Bulletin No. 646

The Financial Condition of Idaho Farmers: Signs of Stress in 1985

John V. Evans, Governor
Office of the Governor
State of Idaho, Boise

in cooperation with

Cooperative Extension Service
University of Idaho
College of Agriculture

Contents

Executive Summary

A random sample of 2,500 Idaho farmers and ranchers was surveyed by the Crop and Livestock Reporting Service in March 1985. The 1,673 usable responses were analyzed by agricultural economists from the University of Idaho Cooperative Extension Service and the Office of the Governor, State of Idaho.

While Idaho has not yet witnessed the degree of farm liquidations and social upheaval prevalent in the Midwest, the survey revealed definite signs of financial stress in Idaho's agriculture. Loan delinquency rates, debt-to-asset ratios and farming expectations were the primary indicators.

About 12 percent of real estate loans and 24 percent of operating loans are delinquent on principal payments. Both are well above normal levels. As should be expected of the lender of last resort, Farmers Home Administration had the highest delinquency rates with 30.8 and 46.1 percent for real estate and operating loans, respectively. Federal Land Banks, commercial banks and individual lenders had lower real estate delinquency rates of 6.7 to 8.4 percent. For operating loans, commercial banks had a 19.1 percent delinquency rate, while Production Credit Associations had a 25.0 percent rate. About 30 percent of all applications for new or expanded agricultural loans were denied.

Debt/asset ratios averaged 34.1 percent for Idaho farmers and ranchers as compared to a recent national estimate of 20.8 percent. Nearly two-thirds, or 64.5 percent, of Idaho operators have no apparent financial problems. This group has debt/asset ratios below 40 percent. At the other extreme, 10.8 percent of farmers have debt/asset ratios exceeding 70 percent, which indicates severe financial stress. Most farmers in this group will lose equity every year they remain in farming and will be hard pressed to survive 2 more years under current economic conditions.

A middle group of 24.7 percent of farmers was found to have debt/asset ratios between 40 and 70 percent. Operators in this category have serious financial problems but can probably survive several more years of current conditions.

In general, the debt/asset ratio declines with the age of the farm operator. Farmers under age 35 have a 52.7 percent average debt/asset ratio. Similarly, debt/asset ratios tend to increase with farm size. Small farms tend to supplement their income with off-farm earnings. Regional differences are relatively minor, but northern Idaho is in somewhat better condition, while southcentral Idaho appears to be suffering the most. Among types of farm operations, dairies, forage producers and cash grain growers seem to be most stressed.

The survey also asked, "How long will you be able to continue farming or ranching?" Nearly 18 percent responded 1 more year. An additional 35.9 percent expected to last 2 to 5 years. The largest group, 38.7 percent, expected to continue for 10 years or longer. These responses were strongly correlated with each farmer's debt/asset ratio. Thus, farming expectations are somewhat more pessimistic but largely in line with the debt/asset categories.

Finally, operators were asked their opinion of policy options to remedy the financial stress problem. A 62.1 percent majority felt no additional government credit programs were needed. When asked about specific policy options, however, three ideas received support. They were (1) to reduce interest rates on outstanding loans, (2) individual financial assistance and (3) a state farm foreclosure review board. A beginning farmer loan program received some support as well.

In summary, the next several years will witness substantial change in Idaho agriculture. The state is likely to lose 10 percent or more of its 24,600 farmers. There will be considerable social and human costs to this restructuring. The state is largely in the position of treating symptoms because solutions lie at the national policy level. Nevertheless, the state should do all it can to enable Idaho's farmers to survive and to ease the transition of those operators who cannot.

About the Authors — Neil L. Meyer is an Extension agricultural economist in the University of Idaho Department of Agricultural Economics in Moscow. Richard L. Gardner is an agricultural economist in the Division of Financial Management for the Office of the Governor, State of Idaho, in Boise.

JOHN V. EVANS
GOVERNOR

OFFICE OF THE GOVERNOR
STATE CAPITOL
BOISE 83720

May 1985

To the People of Idaho:

Agriculture is Idaho's number one industry. It generates in excess of two billion dollars in cash receipts annually and provides a major source of employment both on the farm and in associated businesses.

Market conditions have not been kind to farmers and ranchers in the 1980's. When evidence of financial stress began to emerge in other parts of the country, I naturally became concerned about the health of Idaho's agriculture sector.

This concern grew over this past fall and winter. An informal meeting of agricultural lenders demonstrated that hard evidence of farm finances was difficult to acquire. Yet the series of Agricultural Round Tables I held across the state this spring showed that a growing number of farm operations were in financial difficulty and that some were being forced from the land. An accurate picture of Idaho's farm financial health was needed, so I commissioned the Idaho Crop and Livestock Reporting Service to conduct a credit survey.

I would like to thank that agency, as well as the University of Idaho Cooperative Extension Service, for their assistance in this effort. The information contained in this report is not pleasant to contemplate. However, Idaho must face this problem squarely and develop an appropriate policy response. This report is a good starting point.

Sincerely,

JOHN V. EVANS
GOVERNOR

The Financial Condition of Idaho Farmers: Signs of Stress in 1985

Neil L. Meyer and Richard L. Gardner

Introduction

Farmers in the United States are undergoing the greatest period of financial stress since the Depression of the 1930s (Duncan and Drabenstott 1985). The causes of this financial stress are low commodity prices, high interest rates and declining farm asset values.

Underlying these economic facts are several policy decisions and events that weave together to form the current credit crisis. Foremost are macroeconomic policy decisions. Allowing the value of the dollar to float in 1973 created the opportunity for the strong dollar to exist today. The decision to combat inflation by allowing interest rates to fluctuate more freely in 1979 has created the high interest rates of today. Tax policy changes encouraged capital expansion and outside investments in agriculture (Harl 1984; Boehlje 1984). Finally, the expanding of federal expenditures by 42 percent since 1981 through deficit financing is an extremely stimulative fiscal policy (Hoaglund 1984). The largest budget deficits in history have contributed to high interest rates and a strong dollar as foreign capital is lured to the United States.

At the same time that these macroeconomic policies were emerging, farmers were reacting to the boom in farm exports and associated rising prices of the 1970s. First Russia and then China entered world grain markets as major importers. People perceived there was limited land to feed the hungry millions. Secretary of Agriculture Earl Butz encouraged farmers to plant fencerow to fencerow, and they responded. Marginal areas were planted, grasslands uncropped since the Dustbowl were broken out, and new irrigation investments were made.

As expanded acreage, new technologies and improved seed strains increased production, prices of farmland were driven up by the perception of further scarcity, by strong exports and by the use of cropland as an inflation hedge.

New farmers, farmers who expanded operations and those who invested in new machinery and equipment were thus saddled with large debts and interest expenses. In fact, interest payments rose as a percentage of farm production expenses from 3.1 percent in 1950 to 15.7 percent in 1983 (Baker 1984).

Then, financing the budget deficit pushed up interest rates. Foreign investors rushed to purchase U.S. government securities, which bid up the value of the dollar in foreign exchange. The resulting strength of the dollar priced U.S. goods less competitively in the world market, choking off export sales. Rising Third World debt caused further reduction in U.S. food exports to these markets. Good weather added to bulging granaries in 1980 and 1981. Crop prices declined because of this abundance. Farmers became caught between low prices and high interest costs. Excess agricultural production capacity had been created with high debt service requirements, largely as a result of the events and policy decisions just described.

At the national level, the evidence of this financial stress is well documented. The most common yardstick for measuring financial stress is the ratio of debts to assets. This ratio has increased from a national average of 9.2 percent in 1950 to 16.3 percent in 1980 and to 20.8 percent in 1983 (see Appendix 1).

