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Financial Characteristics of U.S. Farms, January 1, 1987: A Summary

Farm sector income reached a record high in 1986, but financial stress in some segments of the farm sector continued. Land values, particularly on cash grain and livestock farms in the Midwest, continued to fall. However, conditions are apparently improving for these operations and for the lenders supplying them credit, mainly due to record-high Government support and lower production expenses.

Farm sector income in 1986 rose substantially over its 1985 level in both real (adjusted for inflation) and nominal (actual) terms and, in nominal terms, reached a record high (fig. 1). The increase was due largely to lower costs of agricultural inputs (such as fuel and fertilizer) and higher Government support payments. Farm debt declined in 1986, but farm asset values, particularly land values, continued to fall, although at a slower pace than in previous years (fig. 2).

The 1986 farm financial profile reflects mostly improved liquidity (ability to meet payments as they come due during the year), profitability (net farm income), and solvency (ability to pay all legal debts). These improvements may be a sign that the farm economy is recovering after several years of relatively low commodity prices, declining farm exports, plunging farmland values, and high debt loads. These problems were rooted in the agricultural vitality of the 1970's when strong demand boosted incomes and returns to record highs in 1973-75. Asset values rose dramatically in the late 1970's in response to anticipated continuing increases in income and cash flow. Debt levels rose commensurately as farmers borrowed to acquire additional land and expand existing capital and equipment.

This report summarizes the latest information on the financial performance of farmers. Data are partly from farm sector financial accounts published in the *Economic Indicators of the Farm Sector* series published by the Economic Research Service, U.S. Department of Agriculture (USDA). Additional data on the financial condition of farm operators are from USDA's Farm Costs and Returns Survey conducted by the National Agricultural Statistics Service in February and March 1987 for the 1986 calendar year. More detail appears in a companion report, *Financial Characteristics of U.S. Farms, January 1, 1987*, AIB-525, August 1987.

FARM SECTOR'S FINANCIAL STATISTICS YIELD MIXED SIGNALS IN 1986

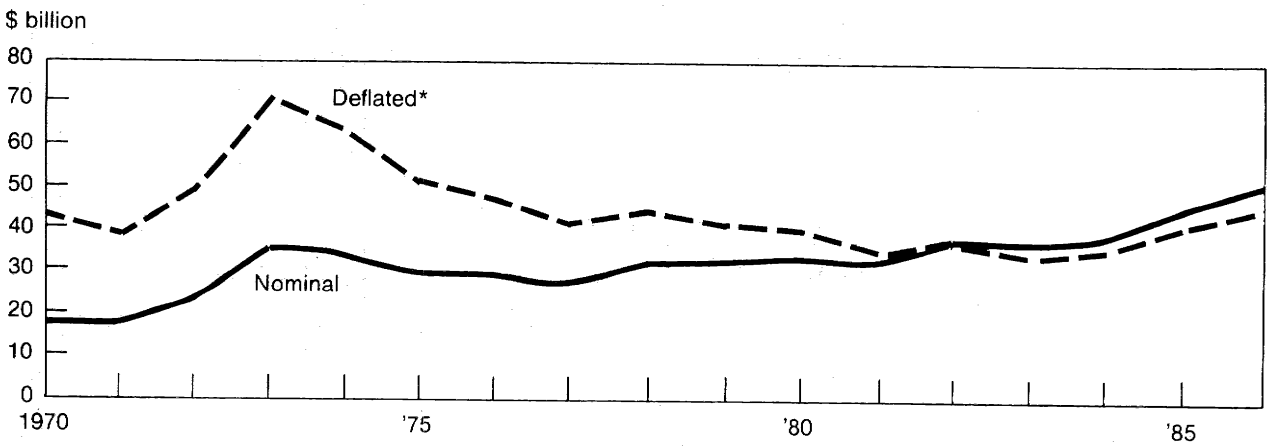
Lower production expenses and increased Government loans and direct payments are improving financial conditions in the farm sector, despite falling assets. Nominal net income is regaining the record levels of 1973–75, and farm debt is dropping. However, land values and equity continued to fall through 1986.

Farm Income Regains Highs

Nominal net cash income (measuring farm business liquidity) and nominal net farm income (measuring profitability) reached record highs in 1986, largely due to Government loan and direct payment programs. Net Commodity Credit Corporation (CCC) loans and direct Government payments rose to over $20 billion. Production expenses simultaneously fell nearly $12 billion, also boosting net income levels. Lower input requirements on land idled under Government commodity programs and farmers' attempts to control costs helped reduce production costs. Interest expenses, rising dramatically from the early

