Dollars per farm</u>							
Farm assets	300,635	469,806	401,908	345,342	221,936	121,690	356,754
Land and buildings	160,387	292,932	211,784	189,186	121,933	55,131	196,464
Farm equipment	43,006	60,206	67,079	63,967	45,393	31,105	55,977
Livestock inventory	26,286	66,338	59,858	57,492	31,602	13,645	47,291
Crop inventory	9,833	17,608	21,178	16,858	12,663	6,010	15,635
Purchased inputs	1,706	4,736	3,857	4,011	2,394	707	3,173
Other assets	51,332	26,480	36,427	13,414	7,953	5,365	34,505
Farm operator debt	0	19,459	90,190	183,166	178,781	187,684	69,516
By lender:							
Farm Credit System	0	4,425	30,068	70,082	102,454	119,453	27,495
Commercial bank	0	8,374	42,846	85,006	48,348	55,754	30,136
Other	0	6,660	17,276	28,078	27,979	12,477	11,885
By original term of loan:							
Less than 1 year	0	3,583	17,350	35,964	19,972	28,154	12,617
1-10 years	0	8,982	31,573	55,986	39,264	55,940	22,327
More than 10 years	0	6,895	41,267	91,216	119,544	103,590	34,572
Commodity Credit Corporation crop loans <u>1/</u>	923	5,769	4,280	6,008	9,222	3,891	3,860
Net worth	300,635	450,347	311,718	162,176	43,156	-65,994	287,238
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.22	0.53	0.81	1.54	0.19
<u>Percent</u>							
Percentage of debt by debt/asset category	0	4.27	41.93	35.29	10.66	7.83	100.00
Percentage of assets by debt/asset category	26.92	20.12	36.40	12.96	2.57	.98	100.00

See footnotes at end of table.

Continued--

Appendix table 38--Farm operator balance sheet by region, January 1, 1989--Continued

Appalachian	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	164,327	39,194	49,046	14,681	4,955	3,437	275,639
<u>Percent</u>							
Percentage of farms	59.61	14.21	17.79	5.32	1.79	1.24	100.00
<u>Dollars per farm</u>							
Farm assets	192,513	265,337	247,373	180,640	223,374	158,426	212,127
Land and buildings	126,484	178,948	154,588	122,089	179,850	84,219	139,143
Farm equipment	15,344	28,607	30,879	31,354	31,743	16,963	21,162
Livestock inventory	8,644	16,533	25,743	13,479	5,126	28,494	13,250
Crop inventory	1,108	2,956	3,669	6,270	1,900	761	2,111
Purchased inputs	273	671	667	714	1,257	370	442
Other assets	35,060	37,542	30,395	6,734	3,263	8,683	32,174
Farm operator debt	0	12,324	52,608	99,004	177,176	261,363	22,830
By lender:							
Farm Credit System	0	5,324	23,527	47,378	83,340	84,132	10,014
Commercial bank	0	5,417	21,486	44,396	59,947	121,566	9,551
Other	0	1,583	7,596	7,230	33,889	55,665	3,265
By original term of loan:							
Less than 1 year	0	1,059	2,941	1,204	5,123	5,263	896
1-10 years	0	5,508	17,168	15,610	59,005	157,041	7,688
More than 10 years	0	5,757	32,500	82,190	113,048	99,060	14,246
Commodity Credit Corporation crop loans <u>1/</u>	0	199	670	282	246	0	167
Net worth	192,513	253,013	194,765	81,636	46,198	-102,937	189,297
<u>Ratio</u>							
Debt/asset ratio	0	0.05	0.21	0.55	0.79	1.65	0.11
<u>Percent</u>							
Percentage of debt by debt/asset category	0	7.67	41.00	23.09	13.94	14.27	100.00
Percentage of assets by debt/asset category	54.10	17.78	20.75	4.53	1.89	.93	100.00

See footnotes at end of table.

Continued--

Appendix table 38--Farm operator balance sheet by region, January 1, 1989--Continued

Southeast	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	89,596	20,208	24,199	10,157	1,465	911	146,536
<u>Percent</u>							
Percentage of farms	61.14	13.79	16.51	6.93	0.99	0.62	100.00
<u>Dollars per farm</u>							
Farm assets	243,465	605,145	392,936	240,833	286,357	138,951	317,623
Land and buildings	185,041	416,772	288,095	173,900	207,119	64,861	232,718
Farm equipment	13,167	39,203	35,492	31,411	41,941	39,527	22,160
Livestock inventory	10,164	26,378	25,228	21,369	21,093	10,967	15,778
Crop inventory	2,659	22,378	4,848	2,458	3,975	762	5,727
Purchased inputs	230	1,415	1,067	1,026	663	529	593
Other assets	26,387	55,858	31,961	9,276	9,145	14,876	29,942
Farm operator debt	0	24,225	86,303	124,191	237,058	204,545	29,843
By lender:							
Farm Credit System	0	8,079	37,767	53,248	128,349	121,376	13,080
Commercial bank	0	12,140	38,190	47,289	53,456	73,783	12,252
Other	0	4,006	10,346	23,653	55,253	9,386	4,511
By original term of loan:							
Less than 1 year	0	1,107	7,931	5,225	12,818	18,198	2,066
1-10 years	0	16,553	37,719	26,409	77,859	43,729	11,393
More than 10 years	0	6,565	40,653	92,556	146,381	142,618	16,384
Commodity Credit Corporation crop loans ^{1/}	62	253	700	766	4,837	6,110	328
Net worth	243,465	580,919	306,633	116,642	49,300	-65,594	287,780
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.22	0.52	0.83	1.47	0.09
<u>Percent</u>							
Percentage of debt by debt/asset category	0	11.19	47.75	28.84	7.94	4.25	100.00
Percentage of assets by debt/asset category	46.86	26.27	20.42	5.25	.90	.27	100.00

See footnotes at end of table.

Continued--

Appendix table 38--Farm operator balance sheet by region, January 1, 1989--Continued

