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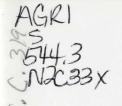
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FARM AND RANCH FINANCIAL CONDITIONS:

UNIVERSITY OF NEBR.

A 1985 PERSPECTIVE

JUN 17 1988

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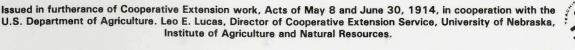
A.L. (Roy) Frederick* and Bruce B. Johnson*

A prolonged period of persistent pressure on farm 1/ incomes and net worth continues to cause severe problems for many farmers. The degree of difficulty being encountered on an individual basis varies, however, by debt level, size of operation, commodities produced, and location, Educational efforts which focus on individual needs are ongoing. 2/

The purpose of this publication is to provide a broader perspective to financial conditions in agriculture. An overview of the current situation will be presented and key concerns for the year ahead identified. Differences between U.S. conditions and those in Nebraska will be noted wherever possible. Income concerns will be distinguished from balance sheet concerns. The impact of farm financial conditions on lenders, agribusinesses and rural communities will be briefly addressed. Finally, some policy alternatives for dealing with current concerns will be outlined.

A major limiting factor in analyzing current financial conditions in agriculture is the lack of comprehensive and up-to-the-minute data. With conditions apparently changing rapidly, analysts are frequently forced to use data that are several months old when making judgments about current conditions. In this publication, available information from the Agricultural Finance Outlook and Situation (ERS, USDA, January, 1985), the Board of Governors of the Federal Reserve System (Seminar by Emanuel Melichar for the Congressional Budget Office, November 13, 1984), and a survey by the American Bankers Association (June, 1984) account for much of the data used.







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 $[\]frac{1}{}$ Also includes ranches.

 $[\]frac{2}{}$ In particular, the "Managing for Tomorrow" program, sponsored by the Nebraska Cooperative Extension Service is worthy of mention.

Farm Income

Any analysis of financial prospects for farmers and ranchers sooner or later must come to the heart of the matter: What is the outlook for farm income? In 1985, this is particularly important because of a succession of years with below average returns. The decline in farm incomes in the 1980s is largely attributable to a reversal in favorable conditions that prevailed during the 1970s.

Exports of agricultural products, which contributed significantly to the best period of the 1970s, have generally fallen since 1980. In part, the turnaround is a reflection of poor economic conditions elsewhere in the world. In addition, the United States, for a variety of reasons, appears to have lost some of its competitive advantage to other exporting nations.

Second, rising production costs, particularly the cost of servicing debt, have been a drain on agricultural sector income generally and highly leveraged farmers in particular. For example, in 1982 and again in 1983, Nebraska's farm operators incurred interest charges of over one billion dollars, an amount equal to about one-sixth of all production expenses. In contrast to the high inflation of the 1970s, high interest rates not only increase costs (and reduce income) but also cause financial deterioration of farm assets (especially real estate).

Both net cash income and net farm income have generally declined through the 1980s (Lines 11 and 13, Table 1).

Net cash income, which measures the difference between gross cash income and cash expenses, represents the amount of income available to purchase assets, retire loans and cover household expenses. On a real (inflation adjusted) basis, net cash income has been trending lower since 1978. The only exception to this trend was in 1983 when government payments, including PIK commodities, combined with lower production expenses to produce a 4.5 percent year-to-year gain in real net cash income. However, current indications are that the downtrend in real net cash income resumed in 1984 and will continue in 1985 as well. So far in the 1980s, real net cash income has averaged more than 20 percent below the 1970s and slightly below the 1960s.

Net farm income has been more erratic than net cash income for at least the last dozen years. In large part, the greater year-to-year variation in net farm income is accounted for by shifts in inventory values. When stocks are reduced, the inventory adjustment has a negative impact on gross and net farm income. However when stocks increase - as occurred in 1984 - the positive inventory adjustment pushes gross and net farm incomes higher.