Figure 1

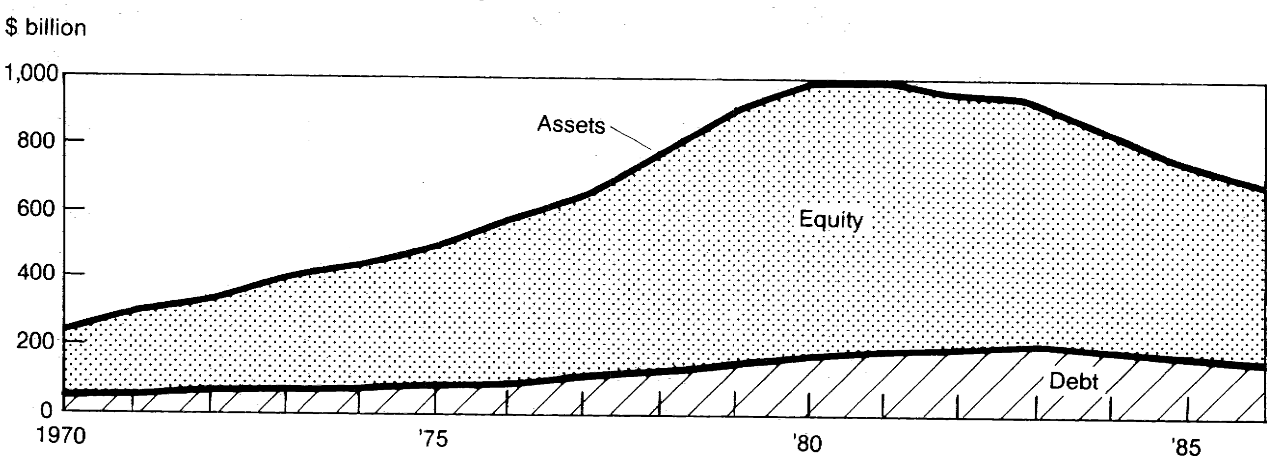
Farm Sector Net Cash Income



*Deflated by the GNP implicit price deflator, 1982=100

Figure 2

Farm Sector Assets, Debt, and Equity*



*Figures are nominal and exclude dwellings.

1970's into the 1980's because of a rise in the level of debt outstanding and interest rates, declined in 1985 and 1986. By 1985, cash flow after debt payment had rebounded to the level of earnings of the early 1970's. It improved again in 1986 but remained well below the levels earned in the peak years of the mid-1970's.

Debt, Assets, and Equity Drop

Farm debt fell over $15 billion in 1986, which should have improved the sector's equity. However, falling debt was offset by the continued decline in asset values. Land values dropped for the sixth consecutive year, suggesting that higher current incomes were not yet reflected in the value of farm assets in 1986. Since peaking in 1981, the U.S. average value of farm real estate has declined 33 percent. The 8-percent drop in 1986, while moderating from the 2 previous years (13 percent in 1984 and 12 percent in 1985), accounted for a $44-billion drop in asset values.

Equity fell $41 billion in 1986, continuing a trend that has resulted in an equity loss of $295 billion, or 35 percent, since 1980. The 1986 equity value of $538 billion is the lowest nominal dollar level of owner net worth since 1970. However, the annual rise in the debt/asset ratio since 1979 abated in 1986. Despite the equity loss in 1986, reduced debts and assets left this solvency ratio slightly lower than its 1985 level.

Returns to Assets and Equity Improve

Higher incomes, combined with lower assets and equity, have increased the rates of return to the farm sector because the incomes represent a higher percentage of the asset and equity levels. In 1986, the farm sector's rate of return on equity was 3.1 percent compared with 1.9 percent in 1985 and an average of -0.1 percent for 1980-84. The rate of return on assets improved from 3.7 percent in 1985 to 4.7 percent in 1986.

Some Farms Remain Financially Stressed

Data suggest that the farm sector is recovering from the liquidity and solvency problems of the first half of the decade. With the help of debt reductions, lower interest rates, and higher incomes, most farmers had adequate income in 1986 with which to meet principal and interest payments, reduce debt outstanding, and meet other financial commitments. However, continued foreclosures and debt restructuring by lenders indicate that not all farmers are sharing in the recovery. Many farmers who used high debt financing to enter agriculture or to expand operations in the late 1970's and early 1980's are now either in negative equity positions (technically insolvent) or are very highly leveraged and probably have negative cash flows partly as a result of high debt repayment requirements.

DISTRIBUTION OF INCOME AND DEBT VARIES WITHIN SECTOR

Income improved as farm size increased in 1986 but varied by farm type. Distribution of debt also varied by size, type, and region. This section uses data from the Farm Costs and Returns Survey (FCRS) to provide details on how debt and income were distributed among individual farm businesses and farm families in 1986 by farm size, type, and region. Certain factors are used to measure debt and income. For a description of these factors, see "Measures of Farm Financial Performance." "Farm Financial Conditions at a Glance" highlights some of the major policy issues concerning the financial well-being of farm operators.