Delta	No debt	Debt/asset ratio				Over 1.0	All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0		
		<u>Number</u>					
Number of farms	56,779	16,483	18,088	6,912	1,683	1,663	101,608
		<u>Percent</u>					
Percentage of farms	55.88	16.22	17.80	6.80	1.65	1.63	100.00
		<u>Dollars per farm</u>					
Farm assets	214,466	338,598	223,291	308,383	242,990	107,209	241,281
Land and buildings	149,804	239,358	127,300	181,024	144,815	45,416	160,659
Farm equipment	21,043	37,917	40,892	62,387	48,914	52,534	31,103
Livestock inventory	12,627	25,321	18,857	31,085	17,839	2,345	16,969
Crop inventory	1,368	3,072	5,025	7,324	14,092	3,134	2,940
Purchased inputs	741	1,148	775	764	1,405	367	819
Other assets	26,869	31,782	30,442	19,658	15,924	3,414	27,246
Farm operator debt	0	16,072	47,823	157,287	194,865	235,885	28,908
By lender:							
Farm Credit System	0	4,581	16,724	77,819	111,468	197,503	14,092
Commercial bank	0	8,734	24,766	63,654	48,280	31,252	11,467
Other	0	2,757	6,333	15,814	35,117	7,130	3,349
By original term of loan:							
Less than 1 year	0	2,271	3,544	10,472	2,973	13,066	1,975
1-10 years	0	10,159	21,045	60,428	43,882	61,933	11,245
More than 10 years	0	3,642	23,234	86,387	148,010	160,885	15,687
Commodity Credit Corporation crop loans <u>1/</u>	3,329	3,996	5,227	3,040	4,488	5,512	3,811
Net worth	214,466	322,526	175,469	151,096	48,124	-128,676	212,373
		<u>Ratio</u>					
Debt/asset ratio	0	0.05	0.21	0.51	0.80	2.20	0.12
		<u>Percent</u>					
Percentage of debt by debt/asset category	0	9.01	29.45	37.01	11.16	13.35	100.00
Percentage of assets by debt/asset category	49.67	22.76	16.47	8.69	1.66	.72	100.00

See footnotes at end of table.

Continued--

Appendix table 38--Farm operator balance sheet by region, January 1, 1989--Continued

Southern Plains	No debt	Debt/asset ratio				Over 1.0	All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0		
<u>Number</u>							
Number of farms	117,772	32,683	42,185	14,700	8,600	3,685	219,626
<u>Percent</u>							
Percentage of farms	53.62	14.88	19.20	6.69	3.91	1.67	100.00
<u>Dollars per farm</u>							
Farm assets	368,190	542,996	402,152	252,343	230,785	118,685	383,406
Land and buildings	257,473	395,657	264,520	154,824	125,478	49,261	263,857
Farm equipment	23,134	36,366	48,662	35,557	42,509	35,074	31,797
Livestock inventory	24,712	46,461	49,334	39,360	47,419	28,344	34,608
Crop inventory	686	1,472	5,048	6,568	2,609	1,176	2,118
Purchased inputs	429	1,544	1,600	2,024	2,971	871	1,034
Other assets	44,372	61,498	32,577	13,971	9,799	3,823	40,586
Farm operator debt	0	22,393	81,528	132,391	182,769	200,231	38,370
By lender:							
Farm Credit System	0	4,514	28,983	56,169	67,973	69,301	13,823
Commercial bank	0	15,199	34,521	56,636	67,229	112,339	17,201
Other	0	2,680	18,024	19,586	47,568	18,592	7,346
By original term of loan:							
Less than 1 year	0	4,861	12,480	17,430	42,682	36,345	6,568
1-10 years	0	11,745	35,264	48,868	33,725	60,734	14,132
More than 10 years	0	5,787	33,784	66,093	106,362	103,153	17,670
Commodity Credit Corporation crop loans <u>1</u> /	566	1,148	2,309	2,156	1,395	481	1,125
Net worth	368,190	520,604	320,624	119,952	48,015	-81,546	345,036
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.20	0.52	0.79	1.69	0.10
<u>Percent</u>							
Percentage of debt by debt/asset category	0	8.68	40.81	23.09	18.65	8.75	100.00
Percentage of assets by debt/asset category	51.49	21.07	20.14	4.40	2.35	.51	100.00

See footnotes at end of table.

Continued--

Appendix table 38--Farm operator balance sheet by region, January 1, 1989--Continued

Mountain	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	39,008	15,556	26,995	8,743	3,243	2,887	96,432
<u>Percent</u>							
Percentage of farms	40.45	16.13	27.99	9.06	3.36	2.99	100.00
<u>Dollars per farm</u>							
Farm assets	653,923	973,683	603,231	473,698	405,232	80,141	649,430
Land and buildings	284,491	460,447	385,885	283,135	238,791	40,171	332,284
Farm equipment	29,020	236,397	57,913	52,240	44,441	13,120	72,709
Livestock inventory	36,243	62,147	77,042	52,291	97,124	11,158	54,595
Crop inventory	6,622	89,277	18,922	17,670	6,391	3,133	24,288
Purchased inputs	1,196	14,675	5,649	5,023	7,724	954	5,176
Other assets	36,458	43,617	39,116	30,239	10,760	6,644	36,036
Farm operator debt	0	30,591	137,334	236,925	331,381	153,661	80,608
By lender:							
Farm Credit System	0	7,367	56,997	99,147	137,769	89,273	33,440
Commercial bank	0	12,315	50,015	80,140	94,876	43,964	27,761
Other	0	10,909	30,322	57,637	98,737	20,424	19,406
By original term of loan:							
Less than 1 year	0	8,227	15,168	21,162	17,240	5,238	8,228
1-10 years	0	9,715	27,637	58,391	102,398	44,177	19,365
More than 10 years	0	12,650	94,529	157,371	211,744	104,246	53,014
Commodity Credit Corporation crop loans <u>1/</u>	242	1,330	3,141	2,501	421	1,896	1,489
Net worth	653,923	943,092	465,897	236,773	73,850	-73,519	568,822
<u>Ratio</u>							
Debt/asset ratio	0	0.03	0.23	0.50	0.82	1.92	0.12
<u>Percent</u>							
Percentage of debt by debt/asset category	0	6.12	47.69	26.64	13.82	5.70	100.00
Percentage of assets by debt/asset category	40.73	24.18	26.00	6.61	2.09	.36	100.00

See footnotes at end of table.

Continued--

Appendix table 38--Farm operator balance sheet by region, January 1, 1989--Continued

Pacific	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	61,480	17,932	28,721	13,393	5,397	2,357	129,279
<u>Percent</u>							
Percentage of farms	47.55	13.87	22.21	10.35	4.17	1.82	100.00
<u>Dollars per farm</u>							
Farm assets	471,045	1,057,387	648,246	368,627	271,405	272,230	569,174
Land and buildings	341,089	862,714	463,643	278,521	178,557	135,400	423,653
Farm equipment	28,894	45,764	49,606	34,496	35,623	29,593	36,709
Livestock inventory	13,054	35,366	38,989	21,654	28,696	69,741	24,488
Crop inventory	8,895	6,306	19,553	8,816	12,306	1,516	10,903
Purchased inputs	1,002	5,349	4,147	3,221	2,083	1,768	2,593
Other assets	48,569	57,618	71,378	20,821	14,140	30,933	50,258
Farm operator debt	0	41,760	143,282	193,151	213,867	410,711	74,049
By lender:							
Farm Credit System	0	22,565	45,771	83,550	72,494	122,523	27,214
Commercial bank	0	10,832	60,520	67,642	75,553	170,212	28,212
Other	0	8,363	36,991	41,959	65,821	117,976	18,623
By original term of loan:							
Less than 1 year	0	11,941	13,395	7,435	28,936	34,365	7,237
1-10 years	0	7,887	35,696	42,132	30,201	199,380	18,284
More than 10 years	0	21,931	94,190	143,584	154,731	176,966	48,527
Commodity Credit Corporation crop loans ^{1/}	256	785	2,736	954	488	64	959
Net worth	471,045	1,015,627	504,964	175,476	57,538	-138,481	495,126
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.22	0.52	0.79	1.51	0.13
<u>Percent</u>							
Percentage of debt by debt/asset category	0	7.82	42.98	27.02	12.05	10.11	100.00
Percentage of assets by debt/asset category	39.35	25.76	25.30	6.70	1.99	.87	100.00

d = Data insufficient for disclosure.