TABLE 1. U.S. Farm Income and Cash Flow Statement

Item	1981	1982	1983	1984F	1985F
Runniyear (Sing 1)	LUD I I I I I I I I I I I I I I I I I I I	1	-Billion Dol	llars	od 19852/
Farm Income Sources:					
1. Cash receipts	142.6	144.8	138.7	139-143	142-147
Crops ^a /	73.3	74.6	69.5	68-72	70-74
Livestock	69.2	70.1	69.2	70-74	71-75
2. Direct government payments	1.9	3.5	9.3	7-10	4-7
Cash government payments	1.9	3.5	4.1	3-5	4-7
Value of PIK commodities	0.0	0.0	5.2	4-6	0
3. Other cash income b/	1.9	2.0	1.5	1-3	1-3
4. Gross cash income (1+2+3)c/	146.4	150.2	149.6	150-154	150-155
5. Nonmoney incomed/	13.6	14.2	13.6	12-14	12-14
6. Realized gross income (4+5)	160.0	164.4	163.2	163-167	163-168
7. Value of inventory change	7.9	-2.6	-11.7	6-10	-2 - 2
8. Total Gross Income (6+7)	167.9	161.8	151.4	171-175	163-168
Production Expenses: 0/ f/					
9. Cash expenses e/ f/	111.4	113.4	109.5	115-117	118-122
10. Total expenses	136.9	139.5	135.3	141-143	142-147
ara Sector					
Income Statement:					
11. Net cash income $(4-9) \stackrel{a}{=} \frac{f}{}$	35.0	36.8	40.1	34-38	31-36
12. Deflated net cash income (1972\$) 5'	17.9	17.8	18.6	15-17	13-15
13. Net farm income $(8-10)^{\frac{a}{1}}$	31.0	22.3	16.1	29-33	19-24
14. Deflated net farm income (1972\$) $\frac{g}{h}$	15.9	10.8	7.5	13-15	8-10
15. Deflated net farm income (1967\$) $\frac{h}{}$	11.4	7.7	5.4	9-11	6-8
16. Off farm income	39.8	39.4	41.0	41-45	43-47
Other Sources and Uses of Funds					
17. Change in loans outstanding f/	15.5	6.8	2.9	0-4	0-4
Real estate	9.3	3.7	2.1	-2-2	-2-2
Nonreal estate $\frac{i}{}$	6.2	3.1	0.8	0-4	0-4
18. Rental income	5.7	5.6	4.3	4-6	4-6
19. Gross cash flow (11+17+18)	56.1	49.3	47.3	41-45	38-43
20. Capital expenditures ±	16.8	13.6	13.1	12-14	11-15
20. Capital expenditures $\frac{I}{2}$ 21. Net cash flow $\frac{a}{2}$ (19-20)	39.3	35.6	34.2	29-33	$\frac{11}{26-31}$

SOURCE: Agricultural Finance Outlook and Situation, ERS, USDA, January, 1985.

F = Forecast. a/ Includes net CCC loans. b/ Income from custom work, machine hire, and farm recreational activities. c/ Numbers in parentheses indicate the combination of items required to calculate a given item. d/ Value of home consumption of farm products and imputed rental value of farm dwellings. e/ Excludes depreciation and perquisites to hired labor. f/ Excludes farm dwellings. g/ Deflated by the GNP implicit price deflator. h/ Deflated by the CPI-U. i/ Excludes CCC loans.

After adjusting for inflation, average net farm income through the first half of the 1980s has been more than a third lower than the average for the 1970s and almost a fourth less than the 1960s. In 1983, real net farm income was the lowest in 50 years. USDA estimates that 1985 income will be only marginally higher than the 1983 low.

Here, in brief, are some of the factors that are likely to impact on both net cash income and net farm income during 1985:

- 1) Gross cash receipts from crops and livestock are likely to be up about two percent this year, thanks to larger crop marketings and somewhat higher livestock prices.
- 2) Government payments will be lower because the PIK program has ended.
- 3) Farm input costs will increase marginally, probably a bit less than the expected inflation rate of 4-5 percent. Interest rates on farm loans for the entire year will not change much on a net basis.
- 4) The impact of items 2 and 3 will more than offset item 1. Thus, farmers and ranchers are likely to remain under financial pressure during the year ahead.

Balance Sheet for the Farm Sector

Farm Assets

The value of all U.S. farm assets, including those of farm households, is estimated to have fallen 0.8 percent between January 1, 1984, and January 1, 1985. The January 1, 1985, estimated value of assets was \$1,022.4 billion, \$67.4 billion less than the peak nominal value on January 1, 1981 (Table 2).

Farm real estate values were expected to have dropped 2.0 percent during 1984 after drops of one percent in 1983 and six percent in 1982. Low farm income and reduced expectations of income growth in the future, together with high interest rates have resulted in substantially lower bids for farm real estate.

