

The Financial Condition of Idaho Farmers: Deterioration in 1986

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JOHN V. EVANS
GOVERNOR



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June 1986

TO THE PEOPLE OF IDAHO:

Idaho's number one industry has been suffering in the last year. Mother Nature was not kind to our crops in 1985, and commodity markets were not kind to our farmers and ranchers. A farm bill was passed by Congress, but as currently administered, no improvement in farm income is expected soon.

Last year I commissioned the Idaho Crop and Livestock Reporting Service to conduct a farm finance survey, which was analyzed by the economists from the University of Idaho and my staff. This survey documented a serious financial problem in Idaho agriculture. This year I asked for an update of that survey because of a widespread perception that the finances of many farmers had deteriorated.

The results of this latest survey confirm that perception. Agriculture's financial problems are too serious to ignore and they will not go away by themselves without extracting a tremendous cost over the next several years. I am not only concerned with the personal hardships and tragedies of thousands of Idaho farm families, but I also fear the damage that may be done to dozens of small communities across rural Idaho. As I said last year, we must face the problem squarely and develop appropriate policies in response.

For providing accurate information to identify the problem, I wish to thank the newly named Idaho Agricultural Statistics Service. The Cooperative Extension Service and the Department of Agricultural Economics at the University of Idaho share the credit. I particularly wish to thank the Idaho Wheat Commission for their foresight in helping to fund this study.

Sincerely,

A handwritten signature in black ink, appearing to read "John V. Evans", written over a large, stylized flourish.

JOHN V. EVANS
GOVERNOR

JVE:dgdf

Summary

A random sample of 2,500 farmers and ranchers was surveyed by the Idaho Agricultural Statistics Service in March 1986. The sample included 1,645 respondents from the 1985 survey. The 1,773 usable responses were analyzed by agricultural economists from the Office of the Governor and the University of Idaho.

The survey indicated additional deterioration in the financial condition of Idaho farmers over the last year. Nature gave farmers a worse time than usual in 1985 with grasshoppers, areas of drought and harvest-time freeze that damaged much of the potato crop. Commodity prices remained low because of abundant supplies and declining demand. USDA estimated Idaho farm land values fell nearly 14 percent in 1985.

As a result, the average debt/asset ratio for Idaho farmers and ranchers increased to 38.6 percent from 34.1 percent in 1985. While these estimates may be somewhat high due to undervaluing assets and a sample that is slightly skewed toward larger farms, the increase from 1985 to 1986 is considered to be statistically significant.

Roughly 60 percent of farmers had debt/asset ratios below 40 percent and can be considered financially healthy. In fact, about a third of Idaho farmers had debts less than 10 percent of assets, and of these, 23 percent had no debt at all. A middle group of 22 percent had debt/asset ratios between 40 and 70 percent. Most of the farmers in this group are experiencing serious financial stress and will have difficulties making payments on their debt principal. These producers can probably survive several more years in agriculture, particularly with debt restructuring, changes in farm management techniques or improved economic conditions.

The greatest concern is for the estimated 17 percent of farm and ranch operators with debt/asset ratios exceeding 70 percent. Farmers carrying these debt loads are unlikely to meet either interest or principal payments on their loans and will see their remaining equity eroded further each year. In fact, 8.4 percent of the survey respondents, up from 5.5 percent in 1985, reported debts exceeding the value of their assets, indicating these farmers are insolvent. The great majority of farmers with debt/asset ratios above 70 percent will not remain in agriculture with their current operation.

In general, the debt/asset ratio tends to decline with the age of the farm operator. In the survey, farmers under 35 years had debt/asset ratios averaging 60 percent, compared with a 17 percent average for those over 65 years. Younger farmers also suffered more financial erosion since the 1985 survey. Similarly, the proportion of debt increases with farm size. The largest farms had debt/asset ratios of 55 percent, compared to 9 percent on the smallest part-time farms.

Regional differences in financial conditions increased from 1985 to 1986. The proportion of farmers experiencing extreme financial problems remained about the same in northern Idaho but increased in the three southern regions. Cattle operations appear healthier than most, while cash grain operations are about average. Potato, sugarbeet and dairy farms have higher than average debt/asset ratios, but many produce enough income to service their debt.

Cash flow is as important to examine as the balance sheet, because some types of farms can better service debt than others. Some farms may have debt/asset ratios above 40 percent or even above 70 percent, and still have income that exceeds cash expenses.

The implications of the balance sheet analysis were largely verified by simulating cash flow on some typical, but hypothetical, Idaho farms. With high debt/income ratios as well as high debt/asset ratios, some farms, particularly those located in southcentral and southeastern Idaho, will continue with negative cash flows. This will result in additional liquidations and foreclosures for highly stressed farmers and ranchers if current conditions prevail.

Delinquency rates on agricultural loans provide further evidence of financial deterioration. For all borrowers, delinquencies were 21 percent on longer term loans. Operating loans were 35 percent delinquent in 1986, versus 24 percent last year. Over half of FmHA operating loans are now delinquent. Delinquency rates on longer term loans for commercial banks, Federal Land Banks and insurance companies have more than doubled from the rate on real estate loans last year.

Asked to value their land at its peak and in the current market, the surveyed farmers perceived an average decline of 44 percent in value. This relates to their expectations for remaining in business. Twenty-one percent think this

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may be their last year as a farm operation. An additional 35 percent expect to remain 2 to 5 years, while 44 percent feel they can stay on the farm 6 years or more. Sixteen percent of respondents expected to be forced from the farm within 5 years due to liquidation, foreclosure or bankruptcy.

Finally, farmers and ranchers were asked their opinion on appropriate policy responses. Two-thirds thought no additional government programs were needed. But when asked about specific policies, a majority approved individual financial management assistance, a farm foreclosure review board and interest rate buy-downs on operating loans. A beginning farmer loan program also received 47 percent acceptance, while a foreclosure moratorium or tenant farming remained unacceptable.

In short, the situation got worse, rather than better, for

Idaho farmers and ranchers in 1985. Agriculture is undergoing a significant restructuring that will force hundreds and probably thousands of Idahoans out of farming or ranching. This has serious implications for small communities as well, particularly in the absence of rural redevelopment and the inability to diversify the rural economy. However, future state policies could affect the number of family farms that survive, the economic health of rural areas and the future competitiveness of Idaho agriculture.

Acknowledgments

The able assistance of Wes Harris, University of Idaho Department of Agricultural Economics Research Associate, in helping prepare the cash flow budgets is gratefully acknowledged. The financial support provided by the Idaho Wheat Commission is appreciated. Any errors, omissions and opinions are the sole responsibility of the authors.

The Financial Condition of Idaho Farmers: Deterioration in 1986

Richard Gardner, Neil Meyer and David Walker

Introduction

Farmers and ranchers in Idaho and the United States continue in the throes of the worst agricultural depression since the 1930s. The roots of agriculture's troubles lie in past national macroeconomic policies, some of which expanded and then contracted demand, caused interest rates to increase sharply, allowed the dollar's value to rise freely and created tax incentives for capital expansion in agriculture.

With the easy credit policies of the 1970s and the lure of increasing exports, farmers bid up the value of land and increased productive capacity. In the process, they became highly leveraged. The huge budget deficits and tight monetary policies of the 1980s increased interest rates and the value of the dollar. U.S. agricultural exports began to slacken and other countries were induced to increase their export capacity.

Farmers and ranchers were caught in a cost-price squeeze between rising input costs and declining prices resulting from crop surpluses. As profitability declined, so did farmland values. Decreasing asset values and more stringent lending policies made credit more difficult to secure, just as low profits made debt servicing more difficult. Debt/asset ratios increased; financial stress became more and more apparent.

To assess the financial condition of Idaho agriculture, Gov. John Evans commissioned a study in 1985 by the Idaho Crop and Livestock Reporting Service, the University of Idaho and the Governor's Office (Meyer and Gardner 1985). Since that time, the agricultural situation appears to have worsened. The 1985 crop year witnessed a major grasshopper infestation, followed by problems with army worms and periods of drought. Early fall freezes caused considerable damage to Idaho's potato crop, while overproduction kept potato prices low.

Crop surpluses existed for most commodities in 1985-86, dampening prices and facilitating continued declines in farmland values. Much more land was for sale than the market can normally accommodate. The numbers of foreclosures, liquidations and bankruptcies appeared to be increasing, which contributed to the glut of land on the market.

The Food Security Act of 1985, passed late last year, has sharply lowered price supports for wheat and feed grains and increased direct government payments. Drops in rents, interest rates, exchange rates, fertilizer and chemical costs and oil prices, along with increases in government payments, are expected to push net farm income to \$30 billion in 1986 (Wall 1986).

In view of these changes, a new farm finance survey seemed appropriate. Compared with the 1985 results, a survey update could document changes in Idaho agricultural finances. This information could have important implications for designing policy to respond to the farm problem.