^{1/} Outstanding CCC crop loans were excluded from both assets and debt.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 39--Farm operator balance sheet by land tenure, January 1, 1989

Full tenant	No debt	Debt/asset ratio					Over 1.0	All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
<u>Number</u>								
Number of farms	59,246	16,716	41,452	17,209	8,311	8,989	151,922	
<u>Percent</u>								
Percentage of farms	38.99	11.00	27.28	11.32	5.47	5.91	100.00	
<u>Dollars per farm</u>								
Farm assets	367,970	264,301	170,142	143,624	123,357	67,890	246,037	
Land and buildings	292,557	98,992	23,756	13,885	8,371	2,476	133,641	
Farm equipment	31,762	67,787	59,127	57,023	53,268	33,185	47,315	
Livestock inventory	12,469	41,146	36,519	41,854	37,477	20,080	27,333	
Crop inventory	8,162	19,074	16,358	13,035	12,743	5,023	12,216	
Purchased inputs	1,528	5,613	3,163	1,632	4,314	1,105	2,563	
Other assets	21,490	31,685	31,218	16,192	7,185	6,000	22,967	
Farm operator debt	0	11,322	36,529	74,944	100,416	134,639	33,161	
By lender:								
Farm Credit System	0	3,444	9,280	21,004	42,454	45,445	10,302	
Commercial bank	0	5,512	20,174	45,209	44,215	76,658	18,186	
Other	0	2,366	7,075	8,730	13,747	12,537	4,673	
By original term of loan:								
Less than 1 year	0	2,657	9,574	19,500	34,264	17,441	8,020	
1-10 years	0	6,181	20,341	35,695	50,525	65,246	16,898	
More than 10 years	0	2,483	6,614	19,749	15,626	51,953	8,244	
Commodity Credit Corporation crop loans 1/	2,085	5,944	4,676	3,380	2,290	5,866	3,598	
Net worth	367,970	252,979	133,613	68,680	22,942	-66,749	212,875	
<u>Ratio</u>								
Debt/asset ratio	0	0.04	0.21	0.52	0.81	1.98	0.13	
<u>Percent</u>								
Percentage of debt by debt/asset category	0	3.75	30.05	25.59	16.56	24.02	100.00	
Percentage of assets by debt/asset category	58.32	11.81	18.86	6.61	2.74	1.63	100.00	

See footnotes at end of table.

Continued--

Appendix table 39--Farm operator balance sheet by land tenure, January 1, 1989--Continued

1-20 percent	No debt	Debt/asset ratio				Over 1.0	All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0		
<u>Number</u>							
Number of farms	48,194	21,786	39,571	15,419	4,478	4,024	133,472
<u>Percent</u>							
Percentage of farms	36.10	16.32	29.64	11.55	3.35	3.01	100.00
<u>Dollars per farm</u>							
Farm assets	202,888	358,948	311,374	333,125	246,921	142,700	275,232
Land and buildings	106,852	197,925	134,883	150,520	123,507	65,892	134,396
Farm equipment	32,864	60,157	82,670	86,345	64,321	38,807	59,498
Livestock inventory	13,498	33,948	38,474	47,952	30,845	16,940	28,907
Crop inventory	4,862	13,299	23,228	26,046	11,459	5,438	14,370
Purchased inputs	808	3,330	3,546	5,417	2,713	965	2,633
Other assets	39,965	40,290	28,264	16,614	13,230	8,210	31,997
Farm operator debt	0	17,503	71,937	177,709	202,380	228,086	58,380
By lender:							
Farm Credit System	0	6,676	24,961	64,430	91,086	84,656	21,541
Commercial bank	0	7,618	34,074	79,867	85,841	130,688	27,392
Other	0	3,209	12,903	33,412	25,453	12,742	9,447
By original term of loan:							
Less than 1 year	0	2,217	10,257	34,432	28,791	24,950	9,099
1-10 years	0	9,354	29,985	62,597	77,379	133,945	24,282
More than 10 years	0	5,932	31,695	80,681	96,209	69,191	24,999
Commodity Credit Corporation crop loans ^{1/}	700	2,562	5,069	10,986	5,571	2,308	3,700
Net worth	202,888	341,445	239,437	155,416	44,541	-85,386	216,852
<u>Ratio</u>							
Debt/asset ratio	0	0.05	0.23	0.53	0.82	1.60	0.21
<u>Percent</u>							
Percentage of debt by debt/asset category	0	4.89	36.53	35.16	11.63	11.77	100.00
Percentage of assets by debt/asset category	26.61	21.28	33.54	13.98	3.01	1.56	100.00

See footnotes at end of table.

Continued--

Appendix table 39--Farm operator balance sheet by land tenure, January 1, 1989--Continued

21-40 percent	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	38,032	27,365	50,408	18,200	8,925	1,972	144,901
<u>Percent</u>							
Percentage of farms	26.24	18.88	34.78	12.56	6.15	1.36	100.00
<u>Dollars per farm</u>							
Farm assets	290,679	514,713	420,798	377,988	232,209	340,550	386,298
Land and buildings	169,862	335,357	238,934	217,246	129,304	159,319	228,455
Farm equipment	39,164	63,034	75,801	68,042	49,786	45,574	60,786
Livestock inventory	22,482	48,251	43,596	48,694	35,806	53,046	39,222
Crop inventory	12,490	14,493	23,089	16,148	8,353	12,372	16,759
Purchased inputs	1,806	2,548	4,328	2,626	1,611	5,520	2,965
Other assets	41,423	46,564	33,927	21,339	7,350	43,178	35,189
Farm operator debt	0	23,009	101,212	195,425	185,539	475,554	81,999
By lender:							
Farm Credit System	0	4,750	42,647	113,446	107,335	236,911	39,817
Commercial bank	0	12,564	36,903	55,451	52,490	178,572	27,838
Other	0	5,694	21,662	26,528	25,713	60,071	14,344
By original term of loan:							
Less than 1 year	0	4,730	10,233	19,415	15,464	26,703	8,208
1-10 years	0	12,088	33,273	57,030	34,130	177,270	25,535
More than 10 years	0	6,191	57,706	118,979	135,944	271,581	48,256
Commodity Credit Corporation crop loans 1/	1,102	1,068	5,769	4,468	12,331	5,050	3,887
Net worth	290,679	491,704	319,586	182,563	46,671	-135,004	304,299
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.24	0.52	0.80	1.40	0.21
<u>Percent</u>							
Percentage of debt by debt/asset category	0	5.29	42.93	29.93	13.93	7.89	100.00
Percentage of assets by debt/asset category	19.74	25.16	37.89	12.28	3.70	1.19	100.00

See footnotes at end of table.