Income Measures Rise As Farm Size Increases

Over 58 percent of all farm households had positive net cash household income compared with 55 percent in 1985. Comparisons among income measures suggest that farm businesses had greater profitability than liquidity in 1986. Although 68 percent reported positive and 32 percent negative net farm income, only 53 percent generated positive and 47 percent negative net cash farm income (table 1). The percentage of farms with negative net cash farm income was 48 percent in 1985.

The percentage of farms with negative net cash farm income varied widely by farm size. Over 82 percent of all farms with sales greater than $100,000 generated positive net cash

MEASURES OF FARM FINANCIAL PERFORMANCE

The following are measures of farm financial performance used in this report.

Income Measures

Net cash farm income. Measures the amount of funds generated by the farm business that can be used to pay back principal, expand the business, or pay for family consumption or other obligations. In this report, net cash farm income is calculated as gross cash income minus all operating expenses, including interest payments but excluding principal repayment.

Net cash household income. An estimate of cash household income that measures funds available to the farm household after family living expenses for business expansion, further consumption, savings, or other obligations. Net cash household income is calculated as family nonfarm income plus net cash farm income minus an estimate of principal repayments and a family living allowance. The family living allowance is estimated to be $15,500. Principal payments are estimated for each farmer by lender, based on the amount of real estate and nonreal estate debt held by each lender and are consistent with standard debt repayment schedules.

Net farm income. Provides a calendar year measure of the net value of agricultural production whether it is sold or stored on the farm and the profit or loss associated with current production. Net farm income is calculated as adjusted gross cash income, reflecting changes in inventory values, plus nonmoney income minus total operating expenses, including both interest and depreciation of capital stock.

Solvency Measures

Debt/asset ratio. Measures both proportional owner equity in the farm and the financial risk exposure of the operation (the extent to which the farm's assets have been borrowed against). It is calculated as total debt outstanding as of January 1, 1987, divided by the farmer's estimate of the current market value of owned assets of the farm business.

Equity level. Measures net worth. It is the hypothetical balance that would remain from the sale of assets and paying off existing debt. It is calculated as total operator assets minus operator debt outstanding.

farm income, while 23 percent of farms with sales less than $10,000 had positive net cash farm income. Net cash household income exhibited a similar distribution by size. In contrast, net farm income varied less by size, with positive net farm income reported for 73 percent of farms with sales greater than $100,000 and for 68 percent of farms with sales less than $10,000. Larger farms generally will have positive net farm income only if net cash farm income is positive because depreciation will be large relative to inventory and other nonmoney adjustments to income. Part-time and smaller farms may have

Table 1--Farms with negative income as measured by net cash farm income, net farm income, and net cash household income by farm size, type, and region, 1986 1/

Item	Percentage of farms with negative--		
	Net cash farm income	Net farm income	Net cash household income
		Percent	
Size:			
$500,000 and above	17.4	27.1	23.3
$250,000-499,999	15.8	27.7	23.8
$100,000-249,999	17.3	27.2	27.4
$40,000-99,999	21.9	29.3	39.0
$20,000-39,999	31.4	28.8	47.1
$10,000-19,999	45.1	34.8	49.4
$9,999 or less	77.1	34.3	45.8
All sizes	46.9	31.5	41.5
Type:			
Cash grain	33.5	34.0	38.4
Tobacco, cotton	37.2	23.7	53.0
Vegetable, fruit, nut	58.2	34.1	42.7
Nursery, greenhouse	31.3	11.2	31.5
Other crop	62.7	37.7	38.7
Beef, hog, sheep	59.4	32.9	43.2
Dairy	17.0	21.8	43.3
Poultry	25.6	16.9	18.1
Other livestock	76.9	46.6	37.7
All types	46.9	31.5	41.5
Region:			
Northeast	51.5	27.8	38.8
Lake States	37.1	31.3	39.2
Corn Belt	35.9	29.6	40.9
Northern Plains	26.2	28.1	35.8
Appalachia	48.3	20.9	49.4
Southeast	63.3	31.1	46.7
Delta	62.4	36.9	46.3
Southern Plains	67.6	44.9	44.2
Mountain	52.2	39.9	41.3
Pacific	59.9	33.5	33.6
All regions	46.9	31.5	41.5

1/ Based on 1986 Farm Costs and Returns Survey.

negative net cash farm income due to low sales volume but positive net farm income due to nonmoney income.

Other highlights of the income measure analysis include the following (table 1):

- Income advanced as farm size increased. For each income measure, the percentage of farms reporting negative net cash income generally fell as sales volume rose.

- Income varied widely by farm type. Dairy, poultry, and nursery or greenhouse farms reported the lowest percentage of operations with negative farm business income, measured by both net cash farm income and net farm income.

- The Northern Plains, Corn Belt, and Lake States had the lowest percentage of farms with negative net cash farm income.