Because of the usually high capital requirements of agriculture, the variability in income from year to year and the low returns to land investments relative to interest costs, the debt/assets ratio must generally be low in order to generate enough income to service the debt. The average annual return to farm assets has decreased over the years from 7.5 percent in the 1950s, to 5.0 percent in the 1960s, to 4.5 percent in the 1970s and less than 3.0 percent in the 1980s (Bullock 1985).

These low rates of return were endurable when interest rates were also low, but now interest payments on a real estate loan far exceed income from that land. For instance, suppose the interest on a cropland loan is 12 percent, but it generates only 3 percent of its value in annual income. Then the farmer needs to own three additional acres to provide the income needed to pay the interest on each debt-financed acre. To repay loan principal requires even more income.

Farm finance experts suggest that farmers with debt/asset ratios exceeding 40 percent are in serious financial trouble. They may be able to survive several more years like those of the recent past without going bankrupt, but their future in farming is very uncertain (USDA 1985). Those with debt/asset ratios exceeding 70 percent are in extreme financial stress. These farms probably will not survive 2 more years of farming under current conditions (USDA 1985). Of course, debt/asset ratios exceeding 100 percent mean the farmer is technically insolvent or bankrupt.

As Table 1 shows, 9.5 percent of U.S. farmers are estimated to have debt/asset ratios exceeding 70 percent. An additional 19.1 percent of producers have debt/asset ratios between 40 and 70 percent. Nationally, these two groups have nearly doubled in size in the last year from 16.6 to 28.6 percent of producers. Declining land values are a major cause of increasing debt/asset ratios. A 1 percent decline in land value causes an increase in debt/asset ratio of .64 to .75 percent (USDA 1985).

While this type of analysis is available at the national level, information about the financial condition of Idaho farmers is scarce. There has been a general feeling that Idaho was not suffering as badly as states in the Midwest because of our agricultural diversity and the fact that land prices did not rise as high in Idaho during the 1970s. There have been no hard data, however, to support this hypothesis. The purpose of this farm survey was to secure a financial profile of Idaho farmers and ranchers. Specifically, answers were sought to the questions listed in the next section.

Table 1. Current financial stress in U.S. agriculture.

Status	Jan. 1, 1984		Jan. 1, 1985*	
	Number of farms	Proportion of all farms	Estimated number of farms	Proportion of all farms
		(%)		(%)
Technically insolvent (debt/asset ratio over 100%)	70,000	3.3	98,000	4.5
Extreme financial problems (debt/asset ratio of 70 to 100%)	73,000	3.3	109,000	5.0
Serious financial problems (debt/asset ratio of 40 to 70%)	220,000	10.0	417,000	19.1
No apparent financial problems (debt/asset ratios under 40%)	1,822,800	83.4	1,561,800	71.4
	2,185,800		2,185,800	100.0

*Projected from 1984 figures based on a continuation of 1983 economic conditions and assuming a further 5 percent national average decline in farmland prices in 1984.

Source: Economic Research Service. 1985. The Current Financial Condition of Farmers and Farm Leaders. Ag. Inf. Bull. No. 490. USDA, Washington, D.C.

Objectives

1. Are Idaho farmers/ranchers suffering as badly as those in the rest of the nation?
2. How many Idaho farmers are falling behind on their agricultural loans?
3. Is any group of producers in particularly bad financial shape?
   - Is one crop type worse off, and how do livestock operations compare?
   - Are large farms in better condition than small farms?
   - Are younger farmers in trouble?
   - Is one region of the state more stressed than other regions?
4. How many producers are likely to be leaving agriculture in the next several years?
5. What policy tools might be useful in addressing farmer/rancher credit problems?

The Survey

During March 1985, 2,500 questionnaires were mailed to Idaho farmers and ranchers concerning their present financial situation and their opinion of several proposals addressing the financial stress problem. (See Appendix 2 for a copy of the questionnaire.) The 2,500 names were selected in a random manner from a sample, stratified by region, of the Idaho Statistical Reporting Service's farmer/rancher list. The surveys were mailed March 15, 1985. During the last week of March and the first week of April, nonrespondents were interviewed by phone. A total of 1,673 usable questionnaires were generated, providing a 67 percent survey response rate. In some cases, respondents did not answer all questions, which limits the ability to make definitive statements. The nonrespondents must be assumed similar to those who did answer the question. If we can assume the respondents and nonrespondents would have the same proportions, then we would be 95 percent confident that the true proportions are within 2 percent of the point estimate.

Profile of Farmers

Efforts were made to draw a representative sample of Idaho producers. The response to the questions suggest that the sample was typical of the 24,600 farmers and ranchers in Idaho.

Age of Respondents — The greatest percentage of farmers/ranchers, 37.5 percent, was in the 50- to 64-year-old group; 34.7 percent were 35 to 49; 11 percent were under 35; and 16.8 percent were 65 years or older (Fig. 1). These proportions lie within 2 percent of the finding of a similar survey on farm policy questions conducted in May 1984 (Meyer and Konn 1985).

Size of Operation — A good measure of farm size is annual gross sales. Idaho has larger farms and more full-time family farms than the nation as a whole. For instance,

47.6 percent of Idaho survey respondents reported gross sales of less than $40,000 (Fig. 2). Yet this group produced only 5.2 percent of total gross sales. These operations are usually part-time enterprises and are not considered commercial farms. In contrast to Idaho's 47.6 percent, more than 71 percent of the nation's 2.4 million farms have gross sales of less than $40,000 (CBO 1984). Idaho's larger farms may be caused by the high valued crops, such as potatoes, onions, sugarbeets, orchards, seeds and extensive livestock operations, and/or because of the lack of off-farm employment opportunities in much of rural Idaho.

The $40,000 to $199,999 category contains most full-time family farms and included 37.6 percent of the Idaho sample. The largest operations with $200,000 or more in gross sales comprised 14.9 percent of the sample farms but produced 67.5 percent of total gross sales. Average gross sales for all respondents in the sample was $127,501 per farm.

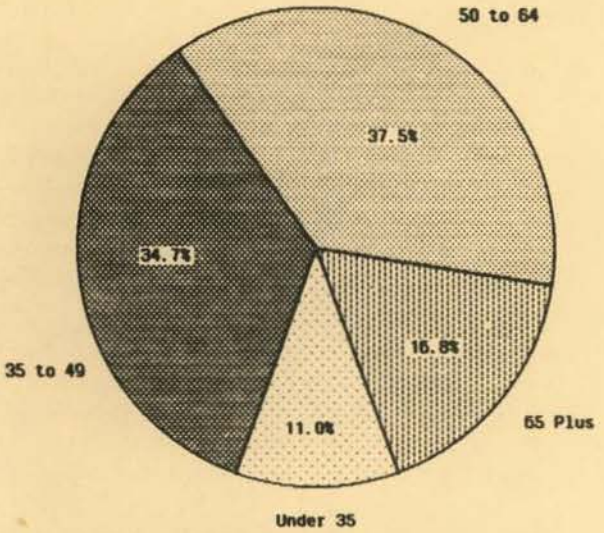

Fig. 1. Age of farm operators by percentage of total.

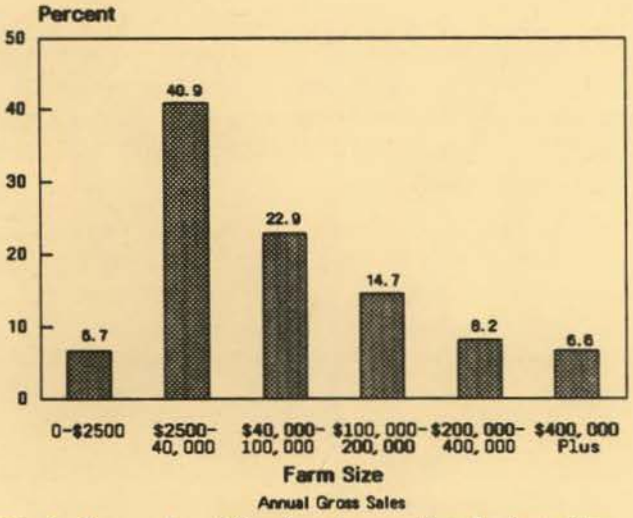

Fig. 2. Gross sales of farm/ranch operations by farm size.