Continued--

Appendix table 39--Farm operator balance sheet by land tenure, January 1, 1989--Continued

41-60 percent	No debt	Debt/asset ratio				Over 1.0	All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0		
<u>Number</u>							
Number of farms	49,878	24,948	46,343	18,118	4,785	1,548	145,620
<u>Percent</u>							
Percentage of farms	34.25	17.13	31.82	12.44	3.28	1.06	100.00
<u>Dollars per farm</u>							
Farm assets	341,582	479,745	513,045	438,216	292,644	315,817	429,961
Land and buildings	209,224	318,087	313,207	282,092	187,307	169,392	268,889
Farm equipment	45,255	57,271	75,165	68,302	40,027	47,368	59,550
Livestock inventory	25,280	51,130	60,506	47,762	45,614	19,501	44,323
Crop inventory	13,435	12,430	24,099	17,243	8,401	24,111	17,079
Purchased inputs	1,660	2,407	3,944	4,340	3,013	2,632	2,903
Other assets	33,126	34,501	35,009	12,329	8,282	16,044	30,375
Farm operator debt	0	21,545	119,241	227,941	242,031	410,932	82,321
By lender:							
Farm Credit System	0	6,320	49,594	93,362	144,361	266,113	36,055
Commercial bank	0	10,108	44,045	93,280	54,951	74,001	29,947
Other	0	5,117	25,602	41,300	42,718	70,819	16,319
By original term of loan:							
Less than 1 year	0	3,661	14,653	15,463	19,597	44,847	8,335
1-10 years	0	8,504	35,720	53,136	60,304	95,310	22,431
More than 10 years	0	9,380	68,869	159,342	162,130	270,775	51,556
Commodity Credit Corporation crop loans ^{1/}	876	1,456	7,015	9,633	5,681	13,587	4,312
Net worth	341,582	458,200	393,804	210,274	50,614	-95,115	347,640
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.23	0.52	0.83	1.30	0.19
<u>Percent</u>							
Percentage of debt by debt/asset category	0	4.48	46.09	34.45	9.66	5.30	100.00
Percentage of assets by debt/asset category	27.21	19.11	37.97	12.68	2.23	.78	100.00

See footnotes at end of table.

Continued--

Appendix table 39--Farm operator balance sheet by land tenure, January 1, 1989--Continued

61-80 percent	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	55,760	25,972	40,841	13,953	2,536	1,975	141,037
<u>Percent</u>							
Percentage of farms	39.53	18.41	28.95	9.89	1.79	1.40	100.00
<u>Dollars per farm</u>							
Farm assets	463,184	610,801	515,339	537,499	556,339	260,650	511,662
Land and buildings	291,438	419,704	324,751	359,051	309,568	175,180	330,093
Farm equipment	42,026	65,761	63,197	72,995	70,020	40,722	56,076
Livestock inventory	38,351	53,491	62,557	54,890	146,959	27,990	51,593
Crop inventory	7,832	15,742	20,086	19,150	12,591	5,523	14,010
Purchased inputs	2,229	3,939	2,919	5,432	5,283	1,219	3,101
Other assets	47,420	51,413	33,248	24,366	11,918	10,016	40,608
Farm operator debt	0	26,789	110,285	278,738	434,532	420,412	78,146
By lender:							
Farm Credit System	0	6,932	45,204	159,787	199,154	295,957	37,899
Commercial bank	0	14,508	45,508	68,679	188,427	49,095	26,720
Other	0	5,349	19,574	50,272	46,951	75,360	13,526
By original term of loan:							
Less than 1 year	0	3,789	11,398	21,569	57,066	15,100	7,370
1-10 years	0	12,299	31,610	67,125	71,507	40,572	19,913
More than 10 years	0	10,701	67,277	190,044	305,960	364,739	50,863
Commodity Credit Corporation crop loans <u>1/</u>	364	4,328	3,286	15,108	5,260	39,272	4,032
Net worth	463,184	584,011	405,054	258,761	121,806	-159,762	433,517
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.21	0.52	0.78	1.61	0.15
<u>Percent</u>							
Percentage of debt by debt/asset category	0	6.31	40.86	35.28	9.99	7.53	100.00
Percentage of assets by debt/asset category	35.78	21.98	29.16	10.39	1.95	.71	100.00

See footnotes at end of table.

Continued--

Appendix table 39--Farm operator balance sheet by land tenure, January 1, 1989--Continued

81-99 percent	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	46,683	28,266	28,792	7,756	1,936	3,147	116,580
<u>Percent</u>							
Percentage of farms	40.04	24.24	24.69	6.65	1.66	2.69	100.00
<u>Dollars per farm</u>							
Farm assets	494,786	719,682	625,638	561,022	372,764	149,664	574,697
Land and buildings	343,466	508,322	420,386	396,347	260,494	114,639	398,398
Farm equipment	43,699	60,555	59,826	60,727	39,436	10,192	51,927
Livestock inventory	32,587	53,972	66,924	61,962	57,953	11,640	48,062
Crop inventory	6,154	12,524	19,651	13,708	8,836	1,448	11,452
Purchased inputs	1,552	3,346	4,552	4,412	1,253	154	2,876
Other assets	46,087	39,010	45,595	20,223	4,791	2,479	40,666
Farm operator debt	0	32,803	136,526	298,752	297,944	179,910	71,351
By lender:							
Farm Credit System	0	13,004	55,796	152,715	104,220	117,135	31,985
Commercial bank	0	10,682	45,523	90,925	91,661	30,395	22,224
Other	0	9,117	35,207	55,111	102,063	32,380	17,141
By original term of loan:							
Less than 1 year	0	2,489	14,039	8,078	1,133	1,732	4,674
1-10 years	0	12,781	41,686	110,370	143,273	42,161	24,254
More than 10 years	0	17,533	80,801	180,304	153,539	136,017	42,423
Commodity Credit Corporation crop loans <u>1/</u>	2,747	2,094	2,874	4,516	440	329	2,634
Net worth	494,786	686,880	489,113	262,270	74,820	-30,246	503,346
<u>Ratio</u>							
Debt/asset ratio	0	0.05	0.22	0.53	0.80	1.20	0.12
<u>Percent</u>							
Percentage of debt by debt/asset category	0	11.14	47.25	27.85	6.93	6.80	100.00
Percentage of assets by debt/asset category	34.47	30.36	26.88	6.49	1.07	.70	100.00

See footnotes at end of table.

