

Farm Business Financial Performance

More than three-fifths of farms ended 1998 with a profit. These farms accounted for more than three-fourths of the value of production and nearly two-thirds of acres operated. Financial performance of farms and the economic condition of farm households vary considerably across the farm typology. Larger family farms, as a group, tend to have economic cost/output ratios less than one, meaning they generate farm profits that can be used to retire debt, expand farm or nonfarm businesses, or support family living expenditures. On average, most small farm groups did not report adequate income to cover expenses. They subsidized the costs of their farming activities with income from off-farm sources.

The financial condition of farm operator households and the financial performance of farms they manage differ considerably among household units classified by the farm typology. This analysis illustrates the diversity of U.S. farm operations, addressing the farm and nonfarm financial characteristics of all farm operator households, including those with limited farm sales. Farm operator households are commonly believed to rely primarily on their farms for their income (Gale and Harrington, 1993). In reality, off-farm income is important to most farm households.

Financial Position

Farm business financial performance measures vary substantially among the various farm typology groups ([table 17](#)). Each farm is classified into one of four financial performance categories based on the net income and debt/asset ratio or solvency position of the farm business. Farm businesses classified as favorable (positive net farm income and debt/asset ratios less than 40 percent) are considered to be in the strongest financial condition, while those in the vulnerable group (negative net farm income and debt/asset ratios greater than 40 percent) are perceived to be exposed to the greatest risk. About 59 percent of all farms were in the favorable group in 1998, while fewer than 5 percent of all farms were classified as vulnerable.

Since this classification system evaluates the financial condition of farm businesses, it is most meaningful when applied to those operations where farming provides a substantial portion of household income, namely high-sales small farms, large family farms, and very large family farms. Only 4 or 5 percent of these farms were in a vulnerable financial position. While 6 percent of residential/lifestyle farm businesses were classified as vulnerable, their households generated sufficient income from off-farm sources to offset losses from farming activities.

A majority of farms were profitable, with 63 percent having positive net income in 1998 (table 18). The profitable farm businesses accounted for 77 percent of the value of production and nearly two-thirds of the acres operated by farms, including nonfamily farms. About 5 percent of agricultural output was produced by farm operations in a vulnerable financial position. A majority of these farms were very small, less than \$10,000 in sales, and focused on the production of beef, grains, or field crops.

Table 17—Number of farms and financial performance classification, by farm typology group, 1998

Item	Small family farms ¹				Large family farms ¹	Very large family farms ¹	All family farms	
	Limited-resource ²	Retirement ³	Residential/lifestyle ³	Farming-occupation ³				
				Low-sales				High-sales
Number								
Number of farms and households	150,268	290,938	834,321	422,205	171,469	91,939	61,273	2,022,413
Percent								
Financial performance ⁴								
Favorable	55.2	68.5	52.9	59.3	66.4	66.7	59.5	58.6
Marginal income	34.3	30.3	38.0	35.1	19.3	17.3	13.2	32.7
Marginal solvency	d	d	3.2	*2.1	9.6	11.0	22.0	3.9
Vulnerable	d	d	6.0	3.5	4.7	5.0	5.4	4.7

d = Data suppressed due to insufficient observations. * = Standard error is between 25 and 50 percent of the estimate.

¹Small family farms have sales less than \$250,000. Large family farms have sales between \$250,000 and \$499,999. Very large family farms have sales of \$500,000 or more.

²Limited-resource farms have household income less than \$20,000, farm assets less than \$150,000, and sales less than \$100,000.

³Small farms other than limited-resource farms are classified according to the major occupation of their operators. Operators of retirement farms are retired. Operators of residential/lifestyle farms report a nonfarm occupation. Operators of farming-occupation farms report farming as their major occupation. Farming-occupation farms are further divided into low-sales (sales less than \$100,000) and high-sales (sales between \$100,000 and \$249,999).

⁴Financial performance classification based on farm income and debt/asset ratio:

Favorable: positive net farm income and debt/asset ratio no more than 40 percent;

Marginal income: negative net farm income and debt/asset ratio no more than 40 percent;

Marginal solvency: positive net farm income and debt/asset ratio more than 40 percent;

Vulnerable: negative net farm income and debt/asset ratio more than 40 percent.

Source: USDA, Economic Research Service, 1998 Agricultural Resource Management Study, version 1.