Objectives

Specifically, the survey sought to answer the following questions:

1. How has the financial condition of Idaho farmers/ranchers changed since 1985?
2. Is any group of farmers in particularly bad shape?
 - Is one crop type worse off? How does livestock compare?
 - Are large farms in better condition than small farms?
 - Are younger farmers in trouble?
 - Is one region of the state stressed more than others?
3. How many farmers are likely to be leaving agriculture in the next several years?
4. What policy tools are most acceptable to farmers and ranchers for addressing their credit problems?

The Survey

During March 1986, 2,503 questionnaires were mailed to Idaho farmers and ranchers. (See Appendix for a copy of the questions). The names included 1,645 who answered the 1985 survey and were still farming. An additional 858 names were selected in a random manner from a sample, stratified by region, of the Idaho Agricultural Statistics Services farmer/rancher list.

The surveys were mailed March 25, 1986. A total of 1,773 usable questionnaires were generated, providing a 71 per-

cent response rate and representing 7 percent of all Idaho farmers and ranchers. Some respondents did not answer all questions, which limits the opportunity to derive definitive statements from the survey results. However, if the non-respondents can be assumed to be similar to those who did answer the questions, there is a 95 percent likelihood that the true proportions are within two percent of the point estimates.

As in 1985, an attempt was made to exclude rural residences and hobby farms from the survey in an effort to make it more applicable to commercial agriculture. The 16,000 farmer mailing list of the Idaho Agricultural Statistics Service is known to be somewhat skewed toward large farms as well. As a result, average gross sales for the sample is \$124,000, while the Idaho Crop and Livestock Reporting Service average in 1985 was \$84,300. Similarly, while the state average land in farms was 598 acres in 1985, the survey respondents averaged 757 acres. This means the results of this survey are somewhat more representative of commercial agriculture than of all farms in Idaho.

Profile of Farmers

The sample was believed to be generally representative of Idaho producers. Response to the questions shows that the sample was typical of the 24,600 Idaho farmers and ranchers in several characteristics.

Age of Respondents

The greatest numbers of the surveyed farmers/ranchers, 38 percent, were in the 50- to 64-year age group; 34 percent were 35 to 49; 11 percent were under 35, and 17 percent were 65 years and older (Fig. 1). These proportions are similar to last year's survey. Both surveys are within 2 percent of the finding of a similar survey conducted in May 1984 (Meyer and Konn).

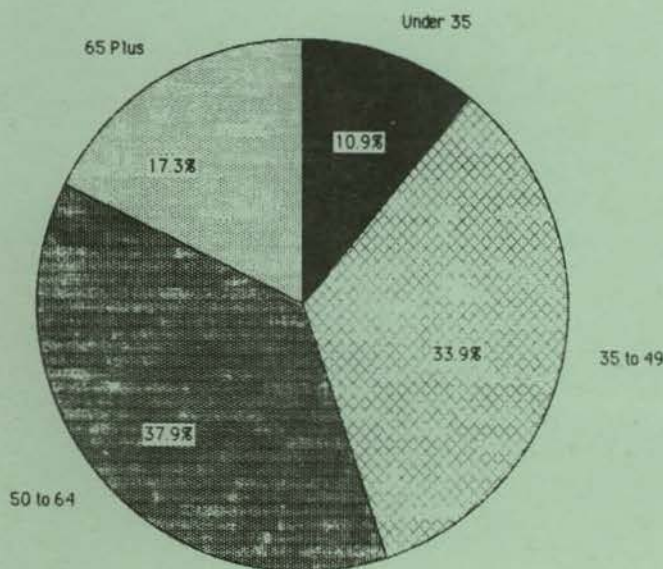


Fig. 1. Age of farm operators by percentage of the total.

Size of Operation

A good measure of size is annual gross sales. Nearly half of the the survey farmers/ranchers — and this includes most of the fulltime family farms — had gross sales between \$40,000 and \$400,000 (Fig. 2). The largest operations, with gross sales exceeding \$400,000, comprised only 6 percent of the sample, but produced 45 percent of the total gross sales.

At the other extreme, 45 percent of respondents reported gross sales of less than \$40,000. These operations, usually part-time enterprises that are not considered commercial farms, produced only 5 percent of total gross sales. The fact that only 45 percent of survey respondents were in this category also reflects the orientation of the sample toward commercial farms. In the 1982 census, 64 percent of Idaho farmers had gross sales of less than \$40,000.

Average gross sales for all respondents was \$124,000 per farm. This is slightly lower than the 1985 survey, and probably reflects lower commodity prices and yields.

Type of Farm Enterprise

Farms were classified according to the crop or livestock category that generated the most sales (Table 1). Cattlemen were the dominant group with 30 percent of survey respondents. Cash grain farmers followed with 27 percent, and dairymen were third with 13 percent. (The sample was taken before the results of the whole herd buy-out program were announced.) Hay/silage producers made up 11 percent; potato producers, 5 percent, and sugarbeet producers, 4 percent. It is no coincidence that these top six categories are also Idaho's top commodities by cash receipts. Other enterprises identified were sheep producers, fruit growers and an "all other" category that included growers of vegetables, seeds, mint, hops and other specialty crops.

The only significant change from last year was that the proportion of potato growers fell from 7 to 5 percent of

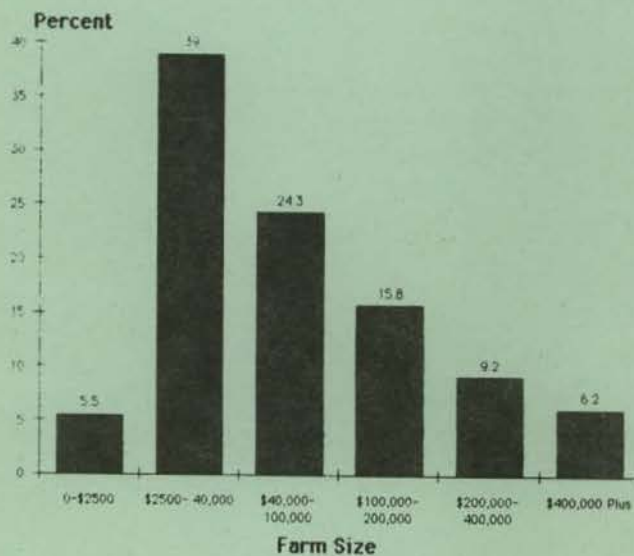


Fig. 2. Gross sales of farm/ranch operations.

the sample. No doubt the freeze and decline in potato prices made the sale of other crops dominant for some operators.

Region of State

Idaho producers were divided into regional groups based on the crop reporting district in which they lived (Table 2). Of the sample, 16 percent were from northern Idaho, 26 percent from the Treasure Valley and southwest Idaho, 23 percent from the Magic Valley and southcentral Idaho and about 35 percent from southeastern Idaho. Since the sample was stratified by region, these proportions of respondents closely match the findings of the 1982 Census of Agriculture.

Measures of Financial Stress

Financial stress can be measured with a wide variety of statistical indicators, none of which reflects the entire picture. A short list of indicators would include debt/asset ratio, debt/income ratio, cash flow, return to equity, loan delinquency rates, loan losses taken by creditors, changes in land values, or numbers of foreclosures, liquidations and bankruptcies (Jolly et al. 1985). Since each focuses on a single characteristic, no one statistical measure should be relied upon too heavily in assessing the financial health of Idaho farmers. When one looks at a number of indicators, however, a general picture can emerge. The following sections present the evidence of Idaho agriculture by several measures of financial stress. The limitations associated with interpreting these measures are also described.

Debt/Asset Ratio

Perhaps the most commonly used farm finance statistic is the debt-to-asset ratio. This figure represents a summary of a farmer's balance sheet at a specific time. It does not provide any information on the profitability of the farm operation or on the rate of return generated by farm assets.

The debt/asset ratio can be used as a benchmark to get a general indication of financial health. Farmers with debt/asset ratios below 40 percent are in good condition and should have no difficulty servicing debt. Above 40 percent, farmers may have trouble repaying the principal

on farm debt. Farmers with debt/asset ratios above 70 percent may have difficulty meeting both principal and interest payments (ERS 1985a). When the debt/asset ratio exceeds 100 percent, debt is larger than the value of assets, and the farmer is technically insolvent.

A common question is why must the debt/asset ratio be so low? Why is a farmer with a debt/asset ratio above 70 percent in trouble? After all, he still owns 30 percent of his farm. The answer lies in the fact that farm land historically generates a cash income of only 3 to 5 percent of its value (ERS 1986a). Any additional return comes in the form of increased land values. Assume, for example, that cash income is 3 percent. A farmer with a loan rate of 12 percent for the value of an acre of cropland needs the net cash income from 3 additional acres to pay interest on that debt.

Still more income is required to pay off the principal and to offer a buffer against income variation from year to year. This is why farmers have difficulty servicing debt much above 30 percent of the value of their holdings. It also explains why those farmers who became highly leveraged with high interest rate debt in the late 1970s and early 1980s are sinking under the debt service requirements. They lose equity every additional year they farm.