Type of Farm Enterprise — Farms were classified by the crop or livestock category that generated the most farm income (Table 2). Producers receiving the majority of gross sales from cattle were the largest group in the sample. They comprised 30.0 percent of the respondents. The next largest group was cash grain farmers with 28.2 percent of the respondents. Dairymen were third at 11.9 percent, then hay/silage producers at 10.4 percent, potato producers at 7.1 percent, sugarbeet producers at 3.2 percent, sheep producers at 2.1 percent and fruit producers at .9 percent of the respondents. The "all other" category comprised 6.1 percent of the respondents and included growers of vegetables, mint, hops and other specialty crops. These findings are very similar to the proportion of cash receipts reported in 1984 (Idaho Agricultural Statistics 1984).

Region of State — Idaho producers were divided into regional groups based on the crop reporting district in which they lived. Among the survey respondents, 15 percent were from northern Idaho (Table 3). Cash grains produced 53 percent of northern gross sales, followed by cattle with 16 percent.

Table 2. Gross sales by most important source.

Major source of gross sales	Number of farms*	% of sample	Average sales per farm
Cash grains	354	28.2	$100,440
Potatoes	89	7.1	372,187
Sugarbeets	40	3.2	174,122
Cattle	377	30.0	107,931
Sheep	26	2.1	103,286
Fruit	11	.9	325,540
Hay/silage	131	10.4	65,129
Dairy	150	11.9	137,709
All other	78	6.2	113,311
Total sample	1,256**	100.0	$127,501

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

**Number of respondents is less than the total sample because of refusal to answer this question.

Table 3. Geographic distribution of respondents to farm credit survey.

Region	Number respondents	% of total sample
Northern[1]	250	14.9
Southwestern[2]	410	24.5
South Central[3]	414	24.7
Southeastern	599	35.8
	1,673	100.0

[1]Northern Crop Reporting District I includes Boundary, Bonner, Kootenai, Benewah, Shoshone, Clearwater, Nez Perce, Lewis and Idaho counties.

[2]Southwestern Crop Reporting District VII includes Adams, Valley, Washington, Payette, Gem, Boise, Canyon, Ada, Elmore and Owyhee counties.

[3]South Central Crop Reporting District VIII includes Blaine, Camas, Gooding, Lincoln, Jerome, Minidoka, Twin Falls and Cassia counties.

[4]Southeastern Crop Reporting District IX includes Lemhi, Custer, Butte, Clark, Fremont, Jefferson, Madison, Teton, Bonneville, Bingham, Power, Bannock, Caribou, Oneida, Franklin and Bear Lake counties.

Southwestern producers comprised 25 percent of survey respondents. Southwestern Idaho has a diversified agriculture, with cattle providing 27 percent of gross sales. Next in order of contribution to gross sales were dairy, 17 percent; cash grains, 11 percent; fruit, 10 percent; and hay/silage, 10 percent. Fourteen percent of gross sales fell into the "all other" category, reflecting the vegetable, seed and specialty crops grown in southwestern Idaho.

Twenty-five percent of the farmers and ranchers surveyed were from southcentral Idaho. Their most important sources of gross sales were as follows: cattle, 24 percent; cash grains, 21 percent; potatoes, 14 percent; and dairy, 12 percent.

Southeastern producers were 36 percent of the survey respondents. The most important sources of gross sales in the southeast district were respectively: cattle, 27 percent; potatoes and cash grains, each 26 percent; and dairy, 9 percent. The southwestern and southcentral districts have a broader variety of products for their gross sales and are less dependent on a few crops than the northern and southeastern regions.

Status of Agricultural Loans

One good measure of financial stress is the delinquency rate on both operating and real estate loans. Meetings with bankers and members of financial institutions have offered some measure of the ability of farmers to keep up with their loan payments. This survey provides an opportunity to measure a typical cross section of farmers and gives delinquency rates for region, age, enterprise and gross sales, areas that are hard to assess.

Two generalizations are possible. First, delinquencies on short term operating capital tend to be higher than for machinery and real estate loans. Farmers make every effort to stay current in their payments on land which is their means of production. Operating loans are often secured only by the current crop. Second, as farmers fall into financial stress, they will first go delinquent on paying off the loan principal. Some will be able to stay current on interest payments to keep the loan from being classed as nonperforming. Operating loan principal is often not repaid until the crop is marketed.

Real Estate Loans — Seventy-two percent of the survey respondents indicated they were using some type of real estate loan. Stated in another way, as many as 28 percent of farmers own their land free and clear. Table 4 shows the percentage of real estate loans from various sources. Federal Land Banks were the most frequent source of credit, providing 39.8 percent of the real estate loans. Private individuals provided 19.9 percent, while Farmers Home Administration (FmHA) provided 19.5 percent. Commercial banks provided 11.7 percent, and insurance companies provided 4.7 percent of the real estate loans.

The delinquency rate on FmHA loans was 30.8 percent. A high delinquency rate is not surprising because the Farmers Home Administration is mandated to be the lender of last resort and because their loans are often subordinate to other debts.

Other lenders have lower and more manageable delinquency rates. For example, the Federal Land Bank has 6.7 percent, individuals 8.4 percent, and commercial banks 7.1 percent of their real estate loans delinquent. There is speculation that these delinquency rates could increase rapidly if lenders discourage the practice of using operating capital to make real estate loan payments.

Operating Loans — Farmers and ranchers use operating loans to supplement their personal resources for annual production expenses. Only 45 percent or 748 farmers, however, indicated they had operating loans, which is somewhat lower than Colorado's 60 percent (Tinnermeier et al. 1985) or New Mexico's 49 percent (New Mexico Department of Agriculture 1984). It is possible that with the timing of the survey in late March and early April, some farmers did not have their operating loan in hand. They may wait until actually needing capital to set up the loan. Another option for troubled farmers is to do without this year and finance operations by selling stored crops or livestock, and/or by making use of advance diversion payments or CCC crop loans. Slow processing of FmHA loans may also be a factor according to comments received at the Governor's Agricultural Round Table meetings held across the state during 1984-85.

The major source of operating loans for Idaho farmers and ranchers is commercial banks (Table 5), which provid-

Table 4. Status of current real estate loans.

Type of lender	Number with loans in sample	% of loans	% delinquent on principal	% delinquent on principal and interest
Commercial banks	140	11.7	7.1	6.4
Insurance companies	56	4.7	10.7	8.9
Federal Land Banks	477	39.8	6.7	5.7
Farmers Home Administration	234	19.5	30.8	23.1
Private individuals	238	19.9	8.4	7.6
Other	53	4.4	11.3	7.6
	1,198	100.0		

Table 5. Status of current operating loans.

Type of lender	Number with loans in sample	% of loans	% delinquent on principal	% delinquent on principal and interest
Commercial banks	429	57.3	19.1	7.2
Input suppliers	10	1.3	30.0	20.0
Production Credit Associations	184	24.6	25.0	10.3
Farmers Home Administration	76	10.2	46.1	36.8
Private individuals	23	3.1	34.8	21.7
Other	26	3.5	23.1	11.5
	748	100.0		

ed 57 percent of the operating loans. The second most important source of operating credit is Production Credit Associations (PCA), which provides 25 percent of the operating loans. Farmers Home Administration (FmHA) was the third most important credit source, providing 10 percent of the operating loans. Together, these three credit sources provided 92 percent of the operating loans. Input suppliers and private individuals are other sources of operating capital.