Continued--

Appendix table 39--Farm operator balance sheet by land tenure, January 1, 1989--Continued

Full owner	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	546,666	121,960	165,389	70,982	19,674	5,886	930,557
<u>Percent</u>							
Percentage of farms	58.74	13.10	17.77	7.62	2.11	0.63	100.00
<u>Dollars per farm</u>							
Farm assets	292,541	511,453	349,327	239,010	223,253	174,977	325,033
Land and buildings	202,381	358,351	257,375	178,834	177,873	93,896	229,596
Farm equipment	16,762	52,355	28,570	23,767	18,964	23,863	24,152
Livestock inventory	11,975	21,318	24,632	18,252	14,722	31,010	16,106
Crop inventory	2,101	17,449	5,913	5,258	3,573	1,101	5,056
Purchased inputs	406	2,509	1,399	1,373	1,181	375	948
Other assets	33,654	38,091	28,048	8,074	6,701	11,711	30,579
Farm operator debt	0	18,121	76,704	126,295	178,843	283,213	31,214
By lender:							
Farm Credit System	0	5,650	26,436	41,134	63,505	134,130	10,768
Commercial bank	0	8,995	34,442	60,371	59,696	89,821	13,736
Other	0	3,475	15,825	24,789	55,642	59,263	6,710
By original term of loan:							
Less than 1 year	0	4,143	5,767	5,085	6,023	15,014	2,178
1-10 years	0	7,393	23,819	37,988	48,074	111,932	9,824
More than 10 years	0	6,586	47,119	83,222	124,747	156,267	19,212
Commodity Credit Corporation crop loans ^{1/}	88	574	1,119	2,797	444	217	550
Net worth	292,541	493,332	272,623	112,715	44,410	-108,237	293,819
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.22	0.53	0.80	1.62	0.10
<u>Percent</u>							
Percentage of debt by debt/asset category	0	7.60	43.67	30.86	12.11	5.73	100.00
Percentage of assets by debt/asset category	52.87	20.62	19.10	5.60	1.45	.34	100.00

^{1/} Outstanding CCC crop loans were excluded from both assets and debt.
Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 40--Farm operator balance sheet by occupational specialty, January 1, 1989

Farming	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	440,281	165,023	234,170	96,341	29,184	17,594	982,593
<u>Percent</u>							
Percentage of farms	44.80	16.79	23.83	9.80	2.97	1.79	100.00
<u>Dollars per farm</u>							
Farm assets	363,726	603,617	509,044	417,907	314,021	201,555	439,579
Land and buildings	226,466	405,199	299,327	248,681	177,234	93,914	272,190
Farm equipment	35,001	62,369	78,371	71,051	55,916	40,939	54,195
Livestock inventory	22,504	47,142	59,969	51,939	55,040	30,229	39,561
Crop inventory	7,518	16,907	24,553	19,269	11,120	8,236	14,427
Purchased inputs	1,338	3,093	4,565	4,285	3,639	1,795	2,768
Other assets	43,343	43,675	38,113	18,461	10,781	14,831	38,235
Farm operator debt	0	25,460	115,183	218,541	253,413	316,903	66,355
By lender:							
Farm Credit System	0	8,564	47,318	104,772	122,131	162,028	29,516
Commercial bank	0	11,348	42,110	76,221	81,346	110,682	23,813
Other	0	5,548	25,755	37,549	49,935	44,193	13,026
By original term of loan:							
Less than 1 year	0	4,927	13,940	20,172	22,531	23,820	7,223
1-10 years	0	10,773	39,260	67,684	71,016	116,654	22,000
More than 10 years	0	9,760	61,983	130,685	159,866	176,428	37,131
Commodity Credit Corporation crop loans <u>1/</u>	936	2,701	5,696	9,231	6,894	9,756	3,515
Net worth	363,726	578,157	393,861	199,366	60,608	-115,348	373,225
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.23	0.52	0.81	1.57	0.15
<u>Percent</u>							
Percentage of debt by debt/asset category	0	6.44	41.36	32.29	11.34	8.55	100.00
Percentage of assets by debt/asset category	37.07	23.06	27.59	9.32	2.12	.82	100.00

See footnotes at end of table.

Continued--

Appendix table 40--Farm operator balance sheet by occupational specialty, 1989--Continued

Hired manager	No debt	Debt/asset ratio					Over 1.0	All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0			
<u>Number</u>								
Number of farms	9,014	2,771	2,648	1,654	d	d	17,960	
<u>Percent</u>								
Percentage of farms	50.18	15.42	14.74	9.20	d	d	100.00	
<u>Dollars per farm</u>								
Farm assets	3,017,837	2,976,541	2,126,488	273,588	d	d	2,339,444	
Land and buildings	2,454,307	1,153,490	1,706,901	145,079	d	d	1,688,685	
Farm equipment	37,737	1,144,686	123,724	38,564	d	d	224,134	
Livestock inventory	32,847	88,924	117,664	41,860	d	d	53,718	
Crop inventory	12,548	445,886	25,844	11,906	d	d	82,224	
Purchased inputs	2,780	79,135	6,685	576	d	d	14,911	
Other assets	44,855	43,599	106,417	21,161	d	d	48,246	
Farm operator debt	0	56,621	432,863	152,958	d	d	112,373	
By lender:								
Farm Credit System	0	4,169	112,215	29,423	d	d	31,726	
Commercial bank	0	34,446	210,454	110,182	d	d	55,398	
Other	0	18,007	110,194	13,352	d	d	25,250	
By original term of loan:								
Less than 1 year	0	17,887	51,909	18,457	d	d	20,357	
1-10 years	0	36,110	143,099	99,884	d	d	43,359	
More than 10 years	0	2,624	237,856	34,617	d	d	48,657	
Commodity Credit Corporation crop loans 1/	2,021	596	4,489	0	d	d	1,768	
Net worth	3,017,837	2,919,920	1,693,625	120,631	d	d	2,227,071	
<u>Ratio</u>								
Debt/asset ratio	0	0.02	0.20	0.56	d	d	0.05	
<u>Percent</u>								
Percentage of debt by debt/asset category	0	7.77	56.79	12.53	d	d	100.00	
Percentage of assets by debt/asset category	64.74	19.62	13.40	1.07	d	d	100.00	

See footnotes at end of table.

