Farm Profits and Financial Distress

Workshop on Credit and Tax Policies for the Family Farm

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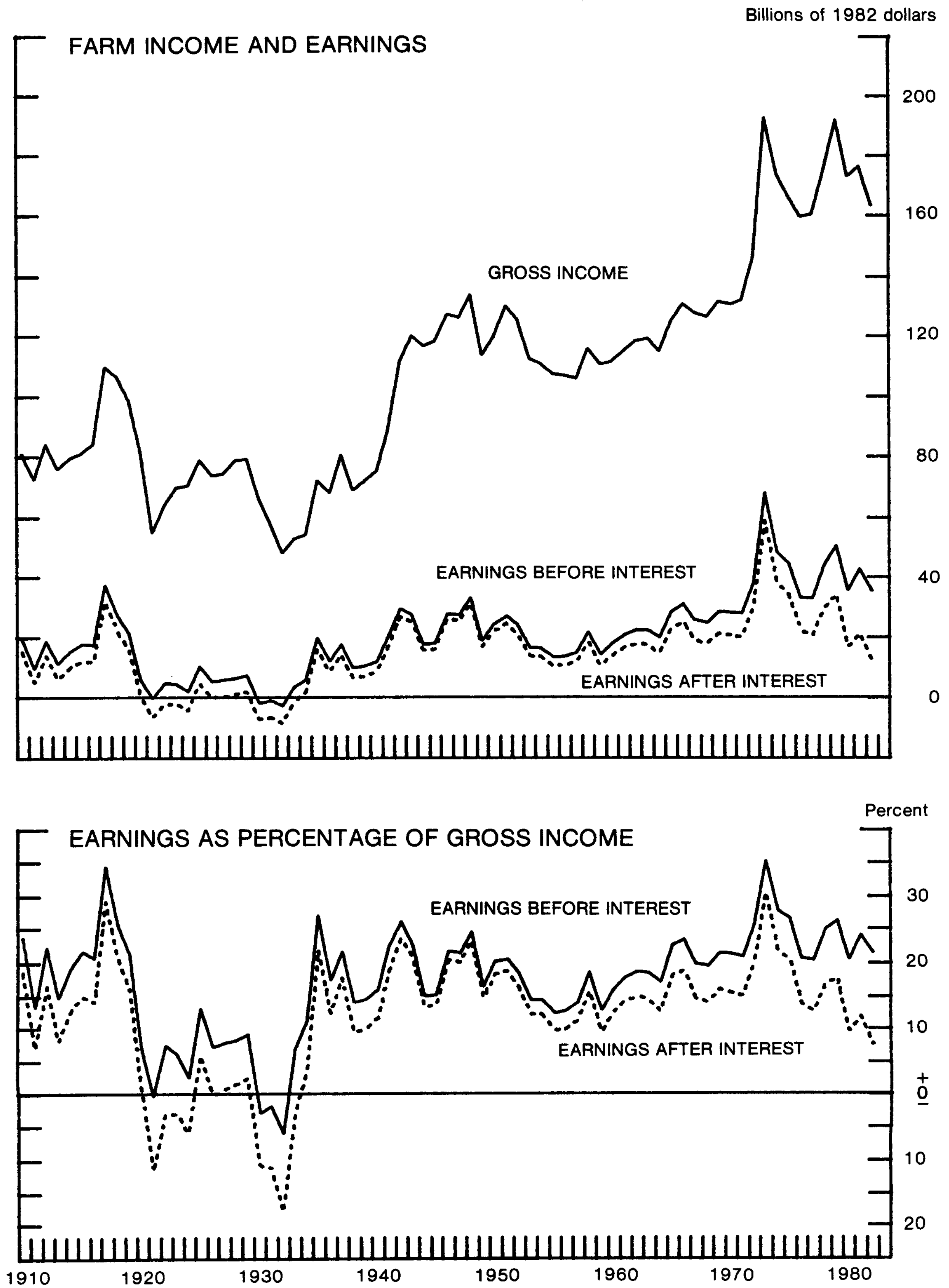
In this statement I endeavor to contribute to understanding of two areas important in the development of farm policy: (1) the profitability of farming, and (2) the nature and incidence of recent severe financial stress on individual farms.