In 1985, the survey showed an average debt/asset ratio for Idaho farmers and ranchers of 34 percent. By 1986,

Table 2. Geographic distribution of respondents to farm credit survey.

	Number		% of sample	
	1985	1986	1985	1986
North ¹	250	281	14.9	16.0
Southwest ²	410	461	24.5	26.2
Southcentral ³	414	410	24.7	23.3
Southeast ⁴	599	607	35.8	34.5
Total	1,759	1,673	100.0	100.0

¹North region includes Boundary, Bonner, Kootenai, Benewah, Shoshone, Clearwater, Nez Perce, Lewis and Idaho counties.

²Southwest region includes Adams, Valley, Washington, Payette, Gem, Boise, Canyon, Ada, Elmore and Owyhee counties.

³Southcentral region includes Blaine, Camas, Gooding, Lincoln, Jerome, Minidoka, Twin Falls and Cassia counties.

⁴Southeast region includes Lemhi, Custer, Butte, Clark, Fremont, Jefferson, Madison, Teton, Bonneville, Bingham, Power, Bannock, Caribou, Oneida, Franklin and Bear Lake counties.

Table 1. Gross sales by source on Idaho farms and ranches.

	Number of farms		% of sample		Average sales per farm	
	1985	1986	1985	1986	1985	1986
Cash grains	384	379	28.2	26.9	\$100,400	\$103,900
Potatoes	89	73	7.1	5.2	372,000	436,200
Sugarbeets	40	60	3.2	4.3	174,100	161,700
Cattle	377	429	30.0	30.4	107,900	89,500
Sheep	26	23	2.1	1.6	103,300	102,000
Fruit	11	10	.9	.7	325,500	108,200
Hay/silage	131	148	10.4	10.5	65,100	51,500
Dairy	150	182	11.9	12.9	137,700	163,300
All other	78	105	6.2	7.5	113,300	106,800
	1,409	1,256	100.0	100.0	124,100	127,506

this ratio had increased to an average of 39 percent! This significant deterioration can be explained almost entirely by the decline in land values. Suppose a farm had the average debt/asset ratio of 34 percent last year and all assets were farm land. The 14 percent decline in Idaho land values reported by USDA means the farm's debt/asset ratio would have increased to 39.6 percent in 1986.

Most Idaho farmers — 60 percent — have a debt/asset ratio below 40 percent (Table 3). This proportion has dropped, however, from 65 percent of farmers last year, meaning that almost 5 percent of the state's farmers slipped into the other two categories. Nearly a third of the operators are solid financially, with debt/asset ratios below 10 percent (Table 4). In fact, 22.8 percent have no debt at all.

The proportion of farmers with serious difficulties, as indicated by a debt/asset ratio of 40 to 70 percent, also decreased to 22 percent from 25 percent last year. Farmers in this category are having trouble servicing debt principal but could likely survive with careful management and debt restructuring.

Unfortunately, the implication of the decrease in the middle category is that more farmers moved into the category of extreme financial problems, with debt/asset ratios over 70 percent. This group increased sharply from 11 percent of Idaho farmers last year to 17 percent in 1986. Farmers in this category are not likely to keep their current operation without an extended period of sharply higher farm income. For 8 percent of the survey sample, a departure from farming is only a matter of time, because debts exceed assets. This raises significant concern for farm

lenders because these insolvent operators have 23 percent of farm liabilities.

Of the 1,190 farmers who answered the debt and asset questions, 23 percent had no debt. Of the farmers who did carry some debt, the average debt/asset ratio was 50 percent. The median was 41 percent, indicating half of the farmers who have debt are undergoing moderate to extreme financial problems.

A Note of Caution — Due to the structure of the surveys, the authors feel the debt/asset ratios reported in both years may be overestimated. This is partly due to the bias of the sample toward larger farm operations, which tend to have higher debt/asset ratios. In addition, total farm assets are often underestimated.

The questionnaire asked for current value of total farm assets. Many operators had difficulty answering this question; debts were more easily identified. The telephone interviewers would often prompt a reply to the asset question by asking the value of land, machinery, livestock and crop holdings. Some farmers, particularly those with little debt, may have overlooked farm assets such as growing crops, the value of home furnishings, personal savings, stocks and bonds and stock holdings in PCAs, Federal Land Banks or other cooperatives. USDA estimated these categories accounted for 6 percent of Idaho farm assets in 1984 (ERS 1986b).

Asset undervaluation may have increased the reported average debt/asset ratios of 34.1 percent for 1985 and 38.6 percent in 1986. For example, USDA reported an average debt/asset ratio for Idaho farmers of 24.9 percent in 1984. Similarly, the proportion of farmers undergoing financial stress could also be exaggerated. Thus, care should be taken in interpreting the absolute level of debt/asset ratios reported here and the numbers of farmers with debt/asset ratios above 40 percent. Nevertheless, the general conclu-

¹This survey uses the average of debt/asset ratios calculated for each farm/ranch operation. The authors think the figure is most meaningful to farmers. USDA calculates an aggregate debt/asset ratio, which is the sum of all farm debt divided by all farm assets in the sample group. The aggregate debt/asset ratio for the 1986 Idaho sample was 37.9 percent; for 1985, 28.4 percent.

A technical issue with the way the survey was constructed may have added to the increase in the 1986 debt/asset ratio. Respondents were asked to report operating debt and intermediate to long term debt in 1986. Whenever a question is split, the total amount reported will usually increase.

Because new producers were added to the survey sample in 1986, we checked the increase in the average debt/asset ratio for the respondents in 1985 and 1986. Debt/asset ratios were compared for farmers who answered the questions both years. Those 658 farmers reported an average debt/asset ratio of 31 percent in 1985 and 37 percent in 1986. The increase of 6.0 percent for this matched sample validates the increase of 4.5 percent for the overall sample.

Table 4. Percent of total liabilities by debt/asset ratio.

Debt/asset ratio	% of producers	% of operating debt	% of longer term debt	% of total liabilities
No debt	22.8	—	—	—
1-10%	9.9	0.9	1.6	1.4
10-39%	27.7	17.3	21.4	20.2
40-70%	22.2	39.0	40.3	39.9
71-99%	9.0	13.9	16.2	15.5
100% and over	8.4	28.9	22.5	23.0

Table 3. Financial stress in Idaho farmers by debt/asset ratio.

Region	Extreme financial problems		No apparent problems		Serious financial problems	
	Debt/asset over 70%		Debt/asset under 40%		Debt/asset 40-70%	
	1985	1986	1985	1986	1985	1986
North	72.2	73.5	19.4	15.6	8.4	10.9
Southwest	65.4	58.3	22.3	23.0	12.3	18.7
Southcentral	58.2	52.5	29.7	23.9	12.1	23.6
Southeast	65.3	61.3	24.7	23.5	10.0	15.2
State average	64.5	60.4	24.7	22.2	10.8	17.4

sions and relationships still hold, as the other measures of stress show. More confidence can be placed in changes between the two surveys.

Cash Flow

Net cash flow is a financial indicator equally important as and complementary to debt/asset ratio. Cash flow indicates whether income exceeds cash expenses but it is not a measure of profitability. This is important because some types of farm operations can operate profitably in spite of higher debt/asset ratios if they have a positive cash flow. For instance, operations that require little land and produce a steady stream of income such as poultry enterprises, dairies or cattle feedlots, can service higher debt/asset loads. Similarly, better managers who obtain above-average returns to their farm assets can survive with a higher debt ratio. Dryland farmers who risk large income

fluctuations from weather need a lower debt load. Cash flow also includes off-farm income, which can help meet farm expenses. Cash flow can be misleading, however, when a farmer is building or reducing inventories.

Unfortunately, time and resource constraints prevented the measurement of individual farm cash flows in this survey. Such an undertaking is difficult and expensive because all income and expenses must be recorded. Indicators of cash flow for Idaho farmers can be observed by looking at some typical but hypothetical farm enterprises, however. Another indicator, the most recent USDA survey, found that farmers in the Mountain and Pacific regions with debt/asset ratios exceeding 40 percent generally showed negative cash flows (ERS 1985a).

Survey data were combined with crop enterprise budget data to develop simulated farms illustrating cash flow for a typical farm for each producing region in the state. Table 5 shows sizes of these farms and the crops grown. The survey provided data on off-farm income and outstanding debt. Interest and principal payments for intermediate and long-term debt were estimated using an amortization factor and the outstanding debt reported by farmers. Since using outstanding debt rather than initial debt would underestimate payment, a relatively short 15-year repayment period was used. Some long-term real estate loans would have up to 30-year terms. The data do not identify how much of the short-term operating debt reported in the survey was current year operating capital. The early spring survey date suggests that most of the debt was carried over from the previous year. This is supported by a reported 35 percent delinquency rate on operating capital loans. We assumed, therefore, that all reported short term debt was carry-over debt.