TABLE 2. Balance Sheet of the U.S. Farming Sector, 1981-1985

Items/year (Jan. 1)	1981	1982	1983	1984	1985
paddan warran aluaes rees a	TRY ERESTO	7 2003-300	Billion De	ollars	
Assets					
Physical assets:					
Real estate	828.4	818.9	772.5	764.5	749.2
ch doelnage the state's					
Nonreal estate:			avail been	one lateri	intage 32-3
Livestock and poultry	60.8	53.6	52.9	49.8	50.4
Machinery and motor vehicles	102.5	108.8	111.0	108.2	106.5
Crops stored on and off-farm	35.9	36.3	42.1	33.7	38.2
Household equipment and furnishings	19.4	20.8	22.6	24.8	26.0
Financial assets:					
Deposits and currency	16.2	16.7	17.4	18.2	18.7
Savings bonds	3.8	3.6	3.5	3.6	3.7
Investments in co-ops	22.8	24.6	26.8	28.3	29.7
Cotal assets	1,089.8	1,083.3	1,048.8	1,031.1	1,022.4
Claims					
diabilities de la company de l					
Real estate debt	95.5	105.6	109.5	111.6	110.9
Nonreal estate debt to	all-time				
CCC	5.0	8.0	15.4	10.8	8.3
Other	81.5	88.1	91.4	92.2	93.0
otal liabilities	182.0	201.7	216.3	214.7	212.1
roprietors' equity	907.8	881.6	832.5	816.4	810.7
otal claims	1,089.8	1,083.3	1,048.8	1,031.1	1,022.4
ebt to asset ratio	16.7	18.6	20.6	20.8	20.7

SOURCE: Agricultural Finance Outlook and Situation, ERS, USDA, January, 1985.

 $[\]underline{a}$ / Preliminary.

Preliminary estimates for Nebraska, however, suggest that asset values declined at a much more rapid rate than the national average during 1984 (Table 3). Total in-state farm assets of \$32.3 billion on January 1, 1985, were down \$3.5 billion or nearly 10 percent from a year earlier. Since 1981, Nebraska's farm sector has experienced a drop in asset values of \$11.2 billion or 26 percent. On a real (inflation adjusted) basis, the loss in asset values is even greater, about 39 percent.

As is true for the country as a whole, the reduction in Nebraska asset values is almost wholly accounted for by reduced farm real estate values. Preliminary estimates suggest that Nebraska farm real estate values dropped about 35 percent in the 1981-85 period.

Though conclusive evidence is not available, the greater relative decline in Nebraska farm assets may be caused by several factors.

- 1) The livestock and crop enterprises which dominate the state's agricultural economy have generated sub-par incomes in recent years.
- 2) Nebraska farmers in the early 1980s had relatively higher debt loads than farmers in most other states. Thus, when interest rates rose, financial stress was experienced more quickly. Financial stress, in turn, directly impacts on farm asset values.
- 3) Rapid irrigation development in Nebraska during the 1970s led to substantial capital (and debt) expansion; this especially appears to have been a factor contributing to financial stress in areas where development occurred on marginal lands.

Farm Debt

Total U.S. farm debt is reported to have declined by 1.2 percent to \$212.1 billion on January 1, 1985 (Table 2). This is the second consecutive year of decline after an all-time peak of \$216.3 billion was reached in 1983. The last time total farm debt declined two or more consecutive years was in 1944-45. Excluding CCC debt, the total was essentially unchanged in 1984. Total farm debt increased at a compound annual rate of 13.2 percent during 1971-80, but this slowed to 3.9 percent yearly for 1981-85.

Total debt on Nebraska farms has also dropped since January 1, 1983 (Table 3). The estimated total debt of \$10.3 billion on January 1, 1985, is \$900 million (8.7 percent) less than the total two years earlier.

In general, reductions in outstanding debt are a reflection of 1) farm liquidations that have already occurred and 2) increased cautiousness on the part of lending institutions.

The Federal Reserve Bank of Kansas City recently reported that farmers in the Tenth Federal Reserve District left agriculture at about three times the normal rate during a six-month period ending October 1, 1984. Some farmers left voluntarily; others were forced out by foreclosure preceedings.

TABLE 3. Abbreviated Balance Sheet of Nebraska's Farming Sector (Including Farm Households) January 1, 1981-85.