Delinquency rates on operating loans were highest for the Farmers Home Administration and lowest for commercial banks. The reported delinquency rate for Farmers Home Administration loans was 46.1 percent. This high rate may come down later in the season when all 1985 operating loan applications have been processed. Respondents indicated 25 percent of the PCA-provided loans were delinquent and 19 percent of the commercial bank-provided loans were delinquent. The PCA delinquency rate has no doubt been pushed up by the approximately 100 farmers who remain delinquent in the wake of the PCA liquidation in southern Idaho.

Availability of Additional Credit — As producers evaluated their production options for the 1985 crop year, one of the factors that affected their opportunities was the availability of additional credit. Producers were asked if they had been turned down for additional credit this year, either in the form of a new loan or expansion of an existing loan. Six hundred and seventeen (37 percent) indicated they had requested additional credit (Table 6). Responses indicate 30 percent of those requesting additional credit were denied additional credit from that source. The survey did not determine whether the requestor obtained credit from an alternative source.

Commercial banks denied more applications for additional loans, but they are the most frequent source of credit for Idaho farmers and ranchers. Their denial rate (21.8 percent) was the lowest of all credit sources. In fact, a Missouri survey of bankers found that 32 percent was considered a "normal" refusal rate in that state (Bevins 1985). Certainly, as commodity prices and asset values have fallen, bankers have been evaluating loans more carefully for both cash flow and collateral.

Production Credit Associations, the second most frequent source of farm credit, have also been careful in approving additional credit for farmers and ranchers. More prudent loan review may be an intentional policy caused by the financial trouble and resulting reorganization of the Federal Intermediate Credit Bank of Spokane. Their denial rate for additional credit was 28.5 percent according to survey respondents.

Farmers Home Administration has a higher rate of additional loan denials at 41.5 percent. This may be caused by limited lending capital or a reluctance to lend more money on very difficult financial situations.

Federal Land Banks turned down 60 percent of the applications for new or expanded credit. Because Federal Land Banks specialize in long term financing, we suspect that the majority of these applications were attempts to refinance operating loans as long term debt. These four lenders — commercial banks, Production Credit Associations, Federal Land Banks and the Farmers Home Administration — supply the major share of farm credit in Idaho.

Demand for additional credit varied among various principal enterprises. It was hypothesized that those in greatest trouble would be denied most frequently. Additional credit for dairymen was most frequently refused. Their requests for additional credit were denied 49 percent of the time. Closely following were the producers of forage products (hay and silage) who were denied additional credit 45 percent of the time. Obviously, dairy and forage producers are interrelated operations on many farms and in many areas.

Next in frequency of credit denials were the cash grain farmers. They experienced denial for 30 percent of their additional credit applications. Cattlemen were very close, experiencing a 29 percent denial rate. This number may be a conservative estimate because many cattlemen do not borrow money until they work their cattle in the spring and, therefore, would not have applied for additional credit in March. Potato growers were the next highest denial rate at 27 percent. Potatoes have been profitable in recent years, but overproduction is expected to drive 1985 crop prices down. Lenders may require potato contracts before giving financing, and a few contracts had not been signed in March. The low denial rate for sugarbeet growers reflects pre-season contracts with processors that lock in profitability. For other crop enterprises, the sample is too small to draw conclusions.

Table 6. Availability of additional credit.

Have you been turned down this year when applying for new or expanded loans?

Type of lender	Loans applied for*	Loans denied	% denied
Commercial banks	308	67	21.8
Insurance companies	7	5	71.4
Input suppliers	3	1	33.3
Production Credit Associations	130	37	28.5
Federal Land Banks	45	27	60.0
Farmers Home Administration	94	39	41.5
Private individuals	16	5	31.3
Other	14	6	42.9
	617	187	30.3

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

Levels of Financial Stress

Debt/Asset Ratios — Perhaps the best indication of the financial health of Idaho farmers can be given by dividing them into three categories by debt/asset ratio. Table 7 shows that 64.5 percent of Idaho operations have debt-to-asset ratios below 40 percent and are in no apparent difficulty. Nearly a third of Idaho farmers and ranchers

(31.9 percent) have debt/asset ratios below 10 percent and are in rock solid financial shape (Table 8).

At the other extreme are about 2,680 farmers with debt/asset ratios exceeding 70 percent. This 10.8 percent of operators hold 23.6 percent of Idaho's farm debt. These operations are in critical condition, with the odds stacked heavily against their survival in the next 2 years. With current market conditions, they are probably losing a substantial portion of their equity each year as debt service requirements exceed income. In fact, an estimated 1,300 farmers, or 5.3 percent, already have debt/asset ratios exceeding 100 percent and are technically insolvent.

The third group consists of the 24.7 percent, or roughly 6,000 operators, with debt/asset ratios between 40 and 70 percent. This group has serious problems. These operators can last several more years with current conditions, but their fate is uncertain in the long run. This group, in particular, will be affected by national economic and farm policy decisions. They are also the operators that can benefit most from state and federal assistance programs to get them through this critical period.

It is worth noting that full-time commercial farms are in the worst shape. A separate analysis was performed for farms with gross sales exceeding $40,000 annually. It found that 14.3 percent of commercial farms have debt/asset ratios exceeding 70 percent, and an additional 29.8 percent of full-time operators are in serious trouble with debt/asset ratios between 40 and 70 percent.

For all farmers in Idaho, the average debt/asset ratio is 34.1 percent. Several reasons exist why this is higher than the 20.8 percent national average. First, the national figures are projections for Jan. 1, 1985 and will soon be revised.

Second, Idaho has more full-time farms and fewer hobby farms than the national average. The survey showed that 48 percent of respondents had gross sales of less than $40,000. Nationally, 71 percent of farms produce less than $40,000 in sales (Census of Agriculture 1984). Since these part-time operations can service debt with off-farm income, they tend to have lower debt/asset ratios. Hence, Idaho, with fewer small farms, would have a higher average debt/asset ratio.

Finally, Idaho producers have made more recent investments in agriculture than most states. Irrigated acreage grew rapidly in the 1970s, and a large amount of surface irrigated land was converted to sprinklers. In the Palouse, farmers have been moving toward reduced tillage systems and other new technologies in recognition of erosion problems. These investments have created significant amounts of relatively new debt for Idaho operators at high interest rates and would increase the debt/asset ratios.

Farming and Ranching Expectations — Farmers and ranchers were 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 the debt/asset ratio categories. The largest group, 38.7 percent, expects to be able to continue farming more than 10 years (Fig. 3). In contrast, 17.7 percent of respondents only feel they will be able to farm 1 more year. A larger group, 35.9 percent, believe they can last 2 to 5 years longer. So over half of Idaho farm operators expect to be forced out of farming within 5 years if current conditions prevail. This compares with one-third of farmers who are in serious or extreme financial difficulty.

A producer's debt/asset ratio influences his degree of optimism or pessimism. Those expecting to continue 1 more year had an average debt/asset ratio of 56.9 percent, while those expecting to remain more than 10 years had a debt/asset ratio of 25 percent. Farming expectations were similar across geographic regions and age groups.

Where Is the Financial Stress?

Age of Producer — Beginning farmers tend to be young people with limited resources that must borrow more than most farmers to establish an efficiently sized operation. In measuring financial stress, we expect higher debt/asset ratios among younger producers.

This relationship was borne out by the survey (Fig. 4). Producers under age 35 had an average debt/asset ratio

Table 8. Percent of total liabilities by debt/asset ratio.

Debt/asset ratio	% of producers	% total liabilities
Less than 10 percent	31.8	2.0
10 to 39 percent	32.6	28.4
40 to 69 percent	24.6	46.0
70 to 99 percent	5.6	10.7
100 percent and over	5.3	12.9

Table 7. Financial stress in Idaho farmers.