Standard Financial Performance Measures

Comparison of farm financial performance measures, based on recommendations by the Farm Financial Standards Council (1995) reveals differences in viability of farms in the various typology groups ([table 19](#)). Generally speaking, limited-resource, retirement, residential/lifestyle, and low-sales farms ran negative

Table 18—Characteristics of farms, by financial position, 1998¹

Item	Financial performance ²				All farms
	Favorable	Marginal income	Marginal solvency	Vulnerable	
	<i>Number</i>				
Total farms	1,207,537	676,668	82,857	97,647	2,064,709
	<i>Percent</i>				
Distribution of:					
Farms	58.5	32.8	4.0	4.7	100.0
Value of production	61.9	17.7	15.1	5.2	100.0
Acres operated	58.2	29.9	6.2	5.7	100.0
	<i>Acres per farm</i>				
Land operated	451	413	696	548	453
	<i>Percent</i>				
Sales less than \$10,000	49.2	62.1	*19.4	54.9	52.5
Type of farm:					
Cash grain	19.9	15.7	23.0	19.2	18.6
Other field crops	24.9	16.9	13.9	18.5	21.5
High-value crops	7.3	7.2	*10.2	*14.2	7.7
Beef	29.7	35.2	21.4	28.5	31.1
Hogs	1.9	*2.8	na	*4.8	2.5
Dairy	5.6	2.0	12.9	*2.6	4.5
Other livestock	10.7	20.2	12.6	*12.0	14.0

na = Not applicable. * = Standard error is between 25 and 50 percent of the estimate.

¹Unlike the other tables in this section, this table includes nonfamily farms. Thus, the total count of farms presented here is slightly higher than in the other tables. The focus of the rest of the section is family farms, but nonfamily farms are included here to get complete estimates of the distribution of farms, value of production, and acres operated across the typology.

²Financial performance classification based on farm income and debt/asset ratio:

Favorable: positive net farm income and debt/asset ratio no more than 40 percent;

Marginal income: negative net farm income and debt/asset ratio no more than 40 percent;

Marginal solvency: positive net farm income and debt/asset ratio more than 40 percent;

Vulnerable: negative net farm income and debt/asset ratio more than 40 percent.

Source: USDA, Economic Research Service, 1998 Agricultural Resource Management Study, version 1.

Table 19—Selected financial performance measures, by farm typology group, 1998

Item	Small family farms ¹					Large family farms ¹	Very large family farms ¹	All family farms
	Limited-resource ²	Retire-ment ³	Residential/lifestyle ³	Farming-occupation ³				
				Low-sales	High-sales			
Dollars per farm								
Balance sheet:								
Total assets	76,108	442,270	291,525	560,567	772,106	1,219,986	2,334,272	498,213
Total liabilities	9,270	*7,234	25,152	38,416	117,560	196,485	466,034	53,144
Net worth	66,838	435,036	266,373	522,151	654,547	1,023,501	1,868,237	445,069
Working capital ⁴	*3,865	23,303	12,429	38,884	75,710	135,954	226,778	36,355
Net farm income	d	**2,936	*1,324	d	25,277	52,866	213,083	12,142
Dollars per household								
Income measures:								
Total household income	9,924	45,659	72,081	34,773	50,180	106,541	209,105	59,734
Off-farm income	13,153	47,158	76,390	37,186	28,717	47,252	33,240	56,628
Family living expenses	15,291	21,897	33,791	20,494	28,911	35,568	46,508	27,981
Percent								
Profitability measures:								
Return on assets ⁵	-13.6	*-0.9	-1.9	-2.8	d	2.2	8.1	d
Return on equity ⁶	-16.8	*-1.1	-2.9	-3.7	-1.7	d	7.6	*-1.1
Operating profit margin ⁷	-102.1	*-23.1	-27.3	-38.6	d	7.6	19.0	d
Solvency measure:								
Debt/asset ratio ⁸	12.2	*1.6	8.6	6.8	15.2	16.1	20.0	10.7
Ratio								
Repayment capacity measure:								
Debt coverage ratio ⁹	d	*4.07	1.39	1.53	2.81	3.38	4.32	2.80
Financial efficiency measures:								
Asset turnover ratio ¹⁰	0.13	0.04	0.07	0.07	0.22	0.28	0.42	0.16
Operating expense ratio ¹¹	1.34	1.04	1.20	0.97	0.77	0.74	0.72	0.81
Economic cost/Output ratio ¹²	2.11	1.27	1.38	1.46	1.07	0.98	0.86	1.06