Crop production costs were obtained from budgets developed by the University of Idaho. For estimating revenue, 1985 crop prices were used as shown in Table 6. Yields for each district are shown in Table 7. Family living expenses were based on median family income for a county in each district. Because family living expenses were included as an expense in the cash flow budget, payment for operator labor was not included.

Cash flow for typical farms in two of the four districts was negative (Table 8). Only cash flow for the typical farms in the north and southwest was positive. The measure of cash flow used did not include payment for one-half of the annual allocation for capital replacement or a return to the land. Excluding these payments, which must be cov-

Table 5. Typical farms in four Idaho regions: crops grown and size.

	Acres	Crops
North	1,000	Winter wheat, spring peas
Southwest	480	Spring wheat, potatoes, sugarbeets, alfalfa hay, sweet corn
Southcentral	320	Spring wheat, dry beans, sugarbeets, alfalfa hay.
Southeast	600	Alfalfa hay, spring wheat, potatoes, spring barley.

Table 6. Crop prices used in cash-flow budgets.

Spring wheat	\$ 3.26/bu
Spring peas	\$ 8.35/cwt
Commercial beans	\$20.20/cwt
Potatoes	\$ 3.15/cwt
Sugarbeets	\$45.00/ton
Alfalfa	\$63.00/ton
Corn seed	\$55.00/bu
Spring barley	\$ 2.40/bu

Table 7. Crop yields per acre for rotations in four Idaho regions.*

	North	Southwest	Southcentral	Southeast
Wheat, bu	72	103	82	115
Peas, cwt	17	—	—	—
Alfalfa, tons	—	5	5.5	5
Comm Beans, cwt	—	—	22	—
Sugarbeets, tons	—	—	25	23
Potatoes, cwt	—	350	—	275
Barley, bu	—	—	—	53
Corn seed, bu	—	—	19	—

*Yields are reported only for crops in rotations used for this study.

Table 8. Cash flow budgets for typical farms by region.

	North	Southwest	Southcentral	Southeast
Acreage	1,000	480	320	600
Total receipts	\$199,063.75	\$372,381.20	\$146,964.89	\$223,241.25
Total variable operating expense	73,313.75	191,632.88	55,644.21	130,500.51
Total fixed operating expense	30,654.88	43,656.20	24,391.00	44,855.94
Family living expenses	18,591.00	15,817.00	15,386.00	17,126.00
Operating debt plus interest	15,433.75	35,929.98	52,473.14	43,109.82
Intermediate- and long-term debt plus interest	6,936.00	9,384.32	14,878.42	14,046.75
Total cash outflow	144,929.37	296,420.38	162,772.77	249,639.02
Cash available	54,134.38	75,960.82	-15,807.89	-26,397.77

ered in the long run, results in a short-run measure of cash flow. A positive value for this short-run cash flow measure indicates that the farmer could survive with this cash flow for a few years until farm prices improved. In the long run, the farmer would have to cover the excluded expenditures to remain in farming. Because of the various assumptions made about the typical farms, the absolute levels of cash available may not be as meaningful as the relative levels across regions.

Negative cash flow for the typical farms in the south-central and southeast regions is not surprising. Debt/asset ratios are the highest in those regions — .45 and .39, respectively (Table 9). Outstanding debt and debt payments are also highest in those regions (Table 9).

Even more telling are the debt-to-income ratios that indicate more clearly the farmer's ability to repay debt. For typical farms in the north and southwest having a positive cash flow, the debt-to-income ratios were .55 and .58, respectively. These ratios indicate that debt was about one-half as large as income. For typical farms in the southcentral and southeast, the debt-to-income ratios were 1.93 and 1.72, indicating that debts were nearly twice income.

Judging by the high debt-to-income ratios for southcentral and southeast farms and the corresponding negative cash flows, the authors conclude that the financial condition of farms in these regions is graver than in the other regions of the state. This condition is underscored by the low breakeven debt/asset ratios for current crop prices for these regions (Table 9). The breakeven debt/asset ratio represents the highest debt load that the farm is capable of servicing, i.e., after servicing debt, net cash flow is equal to zero. Since the existing debt load indicated by the debt/asset ratio is three to four times the break-even ratio, the severity of financial stress for typical farms in the southcentral and southeast districts is apparent.

More bankruptcies and foreclosures can be expected in southeast and southcentral Idaho than in the rest of the state. This conclusion is supported by the higher proportion of farmers and ranchers in these two regions who expect to leave farming within a year, 21 percent in the southcentral region and 25 percent in the southeast. In the north and southwest, the proportion of farmers/ranchers who expect to leave within a year were 14.9 percent and 18.8 percent, respectively.

Lower expected commodity prices for 1986 production hampers the farmer's opportunity to generate a positive cash flow. This effect could be moderated by lower fuel, fertilizer and interest costs. Farmers/ranchers also may be able to improve cash flow by renegotiating debts and rents. Nevertheless, this analysis supports the conclusion that farms with high debts will continue under financial stress.

Loan Delinquencies

Another good measure of financial stress is the delinquency rate for agricultural loans. Questions in this year's survey were constructed differently, making direct comparisons with last year difficult. Nevertheless, delinquen-

cy rates have increased sharply from last year for nearly all types of loans and lenders. The same overall relationships hold this year — fewer loans are delinquent on both principal and interest than on interest only. Lenders will usually exercise forbearance if interest payments are current. Longer-term loans also tend to be paid first so that delinquency rates for operating loans tend to be higher. Many operating loans go delinquent every year for growers with late marketing contracts for crops like potatoes, malting barley and sugarbeets.

Longer-Term Loans — This year the survey questionnaire included in a long-term and intermediate-term loan category all loans for machinery, livestock and the like along with real estate. With the questions phrased this way, the sample of 1,773 farmers reported 1,808 loans. The numbers probably reflect the change in categories, not an increase in real estate loans. The 1985 survey found that roughly a quarter of Idaho farmers own their land free and clear. This figure probably has not changed.

Including intermediate credit in this category significantly increased the number of Production Credit Association (PCA) and commercial bank loans and lowered the proportion of Federal Land Bank (FLB) loans that are made for real estate only. FLB is still the dominant source of longer-term credit, providing nearly 30 percent of the loans. Other sources of intermediate- to long-term debt include commercial banks with 20 percent, the Farmers Home Administration (FmHA) with 18 percent and private loans by individuals at 14 percent (Table 10).

FmHA, the lender of last resort, still has the highest delinquency rate for long- and intermediate-term loans with 35 percent of loans delinquent. Intermediate-term PCA loans were the next most delinquent at 27 percent. Commercial banks, insurance companies and input suppliers all had delinquency rates over 20 percent. The Federal Land Bank had the lowest delinquency rate at 13.7 percent of survey respondents. As a test of the survey, the Idaho FLB reported 10.7 percent of its loans delinquent on February 28, 1986.

Since FLBs and insurance companies lend almost exclusively for real estate purchases, comparisons can be made with last year in these categories. Delinquency rates for both lenders have doubled. The FLB delinquency rate increased from 6.7 percent last year to 13.7 percent this year, while delinquencies for insurance companies rose from 10.7 to 22.9 percent. The 1986 delinquency rates for all lenders are generally two to four times the desirable or normal levels.

Table 9. Synthesized debt burdens in each region.

	Debts	Debt-asset ratio	Debt payments	Debt-income ratio	Breakeven debt-asset ratio
North	\$ 63,467	.23	\$22,368	.55	.27
Southwest	99,068	.37	45,313	.58	.46
Southcentral	153,128	.45	67,351	1.93	.15
Southeast	138,929	.39	57,155	1.72	.09

Operating Loans — Farmers and ranchers use operating loans to supplement their personal resources for annual production expenses. Less than half (42 percent) of the sample reported having an operating loan last year, while 51 percent expected to use a 1986 loan. The survey results on the status of past operating loans are shown in Table 11.

The different types of lenders held roughly the same proportion of operating loans as last year. Commercial banks dominate with nearly 60 percent of the loans made. PCAs accounted for 24 percent, and FmHA made nearly 10 percent of the operating loans. Private individuals, input suppliers and others make up the remainder.

The survey shows that all private operating loans were delinquent. FmHA had the next highest delinquency rate at 55 percent, an increase from 46 percent last year. Weighting the two FmHA delinquency rates for operating and longer-term loans shows 38.6 percent of all FmHA loans delinquent. This is lower than the 51.8 percent delinquency rate FmHA reported for April 16, 1986 (FmHA news release May 2, 1986, Boise, Idaho).

PCA delinquencies jumped from 25 percent in 1985 to 35 percent in 1986. This is much higher than the 10.3 percent of loans reported past due by Idaho PCA on February 28, 1986, because Spokane District PCAs have placed about \$200 million in nonperforming loans in the Farm Credit System Capital Corporation (private communication with Al Haslebacher, Farm Credit Systems, Spokane, April 3, 1986). Respondents would report these nonperforming loans as PCA loans, even though they are no longer on the PCA books.