	No apparent problems		Serious financial problems		Extreme financial problems	
	Debt/asset under 40%		Debt/asset 40 to 70%		Debt/asset over 70%	
Region	Estimated number of farmers	% of farmers	Estimated number of farmers	% of farmers	Estimated number of farmers	% of farmers
Northern	2,910	72.2	780	19.4	340	8.4
Southwestern	4,250	65.4	1,450	22.3	800	12.3
South Central	3,340	58.2	1,700	29.7	700	12.1
Southeastern	5,500	65.3	2,090	24.7	840	10.0
State	16,000	64.5	6,020	24.7	2,680	10.8

of 52.7 percent. Conversely, producers 65 plus years of age had an average debt/asset ratio of 15.1 percent. It comes as no surprise that debt loads are gradually reduced the longer a farmer operates. A younger farmer's debt, however, is likely to be carried today at double digit interest rates that far exceed current returns to agriculture.

A more detailed analysis of debt/asset ratios by age group shows 23.0 percent in the under 35 years of age producers group to have an over 70 percent debt/asset ratio (Table 9). Another 38.5 percent have debt/asset ratios between 40 and 70 percent. That means more than 62 percent of the youngest producers are in extreme or serious financial difficulty compared to 45 percent of middle aged farmers or only 15.4 percent of farmers over age 65.

Size of Operation — Farm size was found to be positively correlated with debt/asset ratio. The smallest hobby farmers had an average debt/asset ratio of only 9.3 percent, which shows the support of off-farm income to service debt. Producers selling $2,500 to $40,000 annually had a 23.6 percent debt/asset ratio (Fig. 5). Debt/asset ratios continue to increase with the size of operation up to the $200,000 to $400,000 category, which had an average ratio of 51.6 percent. The largest farmers had a somewhat lower debt/asset ratio of 44.0. Based on this measure of stress, the commercial farmers and ranchers of more than $200,000 annual gross sales were the ones experiencing the greater financial stress, particularly those in the $200,000 to $399,000 sales group. This would indicate that many farmers leveraged their assets in order to achieve larger operations.

A look at the relationship between loan delinquencies and farm size reveals a slightly different picture. For both real estate and operating loans, middle-sized producers, with $40,000 to $200,000 in gross sales, had significantly higher delinquency rates than small or large operators. This is consistent with small farmers supporting debt service with off-farm income. It also fits with Tweeten's (1985) finding that larger operations generate higher returns to their assets and can thus support higher debt loads. Full-time family farms are the middle-sized operations often in the most stress.

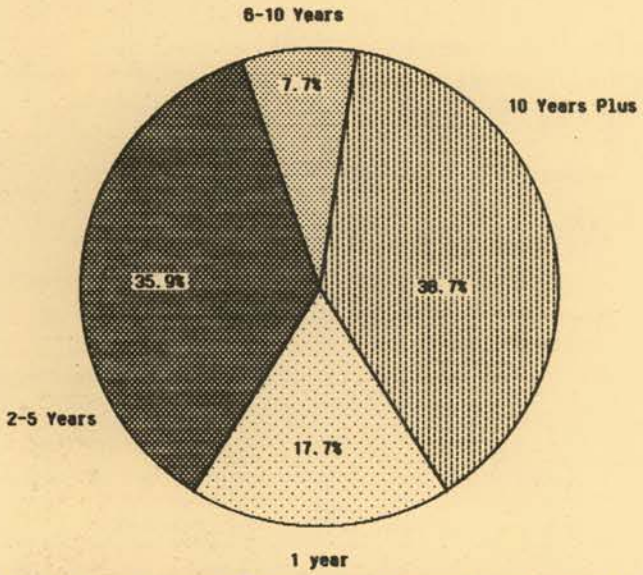

Fig. 3. Farming expectations — how long will you be able to continue farming or ranching?

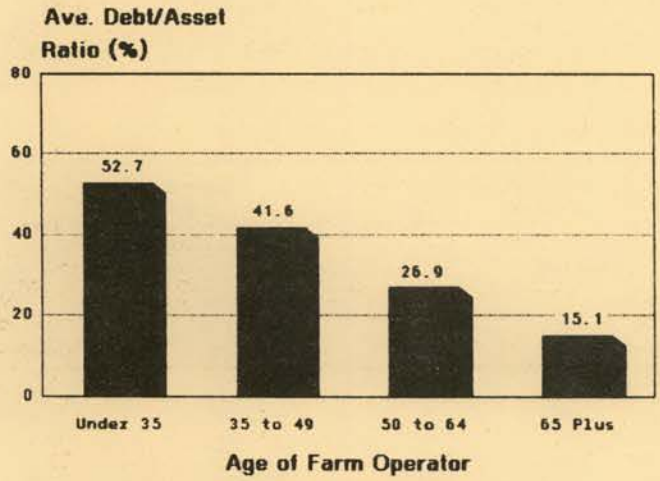

Fig. 4. Debt/asset ratios by age of farm operator.

Table 9. Financial stress in Idaho farmers and ranchers by age.

Age	No apparent problems Debt/asset under 50 percent	Serious financial problems Debt/asset 40 to 70 percent	Extreme financial problems Debt/asset over 70 percent
	(%)	(%)	(%)
Younger than 35	38.5	38.5	23.0
35 to 49 years	55.0	30.8	14.2
50 to 64 years	75.6	18.2	6.2
65 and older	84.6	12.7	2.7
State	64.5	24.7	10.8

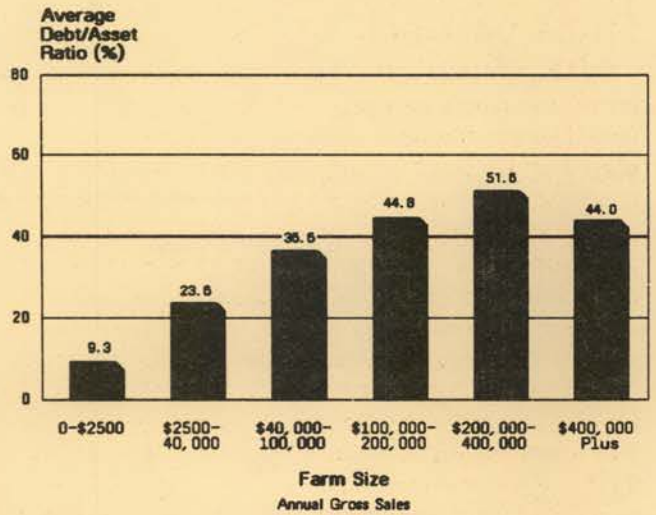

Fig. 5. Debt/asset ratios by farm size.

Farm Enterprise — In the recent past, certain enterprises experienced more profitable price/cost relationships than others. This would imply lower loan delinquency rates and debt/asset ratios for these types of operations. Yet, differences between farm types were not often statistically significant. This could be caused by the difficulty of classifying a farmer into one type of operation. Many Idaho farms are diversified crop and livestock operations.

In general, dairies and cash grain growers had higher debt/asset ratios while the small sample of fruit growers had very low debts-to-assets. Farmers whose primary income source comes from hay and silage had some of the highest delinquency rates for both real estate (20.9 percent) and operating (35.3 percent) loans. Sugarbeet growers and cattlemen had lower than average delinquency rates.

Geographic Region — Regional average debt/asset ratios are shown in Fig. 6. Southcentral Idaho shows the highest debt/asset ratio of 37.1 percent followed by southwestern Idaho with 34.9. Northern Idaho respondents' debt/asset ratio was the lowest at 31.0 percent. Part of the reason for higher debt/asset ratios in southcentral and southwestern Idaho is the recent development of new irrigated land and improvements in existing irrigation systems in the past decade.