d = Data suppressed due to insufficient observations or because the standard error is greater than 75 percent of the estimate. * = Standard error is between 25 and 50 percent of the estimate. ** = Standard error is between 51 and 75 percent of the estimate. ¹Small family farms have sales less than \$250,000. Large family farms have sales between \$250,000 and \$499,999. Very large family farms have sales of \$500,000 or more. ²Limited-resource farms have household income less than \$20,000, farm assets less than \$150,000, and sales less than \$100,000. ³Small farms other than limited-resource farms are classified according to the major occupation of their operators. Operators of retirement farms are retired. Operators of residential/lifestyle farms report a nonfarm occupation. Operators of farming-occupation farms report farming as their major occupation. Farming-occupation farms are further divided into low-sales (sales less than \$100,000) and high-sales (sales between \$100,000 and \$249,999). ⁴Working capital = current assets - current liabilities. ⁵Return on assets = (net farm income + interest - charge for unpaid operators' labor and management) / total assets. ⁶Return on equity = (net farm income - charge for unpaid operators' labor and management) / net worth. ⁷Operating profit margin = (net farm income + interest - charge for unpaid operators' labor and management) / gross farm income. ⁸Debt / asset ratio = total liabilities / total assets. ⁹Debt coverage ratio = (net farm income + off-farm income + depreciation + interest - estimated income tax expense - family living expenses) / (scheduled principal and interest payments). ¹⁰Asset turnover ratio = gross farm income / total assets. ¹¹Operating expense ratio = total cash operating expenses / gross cash farm income. ¹²Economic cost / Output ratio = (total cash operating expenses + benefits + charge for unpaid operators' labor and management) / gross farm income. Source: USDA, Economic Research Service, 1998 Agricultural Resource Management Study, version 1.

operating profit margins, did not cover the full economic costs of production, and generated inadequate farm income to report positive returns to assets and equity. These small family operations accounted for about 16 percent of the value of production in 1998.

Limited-resource farms operated with small asset bases and used little debt financing. Moreover, low levels of working capital (an average of \$3,900 per farm)—defined as current assets minus current liabilities—suggest that these operations had little cushion for financial emergencies. While the debt/asset ratio for these farms was only slightly higher than the ratio for all farms in 1998, these farms were generally too small to operate efficiently and generated negative returns to assets and equity. On average, off-farm income was not adequate to cover family living expenses, suggesting that some of these households were liquidating or borrowing against both farm and nonfarm assets to cover basic living costs.

Even though retirement farms held more assets than limited-resource farms and generated a positive net farm income, they also relied on off-farm income to meet living expenses and service farm debt. Retirement farms appeared to exercise fairly tight cost control measures, with an operating expense ratio of 1.04, which was much better than the corresponding measure for limited-resource and residential/lifestyle farms. Retired farmers' heavy participation in the CRP may have helped reduce costs relative to income. The CRP provides income with relatively few expenditures.

Residential/lifestyle farms had a higher debt/asset ratio than retirement farms or low-sales small farms, possibly due to significant mortgage debt on farm dwellings. This debt may easily have been serviced by the substantial off-farm income that these households received. Residential/lifestyle farms had relatively low working capital (\$12,400) to serve as a cushion in emergencies.

On average, limited-resource, retirement, and residential/lifestyle farms did not report adequate gross farm income to cover operating expenses; their operating expense ratio was greater than 1. They subsidized the costs of their farming activities with income from off-farm sources. In contrast, low- and high-sales small farms were more likely to generate sufficient income to cover operating expenses (operating expense ratio less than or equal to 1). But, only high-sales small farms produced enough revenue, on average, to come close to meeting full economic costs of production. The economic cost/output ratio for this group was 1.07, which means that economic costs and output were nearly equal. On average, these farms had substantial working capital and household off-farm income to contribute to family living expenses and to augment farm income shortfalls.

Family farms with 1998 sales of \$250,000 or more appear to be viable economic units. Their assets averaged \$1,220,000 for large family farms and \$2,334,300 for very large family farms. They had manageable debt levels, generated sufficient farm income (on average) to cover operating expenses and economic costs, and recorded rates of return on assets and equity comparable to small, nonfarm corporations. With economic cost/output ratios less than one, the large and very large family farms that produce 54 percent of the total value of production generated returns that could be used to retire debt, make new farm investments, make off-farm investments, or support family living.

While debt/asset ratios averaged 16 percent for large farms and 20 percent for very large farms, these groups generated average operating profit margins of 8 percent and 19 percent, respectively. Although farm households in these groups received substantial off-farm income, the majority of their household income came from farming.