Commercial bank loans also deteriorated in quality, with their delinquency rate increasing from 19 to 29 percent. The consistent increase in delinquency rates for all cate-

gories of operating loans is clear evidence of a decline in debt service ability by Idaho farmers and ranchers. Depressed commodity prices are the likely reason.

Availability of Credit — Despite the apparent increase in loan risk as evidenced by delinquency rates, ample credit remains available to qualified borrowers. Table 12 shows, in fact, that the proportion of farmers denied requests for additional credit actually declined from 30 percent in 1985 to 22 percent in 1986.

Commercial banks received a sharp increase in credit requests this year and were able to approve a larger proportion of them. PCAs and FmHA also lowered their loan denial rates while serving more loan requests than last year. Only input suppliers, FLBs and private individuals reported higher denial rates than in 1985, but the limited numbers of loans surveyed reduces the reliability of these figures.

Table 12. Availability of additional credit. (Have you been turned down this year when applying for new or expanded loans?)

Type of lender	Loans applied for ¹		Loans denied		Percent denied	
	1985	1986	1985	1986	1985	1986
Commercial banks	308	532	67	86	21.8	16.2
Insurance companies	7	9	5	6	71.4	66.7
Input suppliers	3	13	1	7	33.3	53.8
Production credit associations	130	178	37	28	28.5	15.7
Federal land banks	45	39	27	27	60.0	69.2
Farmers Home Administration	94	119	39	39	41.5	32.8
Private individuals	16	25	5	8	31.3	32.0
Other	14	21	6	5	42.9	23.8
	617	936	187	206	30.3	22.0

¹In cases where the number of responses is less than 30, statistical reliability for data interpretation is limited.

Table 10. Status of long- and intermediate-term loans (real estate, machinery and breeding stock).

Type of lender	Number with loans	Percent of loans	Percent delinquent on principal	Percent delinquent on principal and interest
Commercial banks	366	20.2	21.9	11.5
Insurance companies	70	3.9	22.9	15.7
Input suppliers	57	3.1	21.1	15.8
Production credit associations	111	6.1	27.0	12.6
Federal land banks	540	29.9	13.7	11.1
Farmers Home Administration	321	17.8	34.9	27.4
Private individuals	254	14.1	14.6	9.5
Other	89	4.9	22.5	16.9
	1,808	100.0	21.1	14.6

Table 11. Status of operating loans.

Type of lender	Number with loans in 1986 sample	Percent of loans		Percent delinquent on principal		Percent delinquent on principal and interest	
		1985	1986	1985	1986	1985	1986
Commercial banks	441	57.3	59.6	19.1	28.8	7.2	15.4
Input suppliers		1.3	0.8	30.0	33.3	20.0	33.3
Production credit associations	175	24.6	23.7	25.0	34.9	10.3	18.3
Farmers Home Administration	73	10.2	9.9	46.1	54.8	36.8	38.4
Private individuals	4	3.1	3.2	34.8	100.0	21.7	83.3
Other	1	3.5	2.8	33.3	32.1	11.5	28.6
	740	100.0	100.0	23.8	35.3	11.6	21.1

Asset Values

Another valid indication of financial stress is change in asset values. During inflationary times, farmers and ranchers often receive a significant portion of their returns to farm land in the form of capital gains on asset values. Since 1982, land in Idaho has decreased in value. Not only does this lower farm income, but it also lowers the value of collateral farmers have available to secure credit.

Survey respondents were asked what their land was worth per acre at its highest value (about 1982) and what that land could be sold for today. The results are shown in Table 13. The absolute values are not especially meaningful because they average over so many different types and grades of farmland. They are accurate in that the Treasure Valley of southwest Idaho contains some of the most valuable land in the state, while dryland in northern Idaho generally sells for less than irrigated acreage.

More noteworthy are the percentage declines in land values from the peak years. Respondents estimated land had declined in value an average of 44 percent in the 1980s. The biggest decline, 48 percent, occurred in south-central Idaho, which has much high-lift irrigation. Southeastern Idaho had the lowest decline, 40 percent. The level of decline was positively correlated with debt/asset ratio. Those with debts less than 40 percent of assets thought land values had fallen 40 percent, while those with debt/asset ratios above 70 percent perceived a 48 percent drop.

While this was a subjective assessment of land values by 1,266 farmers, the authors believe the figures are indicative of the current land market. Many of the current land value estimates were based on lender appraisals conducted for purposes of servicing loans. Thus, these values represent the price that could actually be obtained in a soft land market saturated with sellers.

Table 13. Farm land values estimated by survey respondents.

	Highest value	Current value	Percent decline in value
	(per acre)	(per acre)	
North	\$1,446	\$ 799	44.7
Southwest	2,651	1,502	43.3
Southcentral	2,097	1,097	47.7
Southeast	1,636	990	39.5
Statewide	1,967	1,111	43.5

Table 14. Percentage decline in average Idaho farm land values — other surveys.

	USDA ¹	Federal Land Bank ²
1982	- 7.3	- 1.4
1983	0	- 5.4
1984	- 7.9	- 5.7
1985	-13.9	-14.4
1982-1985	-26.5	-24.7

¹Change in USDA index of values per acre of land and buildings. Economic Research Service. 1986. Agricultural resources: Outlook and situation summary. U.S. Dept. of Ag., Washington, D.C.

²Farm Credit Services. 1986. Twelfth farm credit district land value survey. Spokane, WA.

The results of surveys by USDA and the Farm Credit Service of Spokane are shown in Table 14. They state land value declines of 27 percent and 25 percent for the period 1982 to 1985. These surveys document land value declines from reported sales and the experience of FLB officials. To some extent, the USDA and Farm Credit Service surveys lag behind current market conditions. The results of this farmer survey indicate the other two surveys will find further declines in land values in their next measurement.

Farming and Ranching Expectations

Farmers and ranchers were again asked how long they would be able to continue operating if current conditions prevailed. The answers to this qualitative measure of optimism correlate well with farmers' debt/asset ratio categories. The higher the debt/asset ratio, the less optimistic a farmer is likely to be. Still, the largest group — 44 percent — expects to continue operating for 6 years or more (Table 15). In contrast, 21 percent of respondents expect to survive only 1 more year under current conditions. This proportion has risen from 18 percent last year, indicating a slight erosion in farmer confidence. A larger group of 35 percent believe they can last 2 to 5 years longer. This implies 55 percent of Idaho farmers expect to be leaving farming within 5 years if current conditions persist. This compares with 40 percent who appear to be in serious to extreme financial difficulty based on debt/asset ratio.

Respondents who answered 5 years or less were asked their reasons for ceasing operations. The answers in Table 15 show low commodity prices, lack of operating credit and lack of equity as the most common reasons. Retirement was cited by 18 percent. Early retirement due to financial conditions could account for some responses since over half of those citing retirement were under 65 years of age. Only 6 percent predicted off-farm employment opportunities would lure them from farming. Liquidation of the farm was cited by 20 percent, foreclosure by 13 percent and bankruptcy by 6 percent of those leaving agriculture.

Table 15. Farming expectations of Idaho farmers and ranchers. (How long will you be able to continue farming or ranching?)

Years	Number	Percent	
		1985	1986
1	355	17.7	21.0
2-5	599	35.9	35.4
6 or More	738	46.4	43.6
	1,692	100.0	100.0

If 5 years or less, what will cause you to cease operating?¹

Other reasons (e.g., low commodity prices)	35.3%
Lack of operating credit	33.8%
Lack of equity	23.5%
Liquidation	20.0%
Retirement	17.9%
Foreclosure	12.5%
Bankruptcy	6.1%
Off-farm employment	5.6%

¹Farmers could list more than one reason, so percentages do not total 100.

Of the 1,692 total respondents to the question, 271 — or 16 percent — said they would be leaving farming within 5 years due to liquidations, foreclosures and/or bankruptcy. This correlates well with the 17 percent of farmers in the worst debt/asset ratio category.

Where Is the Financial Stress?

Age of Producer

Last year's survey verified the expectation that younger farmers have had less time to build equity in their operation and therefore have more debt compared to assets than established operations. That survey also demonstrated that highly leveraged farmers who cannot service debt from cash income will lose equity.

Fig. 3 illustrates that this year's survey also bears out both these facts. Average debt/asset ratio decreased substantially as age increased. Producers over 65 years of age had debt/asset ratios averaging 17 percent, while those under 35 years of age averaged a 60 percent debt/asset ratio.

In addition, the younger producers had the greatest erosion in farm balance sheets over the last year. The two youngest age categories had increases in debt/asset ratio of 7 percent and 9 percent respectively, while the two oldest groups had increases of less than 2 percent each. Again, this shows the difficulty of maintaining payments on larger debt loads from current returns to farm land.

Table 16 provides further details on farmers by age and debt/asset category. Younger farmers and ranchers tend to be the most distressed farmers. Of farmers under age 35, 33 percent have debt/asset ratios above 70 percent. Only 4.3 percent of farmers over 65 years old are in this category. The implications for a smooth transition to a new generation of Idaho farmers are disturbing.