Item	1981	1982	1983	1984	Projected 1985			
Lagract of Held out	Smill Sub-11 Lty	Billion Dollars						
Assets Real Estate	31.5	29.8	26.8	23.6	20.5			
Nonreal Estate	12.0	12.2	13.1	12.2	11.8			
TOTAL	43.5	42.0	39.9	35.8	32.3			
Claims Real Estate	3.6	4.0	4.2	4.3	4.3			
Nonreal Estate	5.1	5.6	CL = 7.0 = 0	6.4	6.0			
TOTAL	8.7	9.6	11.2	10.7	10.3			
Equity	34.7	32.4	28.7	25.1	21.9			
	Mahatul 201 14001163	R	atio Percent	tage	SI Sdi			
Ratios Equity/Assets	79.9	77.2	72.0	70.1	67.8			
Debt/Equity	25.2	29.6	38.9	42.6	47.0			
Debt/Assets	20.1	22.8	28.0	30.0	31.7			

SOURCE: Primary data are from Economic Indicators of the Farming Sector, State Income & Balance Sheet Statistics Series, Economic Research Service, U.S. Department of Agriculture.

In addition, lenders generally are placing much more emphasis on cash flow projections when making decisions on who will receive new loans or loan extensions. Commercial banks are more frequently requiring real estate as collateral for short and intermediate loans. Farm input businesses are much less likely to offer unsecured loans to those who are not good credit risks. In short, borrowers must meet certain rigid tests with regard to repayment capability.

Farm Equity3/

Farm sector equity in the United States is expected to have decreased \$5.7 billion between January 1, 1984, and January 1, 1985, as assets decreased more than debt (Table 2). This would represent the fourth consecutive year that farm sector equity value declined. During the 1970s, gains in real wealth from increased equity in the farm business were a significant portion of the total returns for many farmers. But in the 1980s, the decline in real wealth has resulted in negative total return to investment (includes net income) and reduced borrowing capacity.

The debt/asset ratio increased slightly in 1984 and now stands at the highest level since the 1930s.

In Nebraska, the equity position of farmers has deteriorated at a much more rapid rate than for all farms nationally. Between 1981 and 1985, equity is estimated to have dropped by 12.8 billion dollars or 36.9 percent (Table 3). This obviously represents a significant erosion of wealth from the farm sector, with resulting implications for future financing, consumption patterns and tenure arrangements.

On January 1, 1984, Nebraska's farm sector had the highest average debt/asset ratio among all the states at 30.0 percent. In all likelihood, the debt/asset estimate of 31.7 percent for January 1, 1985, will be at or near the top as well.

 $[\]frac{3}{}$ Equity is a mathematical determination of the difference between assets and liabilities (claims). Equity is sometimes synonymously referred to as "net worth" when describing the financial status of individual farmers.

Farm Financial Stress

The degree of financial stress being experienced in the U.S. farm sector varies from producer to producer. Lenders and farm financial analysts generally agree that farm/ranch operations with debts equal to 40 percent or more of the value of assets are likely to be feeling considerable stress. Moreover, many of those with debt-to-asset ratios of 50 percent or more are likely to face partial or total liquidation or will require major restructuring of debts and assets to survive.

Impact of Debt on Profitability

It is important to consider the level of debts and the rate of interest when considering profitability. More specifically how do debts impact on a producer's return to equity? Table 4 presents a U.S. time series of rates of return to farm assets and equity through 1984. Clearly, returns during the 1980s have been less than those in the previous decade; not only is income roughly two-thirds of the 1970s level but real (adjusted for inflation) capital losses have occurred. Over the first half of the decade, total return to assets have averaged <u>-3.4 percent annually</u>. In other words, for a producer with no debts, his income return on equity would have been -3.4 percent.

However, if a producer had debts, losses magnify quickly. Suppose, for example, that an individual producer had a debt/asset ratio of 50 percent, returns on assets of -5.0 percent and paid an average interest rate of 12 percent. Under such conditions, the annual rate of return to equity capital would be -22 percent (Table 5). In other words, over a period of five years, such a producer would become financially insolvent. The higher the level of indebtedness and the higher the interest rate, the more quickly net worth disappears when the return on assets is low or negative.