Distribution of Debt Varies by Farm Size, Type, and Region

As of January 1, 1987, total farm operator debt outstanding stood at $98.5 billion, 13 percent below a year earlier. Overall solvency positions (the relationship between assets and debts) stabilized. Debt/asset ratios were greater than 0.40 (indicating that debt was more than 40 percent of assets) on 22 percent of all farms for the beginning of both 1986 and 1987. The percentage of outstanding debt held by these highly leveraged farms remained stable at about 67 percent of all operator debt.

Nevertheless, much of the sector does not appear to have leverage problems. Nearly 39 percent of all farms were debt-free entering 1987, and another 39 percent had debt/asset ratios less than 0.40. In addition, the percentage of total debt held by technically insolvent farms (debt/asset ratios greater than 1.0) decreased from 16 percent in 1985 to less than 14 percent in 1986. The average debt/asset ratio of farm operators stabilized at 0.22 (table 2). The highest debt/asset ratios were among farms with sales greater than $250,000, cash grain farms, and farms in the Lake States and Northern Plains.

The distribution of debt varied widely by farm size, type, and location (table 2). Within each, the distribution of farmers and farm debt was also highly variable across leverage categories. Figure 3 shows the distributions for each sales class.

- Family-sized commercial farms (annual sales of $40,000-499,999) represented almost 35 percent of all farms, controlled 52 percent of all assets, but owed 64 percent of all debt.

- Cash grain farms accounted for almost 24 percent of all farms, owned an equal percentage of assets, but owed almost 34 percent of all debt. The average debt/asset ratio for these farms was 0.30, the highest among all farm types. Over 18 percent of this debt was held on technically insolvent farms (debt/asset ratio greater than 1.0).

- Dairy farms, accounting for less than 12 percent of all farms, owned over 15 percent of all assets. Because the cash flows of these capital-intensive farms have not historically been highly variable, they have traditionally been able to repay debt at higher than average levels (18 percent of all debt) and have had higher than average debt/asset ratios (0.26).

- Farms in the Lake States, Corn Belt, and Northern Plains accounted for over 45 percent of all farms, controlled 40 percent of all assets, but owed over 53 percent of all debt. The Corn Belt was the most indebted region, with over 23 percent of all farm operator debt, almost 17 percent of which was held by technically insolvent operators.

Over 40 Percent of All Farms in Favorable Financial Position

In 1986, 41 percent of all farms had positive net cash farm income and low debt, putting them in a favorable financial position. Classifications that include both income and

Table 2--Distribution of farms and operator assets and debt by farm size, type, and region, January 1, 1987 1/

Item	Share of all-- U.S. farms	Operator assets	Debt 2/	Average debt/asset ratio
	Percent			
Size:				
$500,000 and above	1.9	12.4	17.4	0.31
$250,000-499,999	3.5	9.7	13.9	.31
$100,000-249,999	14.1	23.8	30.0	.27
$40,000-99,999	16.9	18.5	19.6	.23
$20,000-39,999	11.5	8.7	6.3	.16
$10,000-19,999	12.3	7.9	3.9	.11
$9,999 or less	39.8	19.0	9.0	.10
All sizes	100.0	100.0	100.0	.22
Type:				
Cash grain	23.4	24.0	33.5	.30
Tobacco, cotton	5.1	3.4	3.8	.24
Vegetable, fruit, nut	5.1	7.5	8.5	.25
Nursery, greenhouse	1.8	2.0	.8	.09
Other crop	4.6	4.8	4.2	.19
Beef, hog, sheep	42.5	37.6	27.3	.16
Dairy	11.7	15.2	17.8	.26
Poultry	1.8	1.6	1.9	.26
Other livestock	4.0	4.0	2.1	.12
All types	100.0	100.0	100.0	.22
Region:				
Northeast	7.9	9.0	4.9	.12
Lake States	12.4	10.8	15.8	.32
Corn Belt	22.8	19.2	23.2	.26
Northern Plains	10.2	10.3	14.3	.30
Appalachia	11.7	8.7	4.4	.11
Southeast	5.9	5.8	5.9	.22
Delta	4.9	3.8	3.7	.21
Southern Plains	11.3	13.9	9.2	.14
Mountain	5.5	8.3	8.4	.22
Pacific	7.4	10.3	10.3	.22
All regions	100.0	100.0	100.0	.22

1/ Based on 1986 Farm Costs and Returns Survey.
2/ Farm operator debt for farm purposes.

solvency measures give a more complete picture of financial performance (see "Financial Health Categories"). Farms with low debt levels may experience little financial stress, despite negative current income. Likewise, highly leveraged farms feel little stress as long as they generate adequate income. Financial stress is most acute among highly leveraged farms generating insufficient incomes to repay existing debt.