Analysis of sub-groups shows southwestern and southcentral Idaho with 12.3 and 12.1 percent, respectively, of producers with debt/asset ratios more than 70 percent (Table 7). More than 41.8 percent of the respondents in southcentral Idaho are experiencing serious or extreme levels of financial stress. This area has high-lift irrigators and dairymen, two groups which are generally troubled. In contrast, 27.8 percent of Northern farmers are in serious or extreme stress. Despite a heavy reliance upon wheat, those dryland farmers are in comparatively better shape.

Effects of Financial Stress on Employment

Off-Farm Income — One of the alternatives to improve farm family income is to find employment off the farm. Farmers and ranchers were asked if they were employed off the farm and what portion of total family income was earned from off-farm sources. The specific percentages are shown in Table 10. In the under $2,500 gross sales group, nearly half receive 75 percent or more of their incomes from nonfarm sources, and 61.3 percent received the majority of their income from nonfarm sources. For the $2,500 to $39,999 category, 47.7 percent of the respondents received one-half or more of their income from nonfarm sources. These proportions are consistent with the idea that small farmers must supplement their farm income from other sources. More accurately, many small farms are part-time operations that supplement other occupational work.

For the $40,000 to $99,999 gross sales group, 70.2 percent received nearly all (more than 75 percent) of their income from farm sources. That proportion continued to increase to the more than $400,000 gross sales group, which had 95.8 percent of the respondents receiving nearly all of their income from farm sources. As a general rule, small operators received one-half or more of their income from nonfarm sources while large farmers and ranchers were much more dependent on agriculture for their income.

Southcentral farmers were more dependent on farm sales for family income than the other regions. Seventy-one percent of the respondents had nearly all of their family income from farm sources, compared to slightly more than 50 percent of the respondents in the other three regions. There may be fewer off-farm employment opportunities in southcentral Idaho than other regions, forcing farm families to be more dependent on farm income. Without nonfarm income sources, the financial stress from low farm prices would be more severe.

Farm Employment — Farm labor is an area where farmers and ranchers can reduce costs by eliminating certain operations or using more family labor. Farmers and ranchers with gross sales of less than $40,000 hired very little full-time nonfamily labor. They expected to reduce family labor use by 3.2 percent and seasonal hirings by 3.5 percent for the 1985 crop year. This implies some

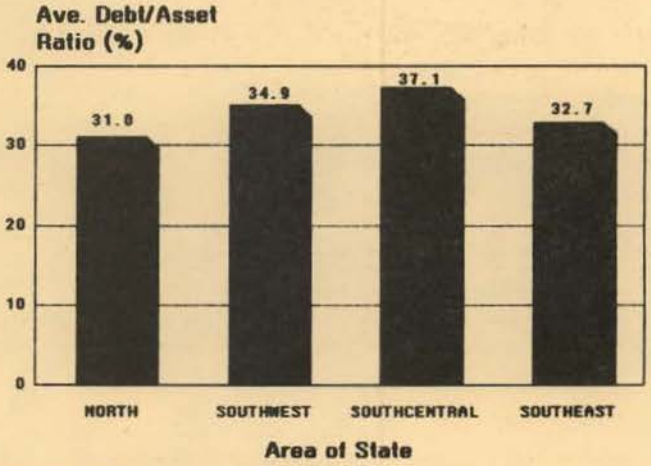

Fig. 6. Debt/asset ratios by regions of Idaho.

Table 10. Proportion of total farm family income earned from off-farm sources by farm size.

Gross sales	Little 0 to 24%	Substantial 25 to 49%	Most 50 to 74%	Nearly all 75 to 100%
Under $2,500	31.2	7.8	11.7	49.4
$2,500 to $39,999	41.0	11.3	19.5	28.2
$40,000 to $99,999	70.2	11.1	8.8	9.9
$100,000 to $199,999	82.9	7.3	4.3	5.5
$200,000 to $399,999	92.1	3.4	1.1	3.4
$400,000 and over	95.8	2.8	1.4	0.0
State	59.8	8.5	11.5	20.1

operations or steps in their production operation would be eliminated. This group also receives 50 percent or more of its total family income from off-farm sources.

Farmers and ranchers in the middle group — $40,000 to $399,999 gross sales — expected to use .7 percent less operator and family labor while cutting back 4.3 percent in full-time, nonfamily labor and 1.4 percent in temporary help. Those commercial farmers and ranchers are dependent on agriculture for their income and are willing to work longer hours in order to reduce labor costs.

Producers with gross sales in excess of $400,000 expected to use less of all types of labor in 1985. They expected to reduce family labor use by 3.2 percent and decrease temporary labor by 2.3 percent and to increase full-time, nonfamily labor by 1.8 percent. This group of farmers hires 65 percent of the nonfamily, full-time employment and 50 percent of the temporary help. As a group, these operations are much more dependent on full-time, nonfamily help and expect to expand hires in 1985.

In summary, the small and part-time farmers will reduce farm labor use and become more dependent on off-farm employment. The middle income group will reduce full-time, nonfamily labor more than seasonal labor but will substitute family labor for both. Large operators expect to reduce family labor and temporary help but hire more nonfamily labor.

Policy Alternatives

Does government have a role in assisting farmers to deal with the financial stress? To answer that question, producers were asked if additional credit programs were needed. The response was 38 percent "yes" and 62 percent "no." Idaho farmers and ranchers do not generally feel additional government credit programs are needed.

Table 11. Acceptability of additional credit programs.

Are additional government credit programs needed?
Yes — 37.9 percent No — 62.1 percent

If additional programs are needed, how acceptable would you find each of the following?

Program	% acceptable	% not acceptable	% no opinion
Subsidized credit for beginning farmers	47.3	35.1	17.6
Subsidized credit for financially troubled farmers	41.3	41.0	17.7
Moratorium on farm foreclosures	41.9	36.7	21.4
State farm foreclosure review board	61.4	21.9	16.7
Individual financial management assistance	64.0	22.9	13.1
Reduce interest rate on outstanding loans	67.1	24.5	8.4
Reduce principal on outstanding loans	22.1	64.4	13.5
Third party assumes ownership, operator becomes tenant	26.9	53.1	20.0

Next, farmers and ranchers were asked how acceptable they would find different alternative programs if they were provided. The programs suggested as alternatives were:

1. Subsidized credit for beginning farmers;
2. Subsidized credit for financially troubled farmers;
3. A moratorium on farm foreclosures;
4. An Idaho farm foreclosure review board;
5. Individual financial management assistance;
6. Reducing interest rates on outstanding loans;
7. Reducing the principal of outstanding loans; and
8. Having a third party assume land ownership while the operator becomes a tenant.

Table 11 shows responses to these alternatives. Idaho producers indicated three clearly acceptable alternatives. The most acceptable was reducing the interest rate on outstanding loans. Sixty-seven percent favored this alternative and only 25 percent found it unacceptable. Second was individual financial management assistance. Sixty-four percent were in favor while 23 percent found it unacceptable. Commercial farmers favored the individual financial advice option by an even higher 69 percent. The third acceptable policy alternative was a State Farm Foreclosure Review Board that was acceptable to 61 percent of the farmer and rancher respondents and unacceptable to 22 percent.

Somewhat less support was given to subsidizing credit for beginning farmers, with 47 percent acceptance and 35 percent answering not acceptable. Subsidizing credit for financially troubled farmers was evenly split between acceptance and nonacceptance. A moratorium on farm foreclosures was acceptable to 42 percent of the respondents and not acceptable to 37 percent.

Farmers and ranchers were clearly opposed to a third group of suggested policy alternatives. Reducing the principal on outstanding loans was not acceptable to 64 percent of the respondents and acceptable to 22 percent. Idaho farmers clearly feel a moral obligation to repay debt but favor lower interest rates. Third party assumption of ownership was not acceptable to 53 percent of respon-

Table 12. Acceptability of selected credit programs by age.