TABLE 4. Rate of Returns to Farm Assets and Equity, U.S., 1960-84a

bostnerses	and feelings	Returns to Ass	ets	Charles Sand applied
Year	Income	Real Capital Gains	TOTAL	Returns to Equity
Fara	sector would	<u>F</u>	ercent	
1960	2.3	-1.1	1.3	0.9
61	2.4	2.8	5.2	5.3
62	2.1	1.5	3.7	3.6
63	2.3	1.7	4.0	4.0
64	1.5	2.6	4.1	4.1
1965	2.4	3.9	6.3	6.9
66	2.5	2.0	4.5	4.8
67	2.0	0.7	2.7	2.7
68	1.5	0.0	1.5	1.5
69	2.0	-1.0	1.1	1.0
1970	1.8	-0.6	1.2	1.0
71	2.0	3.4	5.4	6.0
72	3.6	8.1	11.7	13.6
73	7.1	11.3	18.4	22.2
74	4.5	-0.1	4.4	5.6
1975	3.4	7.7	11.2	13.0
76	1.8	10.0	11.8	13.6
77	1.6	4.2	5.8	6.5
78	2.6	8.7	11.3	13.5
79	2.7	4.2	6.9	8.3
1980	1.3	-1.0	0.3	0.3
81	2.5	-8.6	-6.2	-8.4
82	1.6	-8.0	-6.4	-9.7
83	1.0	-2.7	-1.6	-4.0
84	2.8	-5.9	-3.1	-6.0
1960-69 Ave.	2.1	1.3	3.4	3.5
1970-79 Ave.	3.1	5.7	8.8	10.3
1980-84 Ave.	1.8	-5.2	-3.4	-5.6

SOURCE: Melichar, Emanuel, Agricultural Finance DataBook, Board of Governors, Federal Reserve System, December 1984.

a/ Series Excludes Farm Households

TABLE 5. Return to Equity Capital at Various Profitability Levels and Financial Conditions

Debt to Asset Ratio	GENERAL OF BUILDING	Inter	est Rate of		ing Debt	Onto.
Rate of Return ^a /	10	11	12	13	14	15
and an array of the contract o		Perce	nt Return	to Fauity	Capitalb/-	
			adama da ma	to Equity	oaprea1 <u></u>	
30% D/A Ratio						
6%	4.3	3.9	3.4	3.0	2.6	2.1
4%	1.4	1.0	0.6	0.1	-0.3	-0.7
2%	-1.4	-1.9	-2.3	-2.7	-3.1	-3.6
. –5%	-11.4	-11.9	-12.3	-12.7	-13.1	-13.6
-10%	-18.6	-19.0	-19.4	-19.9	-20.3	-20.7
40% D/A Ratio						
40% D/A RALIO 6%	3.3	2.7	2.0	1.3	0.7	0.0
6% 4%	0.0	-0.6	-1.3	-2.0	-2.7	-3.3
2%	-3.3	-4.0	-4.7	-5.3	-6.0	-6.7
-5%	-15.0	-15.7	-16.3	-17.0	-17.7	-18.3
-10%	-23.3	-24.0	-24.7	-25.3	-26.0	-26.0
-10%	25.5	24.0	tsets, by	aA ban are	Treit.	20.0
50% D/A Ratio						
6%	2.0	1.0	0.0	-1.0	-2.0	-3.0
4%	-2.0	-3.0	-4.0	-5.0	-6.0	-7.0
2%	-6.0	-7.0	-8.0	-9.0	-10.0	-11.0
-5%	-20.0	-21.0	-22.0	-23.0	-24.0	-25.0
-10%	-30.0	-31.0	-32.0	-33.0	-34.0	-35.0
60% D/A Ratio						
6% Katto	0.0	-1.5	-3.0	-4.5	-6.0	-7.5
4%	-5.0	-6.5	-8.0	-9.5	-11.0	-12.5
2%	-10.0	-11.5	-13.0	-14.5	-16.0	-17.5
-5%	-27.5	-29.0	-30.5	-32.0	-33.5	-35.0
-10%	-40.0	-41.5	-43.0	-44.5	-46.0	-47.5
	tors old very l	arms capit	bruth ter	DS AER DEV	WELL TAKE	chan 008
70% D/A Ratio						
6%	-3.3	-5.7	-8.0	-10.3	-12.7	-15.0
4%	-10.0	-12.3	-14.7	-17.0	-19.3	-21.7
2%	-16.7	-19.0	-21.3	-23.7	-26.0	-28.3
-5%	-40.0	-42.3	-44.7	-47.0	-49.3	-51.7
-10%	-56.7	-59.0	-61.3	-63.7	-66.0	-68.3
to the none than						

Percent return to total capital before interest payments on any borrowed capital.

b/ Percent return to equity is: (Total Return - Cost of Credit): Equity.