Continued--

Appendix table 40--Farm operator balance sheet by occupational specialty, January 1, 1989--Continued

Other	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	395,118	99,219	175,791	63,642	19,864	9,613	763,248
<u>Percent</u>							
Percentage of farms	51.76	12.99	23.03	8.33	2.60	1.25	100.00
<u>Dollars per farm</u>							
Farm assets	204,953	292,459	206,472	165,448	134,271	63,032	209,757
Land and buildings	152,624	221,627	148,730	128,918	109,726	32,401	156,090
Farm equipment	12,649	19,538	19,191	16,595	12,215	15,018	15,399
Livestock inventory	8,863	15,242	12,705	10,687	7,353	9,787	10,702
Crop inventory	790	1,822	2,396	1,616	1,412	449	1,375
Purchased inputs	216	698	383	499	245	232	342
Other assets	25,604	33,238	21,888	6,331	3,319	2,380	23,261
Farm operator debt	0	12,219	45,406	87,677	106,257	98,111	23,358
By lender:							
Farm Credit System	0	3,051	12,877	20,465	34,167	42,161	6,489
Commercial bank	0	6,669	25,773	49,215	43,690	38,149	12,524
Other	0	2,499	6,756	17,997	28,399	17,801	4,345
By original term of loan:							
Less than 1 year	0	1,258	2,384	3,939	5,669	7,956	1,289
1-10 years	0	5,589	12,610	21,735	33,054	34,113	6,733
More than 10 years	0	5,372	30,411	62,003	67,533	56,042	15,336
Commodity Credit Corporation crop loans ^{1/}	24	151	380	605	149	128	175
Net worth	204,953	280,240	161,066	77,771	28,015	-35,079	186,399
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.22	0.53	0.79	1.56	0.11
<u>Percent</u>							
Percentage of debt by debt/asset category	0	6.80	44.77	31.29	11.83	5.28	100.00
Percentage of assets by debt/asset category	50.58	18.12	22.67	6.57	1.66	.37	100.00

d = Data insufficient for disclosure.

^{1/} Outstanding CCC crop loans were excluded from both assets and debt.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 41--Farm operator balance sheet by organizational structure, January 1, 1989

Individual	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	784,043	238,135	374,786	147,648	47,359	24,601	1,616,572
<u>Percent</u>							
Percentage of farms	48.50	14.73	23.18	9.13	2.92	1.52	100.00
<u>Dollars per farm</u>							
Farm assets	251,623	418,736	325,168	282,469	209,657	135,227	293,107
Land and buildings	172,526	296,006	202,319	180,152	133,354	67,883	195,579
Farm equipment	21,671	39,019	45,947	44,239	34,520	27,032	32,374
Livestock inventory	13,042	29,126	32,459	31,676	27,905	17,909	22,124
Crop inventory	3,504	7,423	11,908	9,849	6,256	4,587	6,706
Purchased inputs	611	1,849	2,122	2,151	1,500	1,009	1,316
Other assets	32,896	35,672	27,793	11,453	5,943	8,574	29,003
Farm operator debt	0	17,295	73,006	148,412	168,619	204,137	41,075
By lender:							
Farm Credit System	0	5,410	26,500	63,327	77,910	112,469	16,719
Commercial bank	0	8,390	32,009	60,536	57,917	62,861	16,839
Other	0	3,494	14,497	24,548	32,792	28,807	7,517
By original term of loan:							
Less than 1 year	0	2,921	7,338	12,302	12,346	14,517	3,838
1-10 years	0	7,965	24,077	43,750	49,806	67,157	13,232
More than 10 years	0	6,409	41,590	92,359	106,467	122,463	24,005
Commodity Credit Corporation crop loans <u>1/</u>	383	1,470	2,637	4,683	4,144	5,423	1,645
Net worth	251,623	401,441	252,162	134,058	41,038	-68,910	252,032
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.22	0.53	0.80	1.51	0.14
<u>Percent</u>							
Percentage of debt by debt/asset category	0	6.20	41.20	33.00	12.02	7.56	100.00
Percentage of assets by debt/asset category	41.63	21.04	25.71	8.80	2.09	.70	100.00

See footnotes at end of table.

Continued--

Appendix table 41--Farm operator balance sheet by organizational structure, January 1, 1989--Continued

Partnership	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
		<u>Number</u>					
Number of farms	44,567	19,235	25,735	9,903	2,208	1,919	103,567
		<u>Percent</u>					
Percentage of farms	43.03	18.57	24.84	9.56	2.13	1.85	100.00
		<u>Dollars per farm</u>					
Farm assets	580,487	914,273	802,286	639,155	573,636	330,781	698,432
Land and buildings	397,521	622,562	481,234	389,544	320,409	124,643	452,657
Farm equipment	55,390	99,897	109,393	102,439	71,937	62,357	82,056
Livestock inventory	51,346	73,611	103,801	66,221	117,845	84,055	71,962
Crop inventory	12,919	39,735	37,531	34,905	17,116	12,142	26,193
Purchased inputs	2,111	7,372	8,394	8,650	13,728	2,389	5,527
Other assets	43,169	58,275	56,852	32,862	32,601	32,554	47,967
Farm operator debt	0	43,124	180,987	335,413	450,050	500,950	103,929
By lender:							
Farm Credit System	0	17,141	82,132	151,597	203,234	186,889	45,883
Commercial bank	0	17,172	59,440	104,124	133,549	230,954	35,041
Other	0	8,812	39,416	79,693	113,267	83,108	23,005
By original term of loan:							
Less than 1 year	0	7,099	22,808	26,897	66,742	49,086	11,890
1-10 years	0	12,731	59,125	112,590	103,059	269,561	35,013
More than 10 years	0	23,294	99,054	195,926	280,250	182,303	57,026
Commodity Credit Corporation crop loans <u>1/</u>	2,183	2,837	11,189	19,212	2,754	18,514	6,486
Net worth	580,487	871,149	621,298	303,742	123,586	-170,170	594,503
		<u>Ratio</u>					
Debt/asset ratio	0	0.05	0.23	0.52	0.78	1.51	0.15
		<u>Percent</u>					
Percentage of debt by debt/asset category	0	7.70	43.27	30.85	9.23	8.93	100.00
Percentage of assets by debt/asset category	35.76	24.31	28.54	8.75	1.75	.87	100.00

See footnotes at end of table.

Continued--

Appendix table 41--Farm operator balance sheet by organizational structure, January 1, 1989--Continued

Family corporation	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	11,641	8,309	10,625	3,538	767	956	35,837
<u>Percent</u>							
Percentage of farms	32.48	23.18	29.64	9.87	2.14	2.66	100.00
<u>Dollars per farm</u>							
Farm assets	1,277,972	1,431,171	1,301,357	792,371	922,945	407,985	1,241,662
Land and buildings	776,062	861,002	818,927	488,900	355,064	220,448	756,271
Farm equipment	89,568	118,690	165,046	104,378	245,096	84,100	123,344
Livestock inventory	77,049	117,328	134,092	96,247	178,161	58,431	106,864
Crop inventory	24,305	38,151	67,294	46,588	71,503	15,217	43,228
Purchased inputs	8,780	5,465	10,157	11,339	18,766	4,671	8,777
Other assets	139,683	111,209	89,884	44,585	54,355	20,848	103,930
Farm operator debt	0	58,626	309,392	408,207	760,711	800,610	183,276
By lender:							
Farm Credit System	0	12,380	135,688	160,684	217,972	255,622	70,452
Commercial bank	0	28,228	91,233	149,166	286,377	416,737	65,574
Other	0	18,018	82,471	98,357	256,362	128,252	47,251
By original term of loan:							
Less than 1 year	0	12,916	39,624	30,790	226,409	53,575	24,060
1-10 years	0	25,487	74,699	104,712	89,285	338,649	49,343
More than 10 years	0	20,223	195,069	272,705	445,016	408,385	109,873
Commodity Credit Corporation crop loans <u>1/</u>	1,920	6,798	12,045	12,937	2,354	4,122	7,209
Net worth	1,277,972	1,372,545	991,964	384,164	162,234	-392,625	1,058,386
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.24	0.52	0.82	1.96	0.15
<u>Percent</u>							
Percentage of debt by debt/asset category	0	7.41	50.04	21.99	8.88	11.65	100.00
Percentage of assets by debt/asset category	33.43	26.72	31.07	6.30	1.59	.87	100.00

See footnotes at end of table.