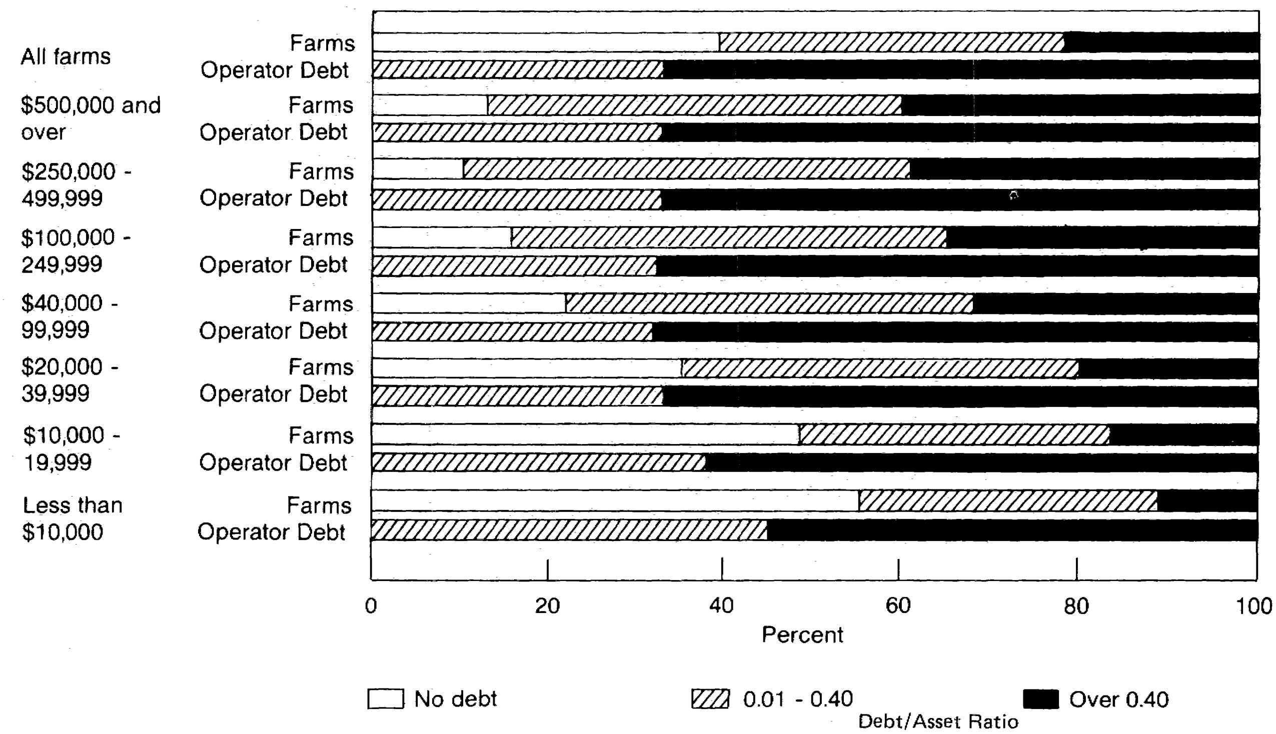
Using different income measures (net cash farm income, net farm income, or net cash household income) affects the distribution of farms between the "favorable" and "marginal income" categories, with the net farm income measure producing the greatest percentage of farms in a favorable position (fig. 4). The distribution of farms in the four financial position categories by size, type, and region using the net cash farm income measure is given in table 3. Highlights of the combined income/solvency analysis include:

- o Over 55 percent of farms with sales above $40,000 were classified as being in a favorable financial position (using net cash farm income and solvency). These farms accounted for almost half of all farms in this category. This category included 60 percent of dairy farms, 34 percent of beef, hog, and sheep producers, 52 percent of farms in the Northern Plains, and 31 percent of farms in the Southeast. Fifty-seven percent of all farms had positive net farm income and low debt. Using net farm income increased the favorably positioned farms with sales less than $40,000 from 34 percent (using net cash farm income) to 61 percent of all farms in that sales category.

- o About 37 percent of all farms were in the marginal income category (using net cash farm income and solvency). This category included 66 percent of farms with

Figure 3

Distribution of Farms and Operator Debt by Farm Size and Debt/Asset Ratio



sales less than $10,000 and 56 percent of farms in the Southern Plains, but only 15 percent of farms in the Northern Plains and 9 percent of dairy farms.

o About 10–12 percent of all farms were in the marginal solvency category for all income measures, including 33 percent of farms with sales greater than $500,000, 23 percent of dairy and poultry farms, and 22 percent of farms in the Northern Plains.

FINANCIAL HEALTH CATEGORIES

Income and solvency measures are combined to classify farm businesses into one of four categories of financial health. A farm has favorable income status if it has positive income and a favorable solvency status if its debt/asset ratio is less than 0.40. This classification system provides a perspective on the proportion of farm businesses and households that face financial stress. The financial health categories include the following:

o ***Favorable.*** Positive income, debt/asset ratio less than 0.40. These farms/households are in good short-term financial positions and are considered financially stable.