More specifically, it is: [% Return to Total Capital - (% Interest Rate x % Debt): (1 - % Debt)

Compared to those with little or no debt, the financial status of heavily indebted producers is generally worse than at any time since the 1930s. There are, however, exceptions to the general proposition of heavy debts being tied to high financial stress. In order to understand the incidence of financial stress problems in detail, we need at least three more pieces of critical information.

The first relates to debt loads by size of farm. Table 6 shows estimated distributions of farm operators and their assets and debt by size of farm as measured by annual sales. For example, operators with annual sales of \$500,000 or more constitute one percent of operators, own 10 percent of total operators' assets, and owe 18 percent of total operators' debt. Note that a general pattern of reduced debt/asset ratios occurs as individual farm size is reduced.

Second, despite relatively high debt/asset ratios, the largest farms have often remained profitable. A major reason is that they generate a relatively high dollar volume of sales per dollar of assets. For example, Melichar estimates that the largest farms represent only 10 percent of

TABLE 6. Estimated Percentage Distribution of U.S. Farm Operators and Their Debt and Assets, By Size of Farm, January 1, 1984.*

Size of farm			
Annual value of farm products sold (thousands	0perators	Assets	Debt
of dollars)	945 21-	11.2	13.64m 13.6
All farms	100	100	100
500 and over	0.24	10	18
200 to 499	3	13	18
100 to 199	7	16	21
40 to 99	16	22	22
20 to 39	1215-11 0.01-	10	7
10 to 19	12	8	5
5 to 9	13 0.03	6	3
2.5 to 4.9	14	6	2
Under 2.5	23	I cap 8 h holom	6393 03 0 4

SOURCE: Melichar, Emanuel, "The Incidence of Financial Stress in Agriculture," paper presented at Agricultural Seminar, Congressional Budget Office, November 13, 1984.

^{*} Estimates shown are based on data from the 1979 Farm Finance Survey, Bureau of the Census, as tabulated by Economic Research Service, USDA, and adjusted and updated by the author.

operators' assets but generate 29 percent of gross sales (Table 7). This relationship, in turn, helped these operators garner 48 percent of net farm income. In contrast, middle-sized farms (\$40,000-99,999 in gross income) had 22 percent of the assets and only 15 percent of the net farm income.

Information presented in Table 7 appears to support the hypothesis that some economies of scale exist for the largest farming operations. Sometimes, the largest farms simply are better able to use their available assets (and debt) to generate income. In such cases, the ratio of debt to net income is lower than for smaller farms. Fragmentary information also suggests that these large farming operations tend to specialize in commodities such as poultry, fruits and vegetables, none of which are significant in Nebraska.

Third, off-farm income may be used by farmers to offset farm debt-servicing costs. In Table 8, the distribution of farm operators' debt by value-of-sales classes is compared with off-farm income. The last column in the table shows off-farm income as a percentage of debt. The point is that on smaller farms, off-farm income is generally sufficient to cover debt-servicing costs. For example, on farms with sales under \$10,000 (which represent one-half of all farms), operators' annual off-farm income exceeds their total farm debt, most of which is really home mortgage and consumer debt.

At the other extreme, on the largest farms, annual off-farm income is equal to only two percent of outstanding debt. Clearly, for this farm size class, off-farm income is relatively insignificant; it won't pay even a fifth of the interest due, to say nothing of the debt principal on such farms.

Incidence of Stress

The preceding analysis suggests that stress may not be as dominant among the largest farms, which tend to be highly profitable, or smaller farms, which tend to rely heavily on off-farm income. There are, of course, exceptions. For example, there is little question that heavily indebted operators of very large cash grain farms are now experiencing financial stress, while similarly leveraged operators producing specialty crops may have high profitability. Also, some smaller farm operations may not receive much off-farm income.

But setting aside special consideration of the largest and smallest farms, there are 625,000 "mid-size" farms with annual sales of \$40,000 to \$499,999. Where debt levels are large for individual farms in this group, financial stress is likely to be significant. These farms often have neither dominant off-farm income nor exceptional profitability. Information presented earlier (Table 5) suggests that operators with debt/asset ratios above 40 percent will usually be finally stressed. Operators with this level of debt on farms with sales from \$40,000 to \$499,999 constitute about nine percent of all operators, own about 14 percent of total operators' assets, and owe about 39 percent of total operators' debt. This amounts to about 210,000 operators who own assets valued at \$107 billion and who owe about \$73 billion, one-third of total farm debt.