Continued--

Appendix table 41--Farm operator balance sheet by organizational structure, January 1, 1989--Continued

Nonfamily corporation	No debt	Debt/asset ratio				Over 1.0	All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0		
<u>Number</u>							
Number of farms	3,619	1,249	1,582	547	d	d	7,371
<u>Percent</u>							
Percentage of farms	49.09	16.94	21.45	7.42	d	d	100.00
<u>Dollars per farm</u>							
Farm assets	6,138,932	6,124,359	3,009,190	738,951	d	d	4,783,515
Land and buildings	5,321,284	1,937,000	2,418,052	394,863	d	d	3,511,679
Farm equipment	65,533	2,558,142	163,069	90,428	d	d	509,595
Livestock inventory	76,953	166,970	208,049	146,309	d	d	127,490
Crop inventory	35,163	1,082,234	61,180	26,146	d	d	215,987
Purchased inputs	6,776	137,122	21,929	3,859	d	d	31,562
Other assets	68,556	68,565	136,910	77,334	d	d	80,458
Farm operator debt	0	106,101	499,468	381,544	d	d	181,363
By lender:							
Farm Credit System	0	4,459	99,485	45,644	d	d	33,745
Commercial bank	0	53,436	283,388	293,280	d	d	101,168
Other	0	48,207	116,595	42,621	d	d	46,450
By original term of loan:							
Less than 1 year	0	38,224	35,925	60,011	d	d	19,383
1-10 years	0	62,355	283,411	226,797	d	d	103,166
More than 10 years	0	5,523	180,133	94,735	d	d	58,814
Commodity Credit Corporation crop loans ^{1/}	5,485	1,020	5,184	501	d	d	4,015
Net worth	6,138,932	6,018,257	2,509,722	357,407	d	d	4,602,152
<u>Ratio</u>							
Debt/asset ratio	0	0.02	0.17	0.52	d	d	0.04
<u>Percent</u>							
Percentage of debt by debt/asset category	0	9.91	59.09	15.61	d	d	100.00
Percentage of assets by debt/asset category	63.00	21.68	13.49	1.14	d	d	100.00

d = Data insufficient for disclosure.

^{1/} Outstanding CCC crop loans were excluded from both assets and debt.

Source: 1988 Farm Costs and Returns Survey, USDA.

Appendix table 42--Farm operator balance sheet by operator age, January 1, 1989

34 years or under	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	45,464	24,183	70,745	39,244	16,805	6,158	202,600
<u>Percent</u>							
Percentage of farms	22.44	11.93	34.91	19.37	8.29	3.03	100.00
<u>Dollars per farm</u>							
Farm assets	268,049	327,284	268,592	188,131	170,053	91,512	246,334
Land and buildings	182,369	210,683	148,077	110,074	96,515	32,302	148,088
Farm equipment	30,542	40,581	48,442	35,955	32,101	31,468	39,197
Livestock inventory	19,255	32,874	35,463	21,479	27,889	17,042	27,620
Crop inventory	6,066	13,831	13,349	8,919	7,670	3,276	10,137
Purchased inputs	1,229	1,544	2,489	1,714	1,835	1,025	1,845
Other assets	22,739	26,790	20,495	9,540	4,045	4,709	17,784
Farm operator debt	0	15,745	62,333	99,589	135,824	132,889	58,242
By lender:							
Farm Credit System	0	3,729	16,777	31,809	68,186	61,439	19,988
Commercial bank	0	7,695	27,480	46,368	35,624	47,347	23,890
Other	0	4,321	18,076	21,412	32,014	24,104	14,364
By original term of loan:							
Less than 1 year	0	3,383	7,162	9,451	12,415	8,977	6,038
1-10 years	0	7,526	27,902	26,180	35,737	52,997	20,288
More than 10 years	0	4,836	27,269	63,959	87,673	70,914	31,916
Commodity Credit Corporation crop loans ^{1/}	946	1,828	2,569	2,801	1,891	4,734	2,171
Net worth	268,049	311,540	206,258	88,542	34,229	-41,377	188,092
<u>Ratio</u>							
Debt/asset ratio	0	0.05	0.23	0.53	0.80	1.45	0.24
<u>Percent</u>							
Percentage of debt by debt/asset category	0	3.22	37.37	33.12	19.34	6.93	100.00
Percentage of assets by debt/asset category	24.41	15.85	38.07	14.79	5.72	1.12	100.00

See footnotes at end of table.

Continued--

Appendix table 42--Farm operator balance sheet by operator age, January 1, 1989--Continued

35-44 years	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	102,885	52,983	107,600	50,159	14,735	10,100	338,462
<u>Percent</u>							
Percentage of farms	30.39	15.65	31.79	14.81	4.35	2.98	100.00
<u>Dollars per farm</u>							
Farm assets	364,627	551,140	363,215	300,238	240,914	126,047	371,327
Land and buildings	189,885	325,513	207,443	182,825	145,465	60,166	209,847
Farm equipment	23,512	108,081	55,295	47,999	48,176	25,069	51,604
Livestock inventory	18,462	35,661	43,196	35,781	32,171	18,327	32,177
Crop inventory	6,753	39,409	18,362	13,979	6,855	5,762	16,602
Purchased inputs	1,164	5,054	3,034	2,998	2,395	828	2,683
Other assets	34,416	36,782	33,304	14,397	5,595	7,399	29,405
Farm operator debt	0	21,095	85,270	160,869	195,016	189,390	68,392
By lender:							
Farm Credit System	0	6,567	28,581	68,080	84,109	109,316	27,127
Commercial bank	0	9,221	36,172	62,550	74,151	58,664	27,191
Other	0	5,308	20,518	30,239	36,756	21,410	14,074
By original term of loan:							
Less than 1 year	0	3,647	7,979	10,522	16,060	16,717	5,865
1-10 years	0	8,496	26,872	53,902	62,411	61,151	22,403
More than 10 years	0	8,953	50,419	96,445	116,544	111,521	40,125
Commodity Credit Corporation crop loans <u>1/</u>	471	2,626	2,818	5,162	2,605	1,966	2,387
Net worth	364,627	530,044	277,945	139,369	45,899	-63,342	302,935
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.23	0.54	0.81	1.50	0.18
<u>Percent</u>							
Percentage of debt by debt/asset category	0	4.82	39.63	34.85	12.41	8.26	100.00
Percentage of assets by debt/asset category	29.84	23.23	31.09	11.98	2.82	1.01	100.00

See footnotes at end of table.