Size of Operation

Farm size was again found to be positively correlated with debt/asset ratio. Operators of the smallest farms rely on off-farm employment for income and had debt/asset ratios averaging 9 percent (Fig. 4). Producers selling \$2,500 to \$40,000 of farm products annually had a 28 percent debt/asset ratio. Debt/asset ratios continue to increase with size. The average of all commercial-sized farms with gross sales exceeding \$40,000 was nearly 49 percent. In fact, farmers with gross sales of \$200,000 or greater had the highest debt/asset ratios at 55 percent. Many of the largest operations achieved their size by leveraging their assets with increased debt.

Table 16. Financial stress among Idaho farmers and ranchers by age.

Age	No apparent problems	Serious financial problems	Extreme financial problems
	Debt/asset under 40%	Debt/asset 40-70%	Debt/asset over 70%
Under 35 years	38.9	28.2	32.9
35 - 49 years	47.4	28.5	24.1
50 - 64 years	71.0	17.9	11.1
65 +	82.7	13.0	4.3
State average	60.3	22.3	17.4

If the largest operations are among the most efficient, they may be able to manage with a higher debt/asset ratio. A look at the relationship between loan delinquencies and farm size supports this notion. Operators selling over \$400,000 in farm commodities annually had significantly lower delinquency rates for both operating and longer term debt. Operators in the \$100,000 to \$200,000 sales category had higher delinquency rates. These medium-sized fulltime farmers have neither the benefits of large-scale operations nor off-farm income to service debt. The smallest farms had lower than average delinquency rates because of their off-farm income.

Farm Enterprise

Comparisons among farm types are difficult to make for two reasons. Classifying farms by crop can be misleading for an agriculture as diverse as Idaho's. Second, the small numbers of farmers of certain types answering a particular question impair the statistical reliability of the results. Nevertheless, some inferences can be made for the major categories.

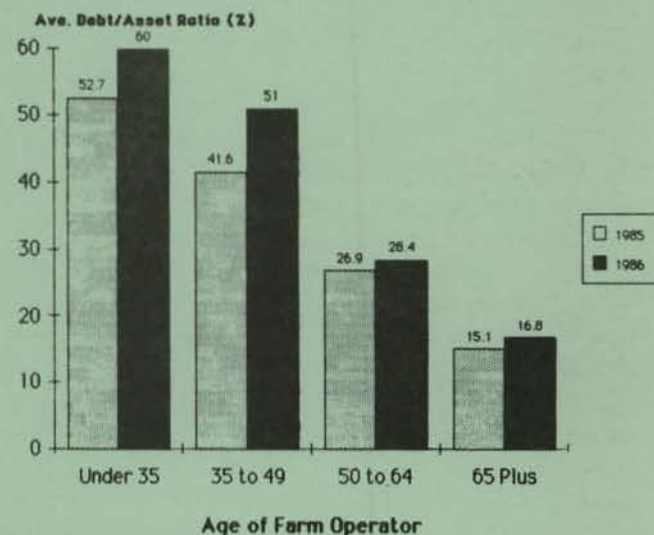


Fig. 3. Debt/asset ratios by age.

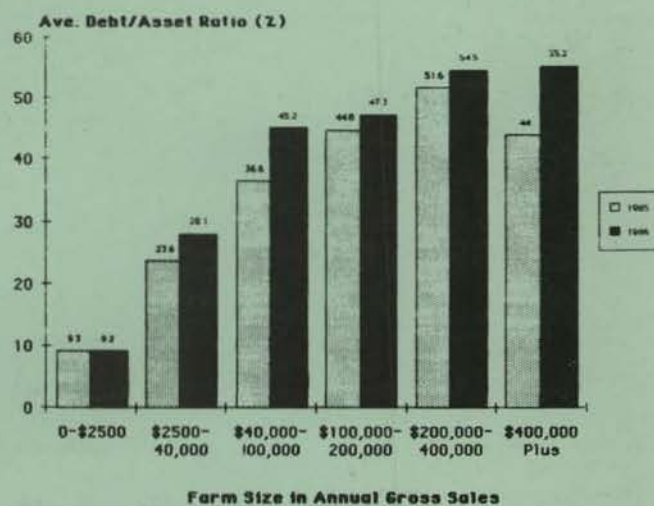


Fig. 4. 1986 debt/asset ratios by farm size.

Cattle operations are the financially healthiest group. Their debt/asset ratio is 29 percent compared to the 38.6 percent state average. Loans to cattle operators have the lowest delinquency rates for both operating and longer term debt.

Cash grain farmers tend to follow state averages, although their operating loan delinquency is higher than average. Potato, sugarbeet and dairy farms all have higher than average debt/asset ratios. These types of operations are capital intensive, however, and most have marketing contracts that reduce income risk. With the exception of potato operating loans, delinquency rates for loans to these groups are average or lower.

Geographic Region

Regional debt/asset ratios are shown in Fig. 5. The same general relationships found in 1985 still hold. Northern Idaho is in somewhat better shape with a 29 percent debt/asset ratio, while southcentral Idaho has the greatest agricultural problems with its high 46 percent average. All regions except the north showed some financial deterioration. Northern Idaho had no significant change in debt/asset ratio.

Table 3 provides additional detail on the number of financial stress categories. In northern Idaho, 26.5 percent of farmers are in serious or extreme financial stress, while 47.5 percent of southcentral operators are in one of the two stressed categories. However, loan delinquency rates tell a somewhat different story. Southcentral farmers have below average delinquency rates: 29 percent of their operating loans are delinquent, compared to 35 percent statewide. Instead, the southeast region is the one with significantly higher delinquency rates of 26 percent for longer-term loans and 43 percent for operating loans. High delinquencies for operating loans are no doubt potato-related.

The Effect of Nonfarm Income

One way to improve cash flow and farm family income is to find off-farm employment. This does not necessarily mean off-farm employment of the farm operator; income could be provided by the spouse, children or other family members. The off-farm work could also be part-time or seasonal.

Off-farm employment will be a key to sustaining small-to-medium-sized farms in the future. Conversely, the pres-

ence of off-farm employment opportunities is important to maintaining a system of family farms, small communities and a rural lifestyle in Idaho. The fact that only 6 percent of those expecting to leave farming cite other employment opportunities as a reason shows that off-farm opportunities are very limited in the rural economy of Idaho.

Farmers and ranchers were also asked to specify the range of their family's nonfarm income. Nearly half of the respondents reported earning less than \$5,000 off the farm; 61 percent earned less than \$10,000 (Table 17). About a fifth of the respondents made more than \$20,000 off the farm. This proportion runs over 25 percent in northern and southeastern Idaho and only 15 percent in southcentral Idaho. Naturally most of these operate small farms of less than \$40,000 in gross sales. Operators with sizable off-farm income also tend to be more optimistic about remaining in farming. Generally, the larger the farm, the lower the nonfarm income.

Policy Alternatives

Two survey questions sought the advice of farmers and ranchers on proper policy responses to financial problems. First, producers were asked if additional government credit programs were needed. The response was 32 percent "yes" and 68 percent "no". Last year 38 percent responded "yes". Comments in telephone interviews suggested dissatisfaction with existing federal programs.

Next, respondent farmers and ranchers were asked how acceptable they would find various programs if they were provided. Table 18 shows responses to these alternatives. Farmers in the \$100,000 to \$400,000 range of annual gross sales, potato and dairy operators and younger farms generally had higher than average acceptance rates for program alternatives. Individual financial management assistance was the most popular alternative with 63 percent acceptance. It was particularly supported by dairy, potato and cash grain operators. A state farm foreclosure review board was next with 55 percent, though its popularity has

Table 17. Non-farm income earned by Idaho farmer/rancher families by region.

	\$0- \$4,999	\$5,000- \$9,999	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000+
	(%)	(%)	(%)	(%)	(%)
North	41.4	10.2	13.3	8.6	26.5
Southwest	49.9	12.4	10.8	7.9	19.0
Southcentral	53.0	15.3	10.0	6.9	14.8
Southeast	46.8	12.2	8.3	7.5	25.2
Total	48.2	12.7	10.2	7.6	21.3

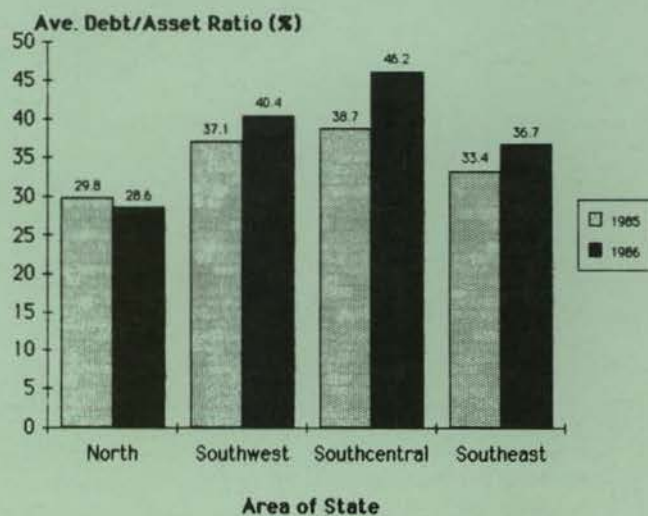


Fig. 5. Debt/asset ratios by area of state.

diminished somewhat from last year. Potato, dairy and sheep farmers showed above average support. An interest rate buy-down program on operating loans was acceptable to 52 percent. This is consistent with last year's finding that reducing interest rates on loans was highly acceptable.