TABLE 7. Estimated Percentage Distribution of U.S. Farm Operators and Their Assets, Debt, and Gross and Net Farm Income, By Size of Farm, January 1, 1984.

Annual value of farm products sold (thousands of dollars)	0perators	Assets	Debt	Gross cash farm income	Net farm income
All farms	100	100	100	100	100
500 and over	1	10	18	29	48
200 to 499	3	13	18	19	19
100 to 199	7	16	21	19	17
40 to 99	16	22	22	20	15
20 to 39	to Language Areday	10	7	6 43 43	3
10 to 19	12	8	5	3	0
to 9	13	6	3	2	0
2.5 to 4.9	14	6	2	1 8 18 1	-1
Under 2.5	23	8	4	redzo 4dz zk	-1

SOURCE: Melichar, ibid.

Operators, assets, and debt are as of January 1, 1984, estimated as described in the note to Table 6.

Farm income data are USDA estimates for 1983, from ERS ECIFS 3-3, pp. 85-88.

TABLE 8. Estimated Percentage Distribution of U.S. Farm Operators and Their Assets, Debt, and Off-farm Income, By Size of Farm, January 1, 1984.

Size of farm					
Annual value of farm products sold (thousands of dollars)	Operators	Assets	Debt	Off-farm income	Off-farm income as percentage of debt
All farms	100	100	100	100	22
		r fact gatta,	A PART OF	L stailte w 11	al ad
500 and over	1	10	18	2	2
200 to 499	3	13	18	3	4
100 to 199	7	16	21	5	5
40 to 99	16	22	22	10	10
20 to 39	11	10	7	9	28
10 to 19	12	8	5	12	57
5 to 9	13	6	3	16	104
2.5 to 4.9	14	6	2	16	143
Under 2.5	23	8	4	27	159

SOURCE: Melichar, ibid.

Operators, assets, and debt are as of January 1, 1984, estimated as described in the note to Table 6.

Off-farm income data are USDA estimates for 1983, from ERS ECIFS 3-3, p. 89.

Two special concerns come from this analysis. First, to the extent this problem is geographically concentrated (e.g., the Midwest), localized stress is much more severe for creditors, agribusinesses and main street businesses than the data as a whole indicate. Second, to the extent that farms under stress are perceived to be full-time "family" farmers, current stress may bring changes to the overall structure of agriculture that society deems undesirable.

Impact of Financial Stress on Lenders, Agribusinesses, and Rural Communities

As financial difficulties for farmers have continued, lenders, agribusinesses and rural communities have been affected as well. Most analysts expect the "ripple effect" of poor farm conditions to continue to be felt by others in 1985.

Agricultural banks as a group have historically appeared to be in sound condition with adequate profits, capital reserves, and liquidity. However, certain trends are disconcerting. Several banks failed in Nebraska in 1984, most of which had predominately agricultural loan portfolios. The proportion of "problem loans" has increased for most banks in rural areas. Loan-loss reserves are being increased wherever possible and lending policies are becoming more stringent. However, despite increased cautiousness on the part of agricultural banks, further consolidation in banks would not be surprising during the year ahead.

The Farm Credit System (Production Credit Associations, Federal Land Banks and Bank for Cooperatives) is feeling similar pressure: loan losses and late payments have increased, profits have declined, and competition is strong for quality borrowers.

Production Credit Association (PCA) losses currently exceed those of the Federal Land Banks (FLB). This does not necessarily imply that PCAs are in worse condition, but only that PCA problem loans surfaced earlier than those of FLBs. Some short-term lenders have allowed borrowers to service long-term debt from their operating lines of credit. As short-term lenders terminate this practice, additional FLB problem loans are more likely to appear.

The Farmers Home Administration (FmHA) typically carries the largest share of high-risk loans because, as a lender of last resort, it lends to farmers who cannot obtain credit elsewhere. Other lenders can often transfer marginal accounts to FmHA to improve their position and avoid added risk. In late 1984, FmHA had over \$25.4 billion in outstanding farm debt. Of the total amount, 21.3 percent is owed by borrowers who are behind schedule in their payments, and who account for 29.6 percent of the total farm program borrowers. FmHA's delinquent farm debt has grown rapidly over the past four years, from \$827.6 million to about \$5.4 billion.