Continued--

Appendix table 42--Farm operator balance sheet by operator age, January 1, 1989--Continued

45-54 years	No debt	Debt/asset ratio					All farms
		0.01- 0.10	0.11- 0.40	0.41- 0.70	0.71- 1.0	Over 1.0	
<u>Number</u>							
Number of farms	154,064	70,558	116,685	41,100	13,363	5,537	401,306
<u>Percent</u>							
Percentage of farms	38.39	17.58	29.07	10.24	3.32	1.37	100.00
<u>Dollars per farm</u>							
Farm assets	278,616	473,183	417,469	381,725	255,019	236,903	362,397
Land and buildings	194,333	327,182	272,238	248,753	168,464	143,627	244,355
Farm equipment	25,844	49,061	56,051	57,865	35,036	45,460	42,565
Livestock inventory	16,836	38,754	37,717	43,110	34,913	21,328	30,116
Crop inventory	3,726	8,432	15,612	12,859	5,660	8,114	9,070
Purchased inputs	1,020	3,154	2,880	2,905	2,195	2,408	2,188
Other assets	30,074	33,594	31,053	14,922	8,750	8,382	28,416
Farm operator debt	0	21,714	93,577	202,655	204,317	372,667	63,727
By lender:							
Farm Credit System	0	5,571	37,046	84,857	73,559	201,082	25,666
Commercial bank	0	10,682	38,229	82,656	81,038	115,700	25,754
Other	0	5,462	18,303	35,141	49,720	55,886	12,308
By original term of loan:							
Less than 1 year	0	2,679	8,734	21,272	16,589	29,513	6,149
1-10 years	0	10,643	30,079	54,182	69,652	122,923	20,182
More than 10 years	0	8,392	54,764	127,201	118,075	220,231	37,397
Commodity Credit Corporation crop loans <u>1/</u>	592	1,752	3,869	5,329	4,332	17,203	2,588
Net worth	278,616	451,469	323,891	179,071	50,702	-135,764	298,670
<u>Ratio</u>							
Debt/asset ratio	0	0.05	0.22	0.53	0.80	1.57	0.18
<u>Percent</u>							
Percentage of debt by debt/asset category	0	5.99	42.69	32.56	10.67	8.06	100.00
Percentage of assets by debt/asset category	29.51	22.95	33.49	10.78	2.34	.90	100.00

See footnotes at end of table.

Continued--

Appendix table 42--Farm operator balance sheet by operator age, January 1, 1989--Continued

55-64 years	No debt	Debt/asset ratio					All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0	Over 1.0	
<u>Number</u>							
Number of farms	225,626	76,498	80,292	24,147	4,834	4,720	416,117
<u>Percent</u>							
Percentage of farms	54.22	18.38	19.29	5.80	1.16	1.13	100.00
<u>Dollars per farm</u>							
Farm assets	382,180	574,091	455,350	428,801	427,555	200,196	432,747
Land and buildings	277,596	424,391	297,474	275,809	265,007	77,915	305,903
Farm equipment	30,202	49,985	56,321	61,377	53,503	26,277	40,914
Livestock inventory	19,812	35,378	40,091	47,067	62,797	44,970	28,953
Crop inventory	5,345	10,239	14,652	14,394	16,613	4,323	8,685
Purchased inputs	925	2,639	3,172	3,787	3,811	965	1,874
Other assets	35,201	47,569	34,403	17,043	25,584	26,116	36,052
Farm operator debt	0	22,432	100,602	214,770	345,908	340,687	43,881
By lender:							
Farm Credit System	0	7,798	42,071	103,700	186,769	122,958	19,134
Commercial bank	0	11,137	42,427	78,979	108,071	159,527	17,882
Other	0	3,497	16,103	32,092	51,068	58,201	6,866
By original term of loan:							
Less than 1 year	0	5,328	11,684	14,658	49,378	21,397	4,901
1-10 years	0	9,463	29,356	65,814	59,886	151,573	13,638
More than 10 years	0	7,640	59,562	134,298	236,644	167,717	25,342
Commodity Credit Corporation crop loans <u>1/</u>	423	1,883	4,528	11,968	15,677	3,292	2,363
Net worth	382,180	551,659	354,749	214,031	81,647	-140,490	388,866
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.22	0.50	0.81	1.70	0.10
<u>Percent</u>							
Percentage of debt by debt/asset category	0	9.39	44.23	28.40	9.15	8.80	100.00
Percentage of assets by debt/asset category	47.88	24.38	20.30	5.74	1.14	.52	100.00

See footnotes at end of table.

Continued--

Appendix table 42--Farm operator balance sheet by operator age, January 1, 1989--Continued

65 years or over	No debt	Debt/asset ratio				Over 1.0	All farms
		0.01-0.10	0.11-0.40	0.41-0.70	0.71-1.0		
<u>Number</u>							
Number of farms	316,419	42,791	37,473	6,987	d	d	405,602
<u>Percent</u>							
Percentage of farms	78.01	10.55	9.23	1.72	d	d	100.00
<u>Dollars per farm</u>							
Farm assets	283,368	524,770	476,069	394,714	d	d	328,473
Land and buildings	195,619	330,927	330,042	290,397	d	d	223,797
Farm equipment	19,453	32,929	43,125	40,952	d	d	23,501
Livestock inventory	12,239	33,021	48,478	29,671	d	d	18,235
Crop inventory	3,113	9,477	8,635	7,390	d	d	4,384
Purchased inputs	500	1,622	1,619	2,434	d	d	761
Other assets	39,409	47,205	43,643	13,619	d	d	40,051
Farm operator debt	0	19,262	94,153	199,656	d	d	15,541
By lender:							
Farm Credit System	0	7,004	44,899	113,086	d	d	7,548
Commercial bank	0	8,172	33,307	56,698	d	d	5,265
Other	0	4,085	15,947	29,872	d	d	2,728
By original term of loan:							
Less than 1 year	0	2,706	13,306	13,983	d	d	1,804
1-10 years	0	7,605	28,303	74,714	d	d	5,142
More than 10 years	0	8,951	52,544	110,959	d	d	8,595
Commodity Credit Corporation crop loans ^{1/}	511	265	3,001	7,287	d	d	862
Net worth	283,368	505,508	381,917	195,059	d	d	312,932
<u>Ratio</u>							
Debt/asset ratio	0	0.04	0.20	0.51	d	d	0.05
<u>Percent</u>							
Percentage of debt by debt/asset category	0	13.07	55.97	22.13	d	d	100.00
Percentage of assets by debt/asset category	67.29	16.85	13.39	2.07	d	d	100.00

d = Data insufficient for disclosure.

^{1/} Outstanding CCC crop loans were excluded from both assets and debt.

Source: 1988 Farm Costs and Returns Survey, USDA.

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