Subsidized credit for beginning farmers received the support of 47.4 percent of producers, nearly the same as the previous year. Dairy and potato farmers liked this alternative more, while hay and silage and beet growers liked it least. A moratorium on farm foreclosures was acceptable to only 38 percent and rejected by 45 percent.

The last option was the least acceptable. "Third party assumes ownership, operator becomes tenant" was designed to represent an extreme outcome of the current farm crisis. Other changes in ownership forms such as limited partnerships, shared-appreciation mortgages or

sale-leaseback would likely have been more acceptable. Although only 30 percent find tenant farming acceptable and a majority of farmers rejected it, the acceptance rate did increase slightly from 27 percent last year. The alternative is more acceptable to crop farmers than livestock operators.

Comparison to Other States

Comparing Idaho's survey results with those of other states is helpful, but care must be taken in the interpretation. The type and timing of surveys, wording of questions, respondent types and response rates all affect survey results. Selected values for comparison from representative state studies are shown in Table 19. Idaho's 71 percent response rate implies the standard deviation (2%) for confidence intervals would be smaller than for other states with lower response.

Montana

Montana's farmers and ranchers maintained approximately the same debt/asset ratio in 1985 as they had in 1984. However, assets declined 19 percent in value and debts 20 percent. Adopting a greater downward adjustment in land prices would further reduce asset values and increase debt/asset ratios. Montana analysts thought the similar reductions in asset values and debt was the result of asset liquidation to reduce debt load. Idaho's average asset values were constant, while average debt increased. This could be the result of frost damage and low prices for the 1985 crops.

Montana's delinquency rate on non-real estate loans increased 2 percentage points from 1984 to 1985. Idaho's delinquency rate for operating loan interest and principal increased from 12 to 21 percent in 1986, or 9 percentage points. Using the indicator of loan delinquencies, the situation deteriorated in both states in 1985.

Table 18. Acceptability of additional credit programs by Idaho farmers and ranchers.

Program	Are additional government credit programs needed? Yes — 32.4% No — 67.6%		
	If additional programs are needed, how acceptable would you find each of the following?		
	Acceptable	Not acceptable	No opinion
	(%)	(%)	(%)
Subsidized credit for beginning farmers	47.4	33.6	19.0
Interest rate buy-down on operating loans	51.9	33.2	14.9
Moratorium on farm foreclosures	37.7	44.6	17.7
State farm foreclosure review board	55.0	29.0	16.0
Individual financial management assistance	63.1	24.6	12.3
Third party assumes ownership, operator becomes tenant	30.1	52.1	17.8

Table 19. Comparison of financial indicators for Idaho and other states, post-1985 crop year.

	Sample response rate	Average debt to asset ratio	Loans delinquent on principal and interest		Proportion in debt/asset categories		
			Operating	Real estate	Less than 40%	40-70%	Greater than 70%
			(%)	(%)	(%)	(%)	(%)
Idaho	71	38.6	21.1	14.6 ¹	60.4	22.2	17.4
Montana	53	27.8	32.7	24.1	70.6	21.7	7.7
Illinois	35	30.8	14.3 ²	11.6	70.6	18.2	11.2
Iowa	35	36.9	14.5 ²	11.9	61.7	22.1	16.2
Kansas	27	31.8	8.7 ²	7.9	69.2	18.3	12.5
Michigan	27	28.6	12.6 ²	6.7	76.9	17.6	5.5
Missouri	—	24.7	9.9 ²	10.0	78.8	14.1	7.1
Nebraska	34	34.3	9.7 ²	8.2	63.2	23.0	13.8
N. Dakota	49	34.7	12.5 ²	11.6	62.2	23.1	14.7
Ohio	25	21.2	5.1 ²	4.3	82.8	12.6	4.6
Wisconsin	27	26.2	12.3 ²	3.2	74.7	18.7	6.6
N. Carolina	—	20.0	18.5 ³	17.0	80.8	11.4	7.8
Alabama	54	24.4	16.5 ⁴	16.5 ⁴	73.7	19.0	7.3

¹Long-term and intermediate-term loans.

²Non-real estate loans.

³Average for crops and livestock loans of delinquent on principal and interest.

⁴Number reported for Alabama was composite of all loans.

Nine Midwest States²

Nine midwestern states used comparable farm finance surveys for 1985. Debt/asset ratios for all farms varied from a low of 21 percent in Ohio to a high of 37 percent in Iowa. The average for the nine state participants was 25 percent debt/asset ratio. Numbers of producers with debt/asset ratio above 40 percent ranged from a low of 17 percent in Ohio to highs of 38.3, 37.8 and 36.8 percent in Iowa, North Dakota and Nebraska. Over 39 percent of Idaho survey respondents had debt/asset ratios over 40 percent. The Midwest states reported 3 percent of their respondents had debts exceeding assets. Idaho had 8.4 percent. Older producers in the Midwest tended to have lower debt levels or were without debt. Idaho's sample population also showed older producers with less debt.

Delinquency rates on principal and interest for real estate loans varied from a low of 3.2 percent in Wisconsin to a high of 11.9 percent in Iowa (Missouri Agricultural Finance Survey, 1985). Idaho's principal and interest delinquency rate on long and intermediate term loans was 14.6 percent. This value is not directly comparable with the midwestern delinquency rates.

For non-real estate (intermediate and operating) loans, delinquencies on principal and interest were lowest at 5.1 percent in Ohio and highest at 14.5 percent in Iowa. Idaho's delinquency rate for principal and interest on operating loans was 21.1 percent. The frost, price and insect problems probably helped to increase Idaho's delinquency rate. Also operating loans for potatoes held in storage often are temporarily delinquent until the potatoes are marketed in the spring.

Although there is wide variation among states, the debt levels were generally lower in the Midwest than in Idaho. This could be because of differences in sampling procedures, because the Midwest has made some of the adjustments Idaho has yet to make or because the newer production areas in Idaho have heavier debt loads due to development costs as well as larger cash operating costs.

²Illinois, Iowa, Kansas, Michigan, Missouri, Nebraska, North Dakota, Ohio and Wisconsin.

North Carolina

A sample of North Carolina producers showed the average debt/asset ratio to be 20 percent. In fact, 38 percent of the respondents were debt free. For real estate loans, 83 percent were current on principal and interest and 86 percent current on interest, implying 17 percent of real estate loans were delinquent on principal or principal and interest. The delinquency rate for operating loan principal and interest was 16 percent for crop, 21 percent for livestock. The average debt/asset ratios for North Carolina producers was 19 points lower than for Idaho producers. Not surprisingly, 20 percent more North Carolina producers had less than 40 percent debt/asset ratios, and 10 percent fewer had debt/asset ratios over 70 percent. Overall, North Carolina producers appear to be in better financial condition than Idaho farmers and ranchers and are experiencing less financial stress.

Alabama

Alabama's study had values similar to North Carolina: an average debt/asset ratio of 24 percent, 45 percent debt free and 7 percent in the extreme financial stress categories. Obviously, Alabama's agriculture is very different from Idaho's and not directly comparable, but stress does exist for 27 percent of the producers.

Some states appear to be under more financial stress than others. Although Idaho has the highest debt/asset ratio of the studies reviewed, the ratios in Iowa, Nebraska and North Dakota also are quite high.³ Comparing the percentages with debt/asset ratios over 70 percent, Iowa appears to be in as much difficulty as Idaho. Illinois, Kansas, Nebraska and North Dakota also have high proportions of producers in extreme financial stress. Loan delinquency rates tend to reemphasize that fact. Generally, the more rural states are finding higher debt/asset ratios. This may be a result of the lack of non-farm employment opportunities. People do not have alternative employment to carry them through the farm crisis. The role of non-farm employment development may be significant for the future stability of farms and rural communities.

³Since Idaho's sample of farms is biased toward commercial size farms, the debt/asset ratios and proportion of producers in various categories may be somewhat overstated. Most other surveys have lower response rates and therefore would be expected to have greater standard deviations in mean estimations.

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Dear Reporter:

Farm and ranch finances continues to be a much discussed subject as the 1986 season approaches. Specific information relative to agricultural credit problems in Idaho was gathered in 1985. In an effort to update the 1985 data we are conducting this follow-up survey. Your cooperation in answering the following questions will help to pinpoint current financial problems. Your ideas will be used to develop policy alternatives.