Program	% answering acceptable				
	Younger than 35	35 to 49	50 to 64	65 and older	Overall
Subsidized credit for beginning farmers	66.3	49.6	43.4	38.5	47.3
Moratorium on farm foreclosures	35.0	41.0	42.7	46.7	41.9
State farm foreclosure review board	66.3	63.8	61.4	53.7	61.4
Individual financial management assistance	73.5	70.1	58.2	57.3	64.0
Third party assumes ownership, operator becomes tenant	35.4	25.5	26.6	24.8	26.9

dents and acceptable to 27 percent. Tenant farming is not palatable until all other farming options are lost.

Analyzing responses by age group finds some differences in acceptance. Table 12 shows the policy alternatives where responses differed among age groups. Subsidizing credit to beginning farmers was acceptable to 66 percent of those younger than 35 years vs. 39 percent acceptable for those older than 65 years and 47 percent acceptable overall. Moratoriums on farms were acceptable to 47 percent of those older than 65 years vs. 35 percent of those younger than 35 years. Those older than 65 years are probably the only ones that remember Idaho Governor Ben Ross' 3-year moratorium on Idaho farm foreclosures in the 1930s. A state farm foreclosure review board was acceptable to 66 percent of those younger than 35 years vs. 54 percent of those older than 65 years. Individual financial management assistance is acceptable to 74 percent of those younger than 35 years compared to 57 percent of those older than 65 years. It is a policy acceptable to the majority of all age groups. Third party ownership was more acceptable to the young, 35 percent of those under 35 years vs. 25 percent for those older than 65 years — not surprising since tenancy is a normal step in development for a young farmer and a sign of failure for a retiring farmer.

Comparison to Other States

Comparing Idaho's survey results to those of other states can be instructive, provided care is taken in the interpretation. Timing of the surveys, wording of questions, response rates and the proportion of full-time farmers can all affect survey results. Midwestern farmers are thought to be suffering the most, yet their financial statistics do not always reveal the full extent of their difficulties.

Colorado — Colorado's agricultural credit survey revealed its farmers to be in similar shape in September 1984 as Idaho farmers were in April 1985. Their average debt/asset ratio was 35 percent (Tinnemeier et al. 1985) compared to Idaho's 34.1 percent. Seventeen percent of Colorado producers had debt/asset ratios above 70 percent, and 20 percent were between 40 and 70 percent debts-to-assets. Debt/asset ratios for beef and dairy enterprises were much higher than the norm. Colorado farming expectations were nearly identical to Idaho; 17 percent expected to remain 1 more year, and 35 percent expected to farm 2 to 5 years longer.

One-third of Colorado producers had no real estate loan, compared to Idaho's 28 percent. Forty-one percent reported no operating loan vs. 55 percent for Idaho. Delinquencies were higher than in Idaho, amounting to 17 percent of real estate and 29 percent of operating loans. About one in five had been refused a loan in the last year.

New Mexico — A survey quite similar to Idaho's was conducted in New Mexico in April 1984 (New Mexico Department of Agriculture 1984). Both New Mexico (24 percent) and Colorado (18 percent), however, had much lower response rates than Idaho's 67 percent rate. New Mexico reported an average debt-to-asset ratio of 33.0 percent. Where Idaho has 12.2 percent of real estate loans and 24.1 of operating loans delinquent, New Mexico had 16.7 percent and 27.4 percent delinquent. Only 12.9 percent of New Mexico farmers and ranchers, however, had been turned down for additional loans vs. Idaho's 30 percent. Like Idaho, more than half of the farmers did not have an operating loan while 43.4 percent did not have a real estate loan. With regard to farming expectations, fully 46.6 percent of New Mexico farmers and ranchers with both real estate and operating loans expected to continue farming for only 1 year longer.

Iowa — Iowa is among the states hardest hit by the farm financial crisis. Yet their average debt/asset ratio was only 29.5 percent in March 1984 (Jolly 1984). Ten percent of operators had debt/asset ratios above 70 percent, and 18 percent of operators were in the 40 to 70 percent category. A more recent Iowa survey increases these proportions to 11 and 21 percent, respectively, but these levels still remain below Idaho proportions. This survey did verify Idaho's finding that younger operators tended to be in worse shape than more established farms.

Missouri — This study was conducted in late 1984. Missouri is another state often listed as hard hit; its delinquency rate on FmHA loans is 55 percent vs. Idaho's 33 percent. Yet its average debt-to-asset ratio was found to be only 22 percent. Farmers with debt/asset ratios exceeding 70 percent equalled 6.2 percent of the total. Missouri probably has more small farms, however, with farmers averaging 63 percent of income from off-farm sources and with 46 percent of farmers having no debt. One-eighth of Missouri's farmers expected to continue farming 1 year more, while 38.3 percent expected to last 2 to 5 years longer. Like Idaho, 12 percent of real estate loans were delinquent. Missouri's farmers were in slightly better shape with 19 percent of operating loans delinquent. Missouri also demonstrated a pattern of increasing debt-to-asset ratio with farm size.

Illinois — Based on farm records, Illinois estimated an average debt/asset ratio of 25 to 33 percent on Jan. 1, 1984 (Wilkin 1985). Because this figure was not obtained directly from a survey, its comparability is not clear.

The United States — Table 1 lists the most current figures for the nation as a whole. The 1984 numbers were taken from a survey while the 1985 figures are projections based on that survey. These estimates show 9.5 percent of U.S. farms are in extreme difficulty vs. 10.8 percent of Idaho's farms. Farms with serious financial problems amount to 19.1 percent for the nation vs. 24.7 percent for Idaho. Thus, Idaho appears to be in slightly worse shape than the nation as a whole. A new USDA survey, however, should be finished in the summer of 1985, and it may increase the proportions of U.S. farmers under stress.

Literature Cited

Baker, C. B. 1984. Agricultural Effects of Changes in Financial Markets. American J. of Ag. Econ., Vol. 66, No. 5, December: 541-548.

Bevins, Robert J. 1985. Agriculture — How Bad Is It and Some Thoughts on Direction. Economic and Marketing Information for Missouri Agriculture. Vol. XXVIII, No. 3, March. Coop. Ext. Ser. Univ. of Missouri, Columbia.

Boehlje, Michael D. 1984. An Assessment of Alternative Policy Responses to Financial Stress in Agriculture. Ag. Econ. Res. Bull. No. 85-2. Cornell Univ. Ag. Exp. Sta., Ithaca, NY.

Bullock, J. Bruce. 1985. Farm Credit Situation: Implications for Agricultural Policy. FAPRI 4-85, Food and Ag. Policy Res. Inst., Univ. of Missouri-Columbia and Iowa State Univ., Ames.

Census of Agriculture. 1984. Idaho State and County Data. Vol. 1, Part 12. U.S. Dept. of Commerce.

Congressional Budget Office. 1984. Crop Price-Support Programs; Policy Options for Contemporary Agriculture. Washington, DC.

Duncan, Marvin, and Mark Drabenstott. 1985. Farm Financial Conditions: A Difficult Transition (revised draft). Ag. Banking Inst. Agribanking Roundtable, Washington, DC.

Harl, Neil E. 1984. Impact of Tax Policy on American Agriculture. United States Agricultural Policy: 1985 and Beyond. Dept. of Ag. Econ., Univ. of Arizona, Tucson. May: 199-216.

Hoagland, G. William. 1984. Budget Trade-Offs. Increasing Understanding of Public Problems and Policies - 1984. Farm Foundation, Oak Brook, IL. 1984: 181-1984.

Idaho Crop and Livestock Reporting Service. 1984. 1984 Idaho Agricultural Statistics. Boise, ID.