Lenders Serving the Farm Typology Groups

Although many farmers operate with seasonal production loans that are taken out and repaid within the same calendar year, only 43 percent of farm operators reported any debt outstanding as of December 31, 1998 (table 20). Year-end loan balances were reported by 29 percent of limited-resource and 13 percent of retirement farms. At the other extreme, about three-fourths of high-sales small farms and large family farms, as well as 81 percent of very large family farms, reported debt outstanding at year-end. This suggests that operations most frequently incurring debt are larger, more efficient units, which are best positioned to benefit from the strategic use of credit.

Banks provided about 48 percent of the outstanding debt reported by farm operators at the end of 1998, accounting for a substantial portion of total farm debt (44 to 54 percent) for each group. The Farm Credit System (FCS) supplied 21 percent of all reported debt, servicing the credit needs of retirement, large, and very large farms more than those of other typology groups.

The Farm Service Agency (FSA) provided about 6 percent of all reported debt, which is understandable, given its role as a lender of last resort. In addition to making loans to farmers directly, FSA also guarantees loans made by other lenders. These loans are not included in the estimates of debt held by FSA. Loans guaranteed by FSA are included in the estimates of debt held by the lenders who made the loan. Without the guarantees, some farmers would not be able to obtain loans from nongovernment sources.

Large and very large operations owed about 43 percent of all debt reported at the end of 1998. These farms owed 55 percent of FCS debt, but only 41 percent of bank debt. The FSA appears to be serving smaller operations, with 52 percent of its loans going to small farms where the operators report farming as their major occupation. In contrast, only 31 percent of FCS debt and 35 percent of bank debt was reported by these operations.

Debt Repayment Capacity

Comparing debt reported by farm operators with the maximum level of debt that they could service with current income from farm and off-farm sources provides a measure of the extent to which farm operators use their available credit capacity. Lenders generally require that no more than 80 percent of a loan applicant's available income be used for repayment of principal and interest on loans. For farm operators, this income available for debt service⁶ can be used to determine the maximum amount of loan payment the farmer could make.

Given current market interest rates and an established repayment period, the maximum debt that the farmer could carry with this loan payment can be determined. Using average rates reported in the 1998 ARMS for real estate and nonreal estate loans and a 7-year repayment period, maximum feasible debt conceptually measures the line of credit that could be available to farmers. Maximum loan eligibility of farmers unable to report positive 1998 income available for debt service was limited to 10 percent of net worth. If such farmers reported negative net worth or family living expenses in excess of total household income, maximum feasible debt was limited to \$100.

⁶Measured as: net farm income + off-farm income - income taxes - family living expenses + depreciation + interest

Table 20—Reported farm debt, by lender, by farm typology group, 1998

Item	Small family farms ¹					Large family farms ¹	Very large family farms ¹	All family farms
	Limited-resource ²	Retire-ment ³	Residential/ lifestyle ³	Farming-occupation ³				
				Low-sales	High-sales			
Number								
Number of farms	150,268	290,938	834,321	422,205	171,469	91,939	61,273	2,022,413
Number of farms with debt	42,858	38,246	359,717	183,042	130,217	68,638	49,899	872,526
Percent								
Percent of farms with debt	28.5	13.1	43.1	43.4	75.9	74.7	81.4	43.1
Dollars per farm								
Average debt								
Farm Credit System	d	**3,096	2,475	6,391	23,163	50,547	120,350	10,701
Commercial banks	4,138	*3,480	12,897	20,404	52,304	84,518	205,929	24,910
Life insurance companies	d	d	**225	**164	**1,595	*3,536	*25,643	*1,220
Farm Service Agency	*244	d	*1,284	3,726	10,109	7,715	*21,071	3,179
Individuals and others	**3,501	**860	9,029	6,411	22,713	40,115	54,755	10,873
Unspecified lender	d	d	**182	*414	*1,425	5,355	12,524	904
All lenders ⁴	*7,868	*7,617	25,977	37,474	111,510	191,262	436,653	51,522
Percent distribution by typology group								
Farm Credit System	d	4.2	9.5	12.5	18.3	21.5	33.9	100.0
Commercial banks	1.2	2.0	21.3	17.1	17.8	15.4	25.1	100.0
Life insurance companies	d	d	*7.6	*2.8	11.1	*13.2	63.7	100.0
Farm Service Agency	0.6	d	16.7	24.5	27.0	11.0	20.1	100.0
Individuals and others	*2.3	*1.1	34.3	12.4	17.7	16.8	15.3	100.0
Unspecified lender	d	d	*8.3	9.6	13.3	26.9	41.8	100.0
All lenders	1.1	2.1	20.8	15.2	18.3	16.9	25.6	100.0
Percent distribution by lender								
Farm Credit System	d	*40.7	9.5	17.1	20.8	26.4	26.9	20.6
Commercial banks	*52.6	*45.5	49.3	54.4	47.0	44.0	47.0	48.1
Life insurance companies	d	d	**0.9	**0.4	*1.4	*1.8	*5.9	*2.4
Farm Service Agency	*3.1	d	*4.9	9.9	9.1	4.0	*4.8	6.2
Individuals and others	*42.7	**11.3	34.7	17.1	20.4	21.0	12.6	21.0
Unspecified lender	d	d	**0.7	*1.1	*1.3	2.8	2.9	1.8
All lenders	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