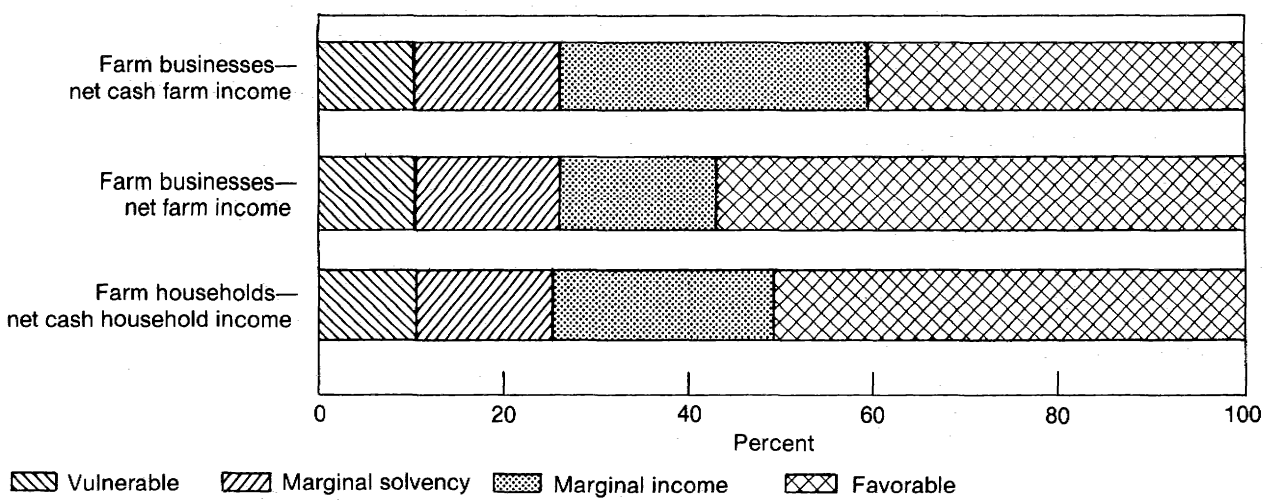
o ***Marginal income.*** Negative income, debt/asset ratio less than 0.40. These farms/households generally face an income problem.

o ***Marginal solvency.*** Positive income, debt/asset ratio above 0.40. These farms/households are generating positive returns, despite higher debt repayment requirements.

o ***Vulnerable.*** Negative income, debt/asset ratio above 0.40. These farms/households are highly leveraged and have income deficiencies that limit their viability as farm businesses.

Figure 4

Distribution of Farm Businesses and Households by Income/Solvency Position, January 1, 1987



FARM FINANCIAL CONDITIONS AT A GLANCE

Are most farms experiencing financial difficulties?

No. About 10 percent of all farm businesses and households were in a vulnerable financial position in 1986, when income and solvency criteria are combined, representing no change from 1985 for businesses and a slight improvement for households. Looking at income alone, about 47 percent of farm businesses had short-term cash flow problems, but when nonfarm income is included, 42 percent had problems. Using net farm income, indicating longer term profitability, 32 percent were stressed. Using solvency alone, up to 26 percent of all farmers were highly leveraged: 22 percent had debt/asset ratios over 0.40, including 4 percent who were technically insolvent.

What share of farm operator debt do farms with financial difficulties hold?

Combining income and solvency criteria, farmers in vulnerable financial positions held 25-35 percent of all farm operator debt in 1986, depending on the income measure used. Farm businesses with negative net cash farm income held 36 percent of all farm debt, while farms with negative net farm income held 43 percent of the debt. Highly leveraged farmers held over 67 percent of all debt, with insolvent farmers holding 14 percent.

Are family-sized commercial farms in a particularly vulnerable leverage or income position?

Yes. Using solvency and net farm income, family-sized commercial farms were more stressed than any other size in 1986, with 13 percent of midsized farms (sales of $40,000-499,999 per year) in a vulnerable position. This compares with 11 percent of farms with higher sales, 10 percent of those with sales of $10,000-39,999, and 7 percent with sales under $10,000 in the vulnerable category. Using income alone, midsized farms were in a less favorable position than smaller farms. Using solvency alone, the reverse holds true, with larger farms more highly leveraged than smaller farms.

Falling land values in the 1980's have most hurt farmers in the Lake States, Corn Belt, Northern Plains, and Delta States. Are farmers in these regions in worse leverage and cash-flow positions than farmers elsewhere?