Your report will be kept confidential and used only in combination with other reports. Please take a few minutes to complete this questionnaire. If you have any questions, please call me collect at 334-1507.

Sincerely,
R.C. Max
Richard C. Max
Statistician in Charge

AGRICULTURAL CREDIT SURVEY - APRIL 1986

1. During 1985, what was the total acres you operated? (Include acres owned and rented from others, but exclude land rented to others.) Total acres
2. During 1985, what was the gross value of total sales including marketing contracts and government payments for the following products from this farm? (Include marketing charges, not net income.)

DOLLARS		DOLLARS	
a. Cash grains, dry beans	<input type="text" value="\$001"/>	f. Fruits	<input type="text" value="\$006"/>
b. Potatoes	<input type="text" value="\$002"/>	g. Hay, forage, silage, seeds	<input type="text" value="\$007"/>
c. Sugarbeets	<input type="text" value="\$003"/>	h. Dairy	<input type="text" value="\$008"/>
d. Cattle & Calves	<input type="text" value="\$004"/>	i. Government Payments	<input type="text" value="\$009"/>
e. Sheep	<input type="text" value="\$005"/>	j. All other	<input type="text" value="\$010"/>
			<input type="text" value="OFFICE USE"/>
			<input type="text" value="920"/>

3. LONG TERM AND INTERMEDIATE LOANS (CIRCLE YES OR NO FOR EACH LENDER)
(Includes real estate, machinery and breeding livestock)

	Commercial Bank	Insurance Company	Input Supplier	PCA	Federal Land Bank	FmHA	Private Individual	Other
a. Do you have a current loan?	020	021	022	023	024	025	026	027
	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
b. If yes, are principal and interest payments current?	030	031	032	033	034	035	036	037
	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
c. If principal and interest are not current, are you current with interest only?	040	041	042	043	044	045	046	047
	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N

4. OPERATING LOANS (CIRCLE YES OR NO FOR EACH LENDER)

	050	051	052	053	054	055	056	057
a. Do you have a 1985 or earlier operating loan?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
b. If yes, are principal and interest payments current?	060	061	062	063	064	065	066	067
	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
c. If principal and interest are not current, are you current with interest only?	070	071	072	073	074	075	076	077
	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
d. Do you have an operating loan for 1986?	930	931	932	933	934	935	936	937
	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N

- e. Will you be using an operating loan in 1986? YES NO

5. Have you been turned down this year when applying for a new or additions to existing loans from any of the following lenders? (Circle yes or no for each lender)

	Did you Apply?	Office Use	Were you Turned Down?	Office Use
Commercial Banks	Y N	100	Y N	200
Insurance Companies	Y N	101	Y N	201
Input Suppliers	Y N	102	Y N	202
PCA	Y N	103	Y N	203
Federal Land Bank	Y N	104	Y N	204
FmHA	Y N	105	Y N	205
Private Individual	Y N	106	Y N	206
Other	Y N	107	Y N	207

6. What was your land worth at its highest value? per acre
 What could you sell your land for today? per acre

7. Farm/Ranch Financial Balance Sheet Questions?

a. What is the current value of your total farm/ranch assets? \$

b. What is your total farm/ranch long term and intermediate debt? \$

c. What is your total farm/ranch operating debt? \$

8. Assuming current trends in income and expenses, how long will you be able to continue farming/ranching? (Place an X in the appropriate box.)

1 year 2-5 years 6 years +

If 5 years or less, what will cause you to cease operating? (Check all appropriate boxes.)

Lack of equity lack of operating credit Retirement Off-farm employment

Liquidation Foreclosure Bankruptcy (Chapter 7)

Other (Please specify) _____

9. Are additional government credit programs needed? YES NO

10. If additional credit programs are offered, how acceptable would you find each of the following? (Circle your answer for each statement)

	Acceptable	Not Acceptable	No Opinion	Office Use
a. Beginning farmer loan program	A	NA	N	400
b. Interest rate buy down on operating loans	A	NA	N	401
c. Moratorium on farm foreclosures .	A	NA	N	402
d. State farm foreclosure review board	A	NA	N	403
e. Individual financial management assistance	A	NA	N	404
f. Third party assumes land ownership, operator becomes tenant	A	NA	N	407
g. Other suggestions (Please specify) _____				

11. What is your age? (Place an X in box for your age group.)

Under 35 35 - 49 50-64 65+

12. If you or members of your family received non-farm income, what was that income in 1985 from off-farm employment and investments? (Place an X in box for non-farm income range)

\$0- \$4,999 \$5,000- \$9,999 \$10,000- \$14,999 \$15,000- \$19,999 \$20,000 and over

Thank you for your help. If you would like a copy of the survey results, please check this box.



SERVING THE STATE

Teaching . . . Research . . . Service . . . this is the three-fold charge of the College of Agriculture at your state Land-Grant institution, the University of Idaho. To fulfill this charge, the College extends its faculty and resources to all parts of the state.

Service . . . The Cooperative Extension Service has offices in 42 of Idaho's 44 counties under the leadership of men and women specially trained to work with agriculture, home economics and youth. The educational programs of these College of Agriculture faculty members are supported cooperatively by county, state and federal funding.

Research . . . Agricultural Research scientists are located at the campus in Moscow, at Research and Extension Centers near Aberdeen, Caldwell, Parma, Tetonian and Twin Falls and at the U. S. Sheep Experiment Station, Dubois and the USDA/ARS Soil and Water Laboratory at Kimberly. Their work includes research on every major agricultural program in Idaho and on economic activities that apply to the state as a whole.

Teaching . . . Centers of College of Agriculture teaching are the University classrooms and laboratories where agriculture students can earn bachelor of science degrees in any of 20 major fields, or work for master's and Ph.D. degrees in their specialties. And beyond these are the variety of workshops and training sessions developed throughout the state for adults and youth by College of Agriculture faculty.

Issued in furtherance of cooperative extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, H. R. Guenther, Director of Cooperative Extension Service, University of Idaho, Moscow, Idaho 83843. We offer our programs and facilities to all people without regard to race, creed, color, sex or national origin.

ERRATA

Tables 3, 7, 8 and 9 on pages 8, 9 and 10 of Extension Bulletin 663, "The Financial Condition of Idaho Farmers: Deterioration in 1986," should be replaced with the tables that follow. Column headings in Table 3 were in error, and tables 7, 8 and 9 contained an error in barley yield that underestimates revenue in the southeast region. Corrected barley yield values also changed the text on page 10. Debt-to-income ratios in southcentral and southeast regions should read 1.93 and 1.40. The text error occurs in the last line of the third paragraph in the first column on page 10.

Table 3. Financial stress in Idaho farmers by debt/asset ratio.

Region	No apparent problems		Serious financial problems		Extreme financial problems	
	Debt/asset under 40%		Debt/asset 40-70%		Debt/asset over 70%	
	1985	1986	1985	1986	1985	1986
North	72.2	73.5	19.4	15.6	8.4	10.9
Southwest	65.4	58.3	22.3	23.0	12.3	18.7
Southcentral	58.2	52.5	29.7	23.9	12.1	23.6
Southeast	65.3	61.3	24.7	23.5	10.0	15.2
State average	64.5	60.4	24.7	22.2	10.8	17.4

Table 7. Crop yields per acre for rotations in four Idaho regions.*

Crops	North	Southwest	Southcentral	Southeast
Wheat, bu	72	103	82	115
Peas, cwt	17	—	—	—
Alfalfa, tons	—	5	5.5	5
Comm beans, cwt	—	—	22	—
Sugarbeets, tons	—	—	25	23
Potatoes, cwt	—	350	—	275
Barley, bu	—	—	—	92
Corn seed, bu	—	19	—	—

*Yields are reported only for crops in rotations used for this study.

Table 8. Cash flow budgets for typical farms by region.

	North	Southwest	Southcentral	Southeast
Acreage	1,000	480	320	600
Total receipts	\$199,063.75	\$372,381.20	\$146,964.89	\$240,871.25
Total variable operating expenses	73,313.75	191,632.88	55,644.21	130,500.51
Total fixed operating expenses	30,654.88	43,656.20	24,391.00	44,855.94
Family living expenses	18,591.00	15,817.00	15,386.00	17,126.00
Operating debt and interest	15,433.75	35,929.98	52,473.14	43,109.82
Intermediate and long-term debt and interest	6,936.00	9,384.32	14,878.42	14,046.75
Total cash outflow	144,929.37	296,420.38	162,772.77	249,639.02
Cash available	54,134.38	75,960.82	-15,807.89	-8,767.77

Table 9. Debt burdens in each region.

	Debts	Debt-asset ratio	Debt payments	Debt-income ratio	Break-even debt-asset ratio
North	\$ 63,467	.23	\$22,368	.55	.27
Southwest	99,068	.37	45,313	.58	.46
Southcentral	153,128	.45	67,351	1.93	.15
Southeast	138,929	.39	57,155	1.40	.14