d = Data suppressed due to insufficient observations or because the standard error is greater than 75 percent of the estimate. * = Standard error is between 25 and 50 percent of the estimate. ** = Standard error is between 51 and 75 percent of the estimate. ¹Small family farms have sales less than \$250,000. Large family farms have sales between \$250,000 and \$499,999. Very large family farms have sales of \$500,000 or more. ²Limited-resource farms have household income less than \$20,000, farm assets less than \$150,000, and sales less than \$100,000. ³Small farms other than limited-resource farms are classified according to the major occupation of their operators. Operators of retirement farms are retired. Operators of residential/lifestyle farms report a nonfarm occupation. Operators of farming-occupation farms report farming as their major occupation. Farming-occupation farms are further divided into low-sales (sales less than \$100,000) and high-sales (sales between \$100,000 and \$249,999). ⁴Outstanding loan balances for the operation's four largest loans were reported on the survey, with the credit source identified from a list of 16 potential lenders. Thus, the total loans from all lenders reported here is less than total liabilities reported in table 19. Source: USDA, Economic Research Service, 1998 Agricultural Resource Management Study, version 1.

Farm debt repayment capacity use (DRCU), computed as actual debt expressed as a percentage of maximum feasible debt, effectively measures the extent to which farmers are using their available lines of credit. ARMS data indicate that, in 1998, farm households used about 30 percent of the debt that could be supported by current household income and equity positions ([table 21](#)). This analysis does not include any nonfarm debt owed by the farm operator's household.

DRCU varied widely by typology group. At one extreme, retirement farms owed about 7 percent of the debt that they could service with current income from all sources. DRCU was also relatively low (16 percent) for residential/lifestyle farms. For limited-resource operations, low-sales small farms, and very large farms, DRCU fell between 34 and 44 percent. DRCU was highest for high-sales small farms (57 percent) and large family farms (48 percent). This means that these two groups of farms had the smallest amount of credit reserves that could be used to help overcome an unanticipated need for funds.

Farms can often meet short-term income shortfalls with savings and sale of liquid assets. However, if DRCU exceeds 1.2—meaning that the operation owes 20 percent more debt than can be serviced with current income—the risk of default increases. About 42 percent of all operations reporting debt outstanding at the end of 1998 had DRCU greater than 1.2, and these farms owed 43 percent of all debt. About two-fifths of high-sales small farms with debt and one-third of larger family farms with debt reported incomes insufficient to meet all debt service commitments at the end of 1998.

Debt repayment, however, may be a particularly severe problem for limited-resource and retirement farms. Among indebted farms in 1998, a larger share of the limited-resource and retirement farms with debt (nearly 90 percent) had a DRCU greater than 1.2. About 60 percent of indebted low-sales small farms were also in the high DRCU group.

In the remaining typology groups, the share of indebted farms having a DRCU greater than 1.2 was lower, between 26 and 39 percent. But these larger family farms accounted for a majority of total production and owe a substantial portion of total debt. Thus, if these larger family farms were to encounter any widespread difficulty in meeting their debt service commitments from savings or other sources, there could be substantial impact on the sector's average performance, including a rise in nonperforming and problem loans for lenders.

Summary

Large and very large family farms are generally economically viable units. On average, they owned substantial assets, had manageable debt levels, generated enough farm income to cover operating expenses and economic costs, and recorded reasonable rates of return on assets and equity. Households operating these larger farms also did well when compared with nonfarm households. Households in both these groups had an average household income well above the average for all U.S. households, largely due to farm earnings (see [“Farm Household Income and Wealth”](#)).