Yes, although both farm business income and solvency positions improved in all four regions in 1986. Farmers in the Lake States, Corn Belt, and Northern Plains appear to be in worse leverage positions than farmers elsewhere, with higher than average debt/asset ratios and higher than average shares of insolvent farmers. However, they had better than average income, helping them to meet cash commitments and repay debts. Farmers in the Delta States had more favorable solvency positions than average by most criteria but less favorable income measures. Thus, declining asset values have thus far affected farmers in the Delta States less than in the other three regions.

Are particular lenders exposed to a greater degree of risk?

Yes, although all lenders' portfolios appear to face a fair degree of risk. Using income/solvency measures and excluding "all other lenders," life insurance companies, holding about 3 percent of farm debt, were at the greatest risk. FmHA, holding about 14 percent of farm debt, followed closely. Commercial banks had a greater share of their total debt owed by vulnerable farmers than did either Federal land banks or Production Credit Associations. Using solvency alone, highly leveraged farmers owed at least 59 percent of any lender's reported debt. FmHA had the greatest proportion, and technically insolvent farmers owed about one-third of its debt. In contrast, insolvent farmers owed about 12 percent of all farm debt held by commercial banks, Federal land banks, and Production Credit Associations.

o About 10 percent of all farms were considered vulnerable by each income measure. The proportion of farms in this position decreased as sales class size increased. Thirteen percent of cash grain farms were in this category.

o A greater proportion of commercial-sized farms had solvency problems than did farms with sales below $40,000. Smaller farms, on the other hand, had more income

Table 3--Distribution of farm operators by net cash farm income/solvency position and farm size, type, and region, January 1, 1987 1/

Item	Income/solvency position				
	Favorable	Marginal income	Marginal solvency	Vulnerable	All farms
	Percent				
Size:					
$500,000 and above	49	10	33	7	100
$250,000-499,999	53	9	32	7	100
$100,000-249,999	55	9	27	8	100
$40,000-99,999	56	11	22	10	100
$20,000-39,999	58	22	10	10	100
$10,000-19,999	49	35	6	10	100
$9,999 or less	22	66	1	11	100
All sizes	41	37	12	10	100
Type:					
Cash grain	47	21	19	13	100
Tobacco, cotton	51	28	11	9	100
Vegetable, fruit, nut	36	48	6	11	100
Nursery, greenhouse	58	28	11	3	100
Other crop	31	51	6	12	100
Beef, hog, sheep	34	51	6	9	100
Dairy	60	9	23	8	100
Poultry	51	16	23	9	100
Other livestock	21	61	2	16	100
All types	41	37	12	10	100
Region:					
Northeast	41	45	8	7	100
Lake States	42	26	20	11	100
Corn Belt	50	25	15	11	100
Northern Plains	52	15	22	11	100
Appalachia	47	41	5	7	100
Southeast	31	53	6	11	100
Delta	29	52	9	10	100
Southern Plains	27	56	5	11	100
Mountain	37	44	11	8	100
Pacific	34	49	6	11	100
All regions	41	37	12	10	100

1/ Based on 1986 Farm Costs and Returns Survey.

problems. This is consistent with the tendency of larger farms to be more frequent and heavier users of debt and to carry higher debt loads relative to their assets.

o Overall, 47 percent of farm households were in a favorable financial position in 1986 compared with 41 percent of farm businesses, using cash income measures. Due to relatively high levels of off-farm income, many smaller farms in the marginal income or vulnerable categories under the criterion based on net cash farm income were in a favorable position under the criterion based on net cash household income.

AGRICULTURAL LENDERS STILL AT RISK

Between January 1986 and January 1987, the proportion of debt owed by the 4 percent of farms considered technically insolvent fell from more than 16 percent of all debt to less than 14 percent. Negative net cash farm income was reported on 48 percent of these farms at the end of 1986, down from about 54 percent at the beginning of the year. Adjustments in asset values, debt levels, and income and expense flows have placed farmers at considerable risk and have affected the financial performance of lenders. The financial stress of farmers has been transmitted to lenders. Lenders have suffered reduced earnings and, in some cases, bankruptcy due to farm loan delinquencies.

The proportion of debt owed by highly leveraged farms (debt/asset ratios of 0.40 and above) changed little in 1986 (table 4). They accounted for 22 percent of all farms but owed over 67 percent of all debt. At the end of both 1985 and 1986, about 47 percent of these farms reported negative net cash farm income. The 10 percent of all farms that were both highly leveraged and reported negative net cash farm income owed 25.1 percent of total farm debt as of January 1987 (table 5), down from 26.4 percent in January 1986.