Jolly, Robert W. 1984. Microeconomic Characteristics of Farm Debt. Financial Stress in Agriculture. Kansas City Federal Reserve Bank.

Meyer, Neil L., and Nancy Konn. 1985. Agricultural and Food Policy Issues: Idaho Producer's Views. Univ. of Idaho Ag. Exp. Sta. Bull 642, Moscow.

New Mexico Department of Agriculture. 1984. 1984 Agricultural Credit Survey. Las Cruces, NM.

Tinnermeier, Ronald L., Frank Garland and Jim Rubingh. 1985. Agricultural Credit Survey — 1984. Working Paper 85-1, Dept. of Ag. and Natural Res. Econ. Colorado State Univ., Ft. Collins.

Tweenten, Luther. 1985. Farm Financial Stress, the Structure of Agriculture and Public Policy. Paper presented at Amer. Enterprise Institute Conference on U.S. Agricultural Policies, Washington, DC. January 28-29, 1985.

U.S. Department of Agriculture. 1985. The Current Financial Condition of Farmers and Farm Lenders. Ag. Info. Bull. No. 490, Econ. Res. Ser., Washington, DC.

Van Blokland, P. J. 1985. A Perspective on the Current Agricultural Financial Crisis. Florida Food and Resource Economics. No. 63, March-April.

Wilkin, D. F. 1985. Financial Position of Illinois Farm Operators: Cost and Returns from Crop and Livestock Enterprises. Farm Economics, Facts and Opinions. Univ. of Illinois Coop. Ext. Serv., Urbana-Champaign.

Appendix 1

The most commonly used measure of financial solvency is the debt/asset ratio. This ratio is calculated by dividing debts by assets. A debt/asset ratio of 0.4 or 40 percent means for each $40 in debt, there are $100 in assets to repay the debt. When debts equal or exceed assets, the ratio is 1.0 or greater, which signifies technical insolvency or bankruptcy. Selling all assets would not cover all expenses. Currently the national debt/asset ratio is 20.8 percent. This means for each $20.80 in debt, farmers and ranchers have $100 in assets.

Appendix Table A. The effect of interest rates and debt/asset ratios on equity growth.

	Interest rate on outstanding debt		
Debt/asset ratio	7%	11%	15%
0	2.0	2.0	2.0
.10	1.4	1.0	0.6
.20	0.8	- 0.2	- 1.2
.30	- 0.1	- 1.9	- 3.6
.40	- 1.3	- 4.0	- 6.7
.50	- 3.0	- 7.0	- 11.0
.60	- 5.5	-11.5	- 17.5
.70	- 9.7	-19.0	- 28.3
.80	-18.0	-34.0	- 50.0
.90	-43.0	-79.0	-115.0

Source: Van Blokland, P. H. 1985. A Perspective on the Current Agricultural Financial Crisis. Florida Food and Resource Economics. No. 63, March-April.

The real problem in agriculture today is the low rate of return on assets as compared to interest rates for an extended period of time. The current income return for the 1980-83 period of farm assets was 2.1 percent (Bullock 1985). This means each $100 in assets returned $2.10 in income. If the interest rate on money borrowed for assets is 10 percent, $10 in income would be necessary to pay interest for $100 debt. That means $476 in assets, or a debt/asset ratio of 21 percent, would be necessary to service the interest cost on $100 in borrowed assets at 10 percent.

The interest rate and debt/asset ratio strongly influence equity growth rates as shown in Appendix Table A. It is for these reasons there is considerable discussion on the debt/asset ratio. The reasons for using ratios of 40 percent to indicate severe financial stress and 70 percent for extreme financial stress are shown in Appendix Table A. At a 40 percent debt/asset ratio and paying 11 percent, a producer would experience a 4 percent annual loss of equity. At a 70 percent debt/asset ratio and paying 11 percent interest, a producer would lose 19 percent of his equity annually. Such losses put severe financial stress on producers.

No business can continue to experience such losses for the long run. Interest rate and debt-to-asset ratio strongly influence a firm's ability to continue in business. This is why the debt/asset ratio is widely used as a measure of financial health for farm businesses.

Appendix 2 — Sample Questionnaire

OFFICE OF THE GOVERNOR
John V. Evans, Governor

Richard Gardner
Agricultural Economist

IDAHO STATE DEPARTMENT OF AGRICULTURE
George Neumayer, Acting Director

UNIVERSITY OF IDAHO
College of Agriculture
Neil Meyer, Agricultural Economist

Dear Reporter:

Farm and ranch finances have become a subject for much discussion as we move into 1985. Specific information relative to agricultural credit problems in Idaho is non existent. 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,

Richard C. Max
Statistician In Charge

AGRICULTURAL CREDIT SURVEY
APRIL 1985

1. During 1984, what was the total acres you operated? (Include acres owned and rented from others, but exclude land rented to others.)

   Total Acres 910

2. During 1984, what was the gross value for total sales including production and/or marketing contracts and payment-in-kind-grains of the following products sold from this farm? (Include marketing charges, not net income.)

	DOLLARS		DOLLARS
a. Cash grains, dry beans	$ 001	f. Fruits	$ 006
b. Potatoes	$ 002	g. Hay, forage, silage seeds	$ 007
c. Sugarbeets	$ 003	h. Dairy	$ 008
d. Cattle & Calves	$ 004	i. Government Payments	$ 009
e. Sheep	$ 005	j. All other	$ 010

3. Do you currently have outstanding real estate loans with any of the following lenders?

(CIRCLE YES OR NO FOR EACH LENDER)

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

4. Do you currently have outstanding operating loans with any of the following lenders?

Operating a. Do you have current operating loans?	050 Y N	051 Y N	052 Y N	053 Y N	054 Y N	055 Y N	056 Y N	057 Y N
b. If yes, are principal and interest payments current?	060 Y N	061 Y N	062 Y N	063 Y N	064 Y N	065 Y N	066 Y N	067 Y N
c. If principal and interest are not current, are you current with interest only?	070 Y N	071 Y N	072 Y N	073 Y N	074 Y N	075 Y N	076 Y N	077 Y N

5. Farm/Ranch Financial Balance Sheet Questions?

a. What are your total farm/ranch assets?..... | 080 $_____ |

b. What are your total farm/ranch liabilities?..... | 081 $_____ |

c. What is the total dollars of interest you paid during 1984?..... | 082 $_____ |

6. 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 | 1 | 2-5 years | 2 | 6-10 years | 3 | 10 years + | 4 | | 090 |

7. 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

8. Are additional government credit programs needed? ..... | 300 Yes_____ No_____ |

9. 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. Subsidized credit for beginning farmers.....	A	NA	N	400
b. Subsidized credit for financially troubled farmers.....	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. Reduce interest rate on outstanding loans.....	A	NA	N	405
g. Reduce principal of outstanding loans.	A	NA	N	406
h. Third party assumes land ownership, operator becomes tenant.....	A	NA	N	407

i. Other suggestions (please specify)_____

_____

10. How many workers do you normally use to operate your farm or ranch? (Indicate number in each group)

Yourself and family members	500
Fulltime non-family	501
Temporary	502

11. How many workers do you expect to use to operate your farm or ranch in 1985? (Indicate number in each group)

Yourself and family members	600
Fulltime non-family	601
Temporary	602

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

Under 35 | 1 | 35-49 | 2 | 50-64 | 3 | 65+ | 4 | | 700 |

13. If you or members of your family were employed off the farm, what percent of your total farm family income in 1984 came from off-farm employment and investments? (Place an X in box for your percent range)

0-24 | 1 | 25-49% | 2 | 50-74% | 3 | 75-100% | 4 | | 800 |

Thank you for your help. If you would like a copy of the survey results, please check this box. | 900 |

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. Guenthner, 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.

2500 6-85

$1.50 per copy