Financial statistics show a real difference between these larger family farms and small family farms. The National Commission on Small Farms, in fact, examined financial statistics by sales class when they drew the line between large and small farms at \$250,000 of sales. One reason for selecting that level of sales was that average returns on equity were positive for farms with sales above \$250,000 and negative for farms with sales between \$50,000 and \$249,999 (U.S. Dept. Agr., Nat'l. Comm. on Small Farms, 1998, p. 18).

Table 21—Debt repayment capacity utilization calculation, by farm typology group, 1998

Item	Small family farms ¹					Large family farms ¹	Very large family farms ¹	All family farms
	Limited-resource ²	Retire-ment ³	Residential/lifestyle ³	Farming-occupation ³				
				Low-sales	High-sales			
Dollars per farm								
Net farm income	d	**2,936	*1,324	d	25,277	52,866	213,083	12,142
Income for debt coverage ⁴	d	23,465	34,026	20,125	40,337	83,067	224,824	35,519
Principal/interest payments	1,258	*996	3,689	5,508	17,287	28,247	69,472	7,763
Debt coverage margin ⁵	d	22,468	30,337	14,617	23,050	54,819	155,352	27,756
Maximum loan payment ⁶	4,031	20,737	30,755	20,126	38,933	76,998	200,181	33,038
Maximum feasible debt ⁷	21,079	111,776	161,391	113,290	207,683	409,808	1,051,161	175,961
Total liabilities	9,270	*7,234	25,152	38,416	117,560	196,485	466,034	53,144
Percent								
Debt repayment capacity utilization (DRCU) ⁸	44.0	*6.5	15.6	33.9	56.6	48.0	44.3	30.2
Number								
Number with DRCU greater than 1.2	37,035	33,524	93,704	110,305	50,879	24,194	16,281	365,923
Percent								
Farms with DRCU greater than 1.2:								
Percent of all farms	24.6	11.5	11.2	26.1	29.7	26.3	26.6	18.1
Percent of farms with debt	*86.4	87.7	26.0	60.3	39.1	35.2	32.6	41.9
Percent of debt	46.6	51.3	28.5	51.4	52.8	48.5	38.0	43.1

d = Data suppressed due to insufficient observations or because the standard error is greater than 75 percent of the estimate. * = Standard error is between 25 and 50 percent of the estimate. ** = Standard error is between 51 and 75 percent of the estimate. ¹Small family farms have sales less than \$250,000. Large family farms have sales between \$250,000 and \$499,999. Very large family farms have sales of \$500,000 or more. ²Limited-resource farms have household income less than \$20,000, farm assets less than \$150,000, and sales less than \$100,000. ³Small farms other than limited-resource farms are classified according to the major occupation of their operators. Operators of retirement farms are retired. Operators of residential/lifestyle farms report a nonfarm occupation. Operators of farming-occupation farms report farming as their major occupation. Farming-occupation farms are further divided into low-sales (sales less than \$100,000) and high-sales (sales between \$100,000 and \$249,999). ⁴Income for debt coverage = net farm income + off-farm income + depreciation + interest - estimated income tax expense - family living expenses. ⁵Debt coverage margin = income for debt coverage - principal and interest payments. ⁶Maximum loan payment is that which could be made while maintaining a debt coverage margin of 1.25. Maximum loan payment = 80 percent of income for debt coverage. ⁷Maximum feasible debt is the maximum of 1) that loan which could be repaid with the maximum loan payment at 1998 ARMS reported average interest rate over a 7-year loan term, 2) 10 percent of net worth, or 3) \$100. ⁸Debt repayment capacity utilization = Total liabilities / maximum feasible debt. DRCU measures the extent to which the farm operation is utilizing its capacity to service debt from current income.

Source: USDA, Economic Research Service, 1998 Agricultural Resource Management Study, version 1.

The financial picture is more mixed for small farms than for large and very large farms. Generally speaking, limited-resource, retirement, residential/lifestyle, and low-sales farms did not cover economic costs in 1998, and they did not generate enough farm income to report positive returns to assets and equity. High-sales small farms, however, were more like large and very large farms in some respects. On average, high-sales small farms generated sufficient income to cover operating expenses, and nearly covered economic costs.

Generally, farms need to be in the upper end of the small farm spectrum to generate income from farming near the average for all U.S. households (Perry and others, 1998). This does not mean that all households operating small farms other than those with high sales are low-income, but rather points out the importance of off-farm income for meeting family living expenses and debt service needs.