Table 4--Distribution of lender-held operator debt by operator debt/asset ratio 1/, 2/

Lender	Debt/asset ratio: Less than 0.40		0.40-1.0		More than 1.0	
	1986	1987	1986	1987	1986	1987
	Percent					
Commercial banks	38.7	38.5	47.6	49.9	13.7	11.6
Federal land banks	32.5	32.6	56.9	54.5	10.6	12.9
Farmers Home Administration	15.4	15.5	49.3	54.1	35.3	30.4
Production Credit Associations	42.0	39.6	46.2	48.4	11.8	12.0
Commodity Credit Corporation	32.1	39.1	54.0	49.4	13.9	11.5
Other individuals	39.9	36.0	47.9	56.1	12.2	7.9
Life insurance companies	NA	21.4	NA	66.5	NA	12.1
Merchants and dealers	41.2	40.5	41.0	46.1	17.8	13.4
Others	37.8	30.4	48.3	62.4	13.9	7.2
All lenders	33.7	32.9	50.2	53.2	16.1	13.9

NA = Not available.

1/ As of January 1, 1986 and 1987.

2/ Farm operator debt for farm purposes is based on Farm Costs and Returns Survey, 1985 and 1986.

The distribution of lender-held debt suggests that most lenders' portfolios are still at risk. Although the proportion of debt owed by technically insolvent farms fell in 1986, debt owed by farms with debt/asset ratios of 0.40–1.0 increased from 50 percent to 53 percent of all debt. As measured by net farm income, 32 percent of all debt was owed by financially vulnerable farms.

The proportion of debt owed by highly leveraged farms changed little for most lenders in 1986, although the percentage owed by technically insolvent farms rose for Farm Credit System lenders (Federal land banks and Production Credit Associations) and life insurance companies. These percentages were still below the national average for all lenders. The proportion of debt in this high-risk category rose from 10.6 percent to 12.9 percent of Federal land bank debt and increased slightly to 12 percent of debt for Production Credit Associations and life insurance companies. However, the percentage of debt owed by financially vulnerable Farm Credit System borrowers was lower than the average for all lenders by all income measures.

Commercial bank debt owed by technically insolvent farmers dropped from 13.7 percent to 11.6 percent of all bank debt in 1986. But, by all income measures, a greater percentage of bank debt was owed by vulnerable farms than that reported by either Farm Credit System lender.

Highly leveraged farms continued to owe over 84 percent of Farmers Home Administration (FmHA) debt, but the debt owed by technically insolvent FmHA borrowers fell from 35 percent to 30 percent. Although vulnerable borrowers owed more FmHA debt than the averages for all lenders, by all measures, nonvulnerable farm businesses owed roughly 60 percent of all FmHA debt.

CCC debt distribution reflects the improving position for farm program participants relative to other borrowers, as the proportion of debt held by highly leveraged farms

Table 5--Percentage of debt owed by vulnerable farm operators by income measure and lender, January 1, 1987 1/, 2/

Lender	Income measure: Net farm income	Net cash farm income	Net cash household income
		Percent	
Commercial banks	31.2	28.1	33.3
Federal land banks	31.0	23.5	32.8
Farmers Home Administration	37.9	31.6	54.6
Production Credit Associations	27.6	20.5	29.8
Commodity Credit Corporation	20.6	12.1	22.3
Other individuals	29.5	24.2	31.0
Life insurance companies	43.5	39.2	53.2
Merchants and dealers	28.5	18.6	31.1
All other lenders	44.1	16.9	25.7
All lenders	32.0	25.1	35.0

1/ Vulnerable operations report debt/asset ratios greater than 0.40 and negative income.
2/ Farm operator debt for farm purposes is based on the 1986 Farm Costs and Returns Survey.

dropped from 68 percent to 61 percent in 1986. The percentage of CCC debt held by vulnerable operations was the lowest of any lender for all income measures, suggesting that CCC loans improve the cash available to program participants and that participants in Government programs are less likely to experience financial stress than nonparticipants.

Differing measures of credit restraint and control among lenders are changing market share relationships among traditional farm credit suppliers. Since the beginning of 1985, the Farm Credit System share of all non-CCC debt reported by operators has dropped from over 35 percent of all debt to less than 29 percent. The commercial bank share has increased from less than 28 percent to 31.6 percent. Bank reports support this finding, suggesting that banks are lending to former Farm Credit System borrowers and requiring real estate as security for loans for all purposes. The FmHA share fell from 16.2 percent to 15.4 percent in 1986 but remained above the 13.7 percent level of January 1, 1985.

Lenders generally appear to be imposing credit restraints on their borrowers, as further land value declines have reduced the loan value of farmland security. Loan defaults and writeoffs are contributing to the drop in debt levels, and limited credit availability is encouraging farmers to reduce debt and limit capital spending.

FOR ADDITIONAL INFORMATION...

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The more detailed companion report, *Financial Characteristics of U.S. Farms, January 1, 1987,* AIB–525, August 1987, will be available by mid–August from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402. Order by title and series number. Write to the above address for price information, or call the GPO order desk at 202/783–3238. You may charge your purchase by telephone to your VISA, MasterCard, Choice, or GPO deposit account. Bulk discounts are available. Foreign customers must add 25 percent extra for postage.

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