With the current level of economic stress in the farm sector, it is not likely that FmHA's role will diminish nor that its portfolio will improve in 1985. Indeed, it would not be surprising to see increased reliance on FmHA. As such, questions will continue to be raised about just how far the "lender of last resort" should go in providing financial support to individual farming operations.

Agribusinesses have two major concerns about current financial conditions in agriculture. The first relates to overdue and unsecured farm accounts. The concern is not only about receiving payment on such accounts, but in the event of bankruptcy, unsecured creditors would have a low priority in receiving returns from the bankruptcy. Uncollectable accounts receivable are a frequent contributor to business failures. This problem is magnified for many agribusinesses by narrow operating margins which provide little opportunity for "catch-up" elsewhere in the business.

Second, to the extent current financial conditions in agriculture cause consolidation into larger farm units, the possiblity of bypassing smaller agribusinesses in rural communities increases. Simply stated, larger farm operators tend to patronize larger agribusinesses, where price discounts and other special services are more likely.

As agribusinesses struggle for survival, other businesses in small agriculturally oriented towns are likely to be negatively affected as well. This, in turn, will likely hurt a community's tax base and make it difficult to maintain such institutions as schools and churches. In short, poor farm financial conditions cannot be isolated; in much of Nebraska, the impact on towns and villages is both direct and substantial.

Alternatives for Dealing with Farm Financial Stress

There are no easy or painless solutions to current financial difficulties in the farm sector. The most helpful development, of course, would be for cash income to increase across all sectors of production agriculture. However, the outlook for 1985 appears to be much like what's already been experienced in earlier years of this decade. If anything, conditions are worsening because of the cumulative effect of several consecutive years of financial stress.

Many proposals are being advanced to address farm financial stress. Each proposal, either explicitly or implicitly, must answer several questions:

- 1) How much assistance should be provided by the public sector to farm operators?
 - 2) How should eligibility for assistance be determined?
- 3) What mechanism should be used for providing assistance to farm operators?
 - 4) What type of assistance should be provided?

The following concerns have been voiced by those who have tried to answer these questions:

1) With respect to the first question, some have argued that farm problems are primarily the result of unwise fiscal and monetary policies of the federal government and, therefore, the federal government has an obligation to provide substantial assistance. Supporters also indicate that failure to address farm financial problems will have negative economic and social implications for large sections of the country.

However, others point out that the federal government budget precludes providing much, if any, assistance. Still others argue that massive assistance to heavily-indebted farmers would be "unfair" to those who have been conservative in their use of debt financing.

Except for the "fiscal and monetary policies" argument, debate on potential assistance from state (Nebraska) government centers on the same issues.

2) Questions about eligibility for assistance presume that assistance would not be open-ended. In particular, it is frequently proposed that assistance be provided to those with debt-to-asset ratios above a predetermined level or who could not survive without assistance. Gross or net income may also limit aid eligibility. Some analysts further suggest that eligibility standards should not be too exacting in the interest of approving assistance applications as quickly as possible.

Political compromise would ultimately be necessary to determine eligibility.

3) The nature of the mechanism for providing assistance has received much attention. At the state level, proposals have included establishing a state owned and operated bank and increased authority for the Nebraska Investment Finance Authority to provide lower-interest loans to farmers. Another proposal is to provide a state agricultural credit fund for purchase of farm loans from failed banks and other credit institutions. Some individuals have called for a moratorium on all farm loan foreclosures.

Federal initiatives might involve new authority for the Farmers Home Administration such as providing additional subsidies on interest rates, principal deferral or write-downs, relaxed regulations on loan foreclosures, and participation in asset ownership through a lease-back arrangement.

In addition, Neil Harl, Professor of Agricultural Economics at Iowa State University, has proposed a new federally chartered corporation be implemented to "warehouse" questionable farm debts until farm financial conditions improve. The new corporation might work directly with original lenders to reduce interest rates and provide a federal subsidy for the purpose of lowering interest rates. In return, participating farmers might be required to share asset ownership with lenders.

4) Assistance provided might be in two general forms. The first would involve increasing cash receipts through any of several commodity program initiatives of the federal government. This alternative seems unlikely, since current financial stress in agriculture is closely associated with debt-servicing costs.

Second, if assistance is provided to deal with debt problems, it could focus primarily on debt principal or interest costs. In the short-run, reduction of interest costs might provide the most assistance. Longer-range, however, debt principal reductions may be the only way to assure viability in agriculture for those with the heaviest debt loads.