Many discussions of policies toward agriculture and family farms are flawed because the participants hold incorrect impressions of the profitability of farming. It is widely known that a low rate of return to farm capital has prevailed during most years of the past three decades, but relatively few of the many persons--economists, editors, and government officials--who occassionaly comment on farm policy and well-being appear to know that the amount of that return has exhibited a substantial long-term uptrend, or to have thought about the implications of that uptrend for concerns such as the pricing of farm real estate, the problems of beginning farmers, or the trend of food prices.

The trend of farm profitability has been masked because most farm operations are proprietorships, and thus reported income is a combination of rewards to operators' labor, management, and capital. After adjustment for inflation, the long term trend in that total income has been essentially flat. Over time, however, the farm management and labor force consisting of farm operators and their families has been drastically reduced; therefore, given the same real total income, the income attributable to labor and management work has fallen, while that due to capital has risen.

Chart 1 shows estimates of such earnings of capital, calculated in the manner developed by the USDA, which in effect are the income left after "paying" operator and farm family labor at the average farm wage rate, plus a "management fee" equal to 5 percent of gross income. Data are charted in 1982 dollars, using the deflator for personal consumption expenditures as the index of general price inflation. It is evident that the farm programs in effect since the mid-1930s have been successful in maintaining earnings in the aftermath of the farm booms of 1941-52 and 1972-79, in sharp contrast to the collapse of earnings after the boom of World War I. In the last few years, it is also clear that while earnings before interest have been well maintained in the face of adverse supply-demand developments, sharply increased interest payments have produced noticeably lower earnings after interest.

Chart 1



Before exploring this credit development in detail, the relationships between earnings and asset values merit attention. The top panel of Chart 2 shows the long term record of these series, with both adjusted for general price inflation, and with the scale for assets set at 1/25 of the scale for earnings. Therefore, when assets and earnings are at the same level on this chart, it means that assets are then valued at 25 times current earnings, or, alternatively, that the rate of return to total capital is 4 percent. The chart indicates that these have been the approximate average values.

Chart 2 indicates that asset values, dominated by real estate prices, tend to follow the trend in earnings. In addition, expectations of the future trend of earnings appear to play a major role in the reaction of asset prices to ongoing changes in earnings. During the earnings boom associated with World War II, the Marshall Plan, and the Korean War, a postwar collapse in earnings was widely expected, and the rise in asset values was relatively moderate in spite of long-term farm credit being readily available at relatively low real interest rates. In contrast, in the late 1970s, when there was widespread optimism regarding future growth in farm earnings because of fundamentally favorable worldwide supply-demand relationships, asset prices were bid up to a level that can be viewed as consistent with expectations that earnings would continue rising at the relatively steep 1954-79 trend. The ready availability of credit at a favorable real interest rate certainly encouraged its use in farm asset purchases, but the primary impetus to land prices was provided by the earnings growth record and optimistic earnings expectations.

As 1980 began, earnings fell far below the upward trend to which asset prices appeared to be pegged, and as this condition persisted, farm land prices began a retreat in mid-1981. Farm programs again supported earnings, however, and the return to total capital remained above 3 percent. But at the same time, interest rates soared to unexpectedly high levels and remained there through much of 1980-82, with devasting impact on those heavily indebted farmers paying the new rates. This development immediately created immense new variation among farmers in the return to equity, related to the degree of indebtedness and the interest rate being paid.

Take, for example, several farmers who each earned an average return to their total capital, which was 3.3 percent in 1982. For a

Chart 2

Billions of 1982 dollars

Billions of 1982 dollars

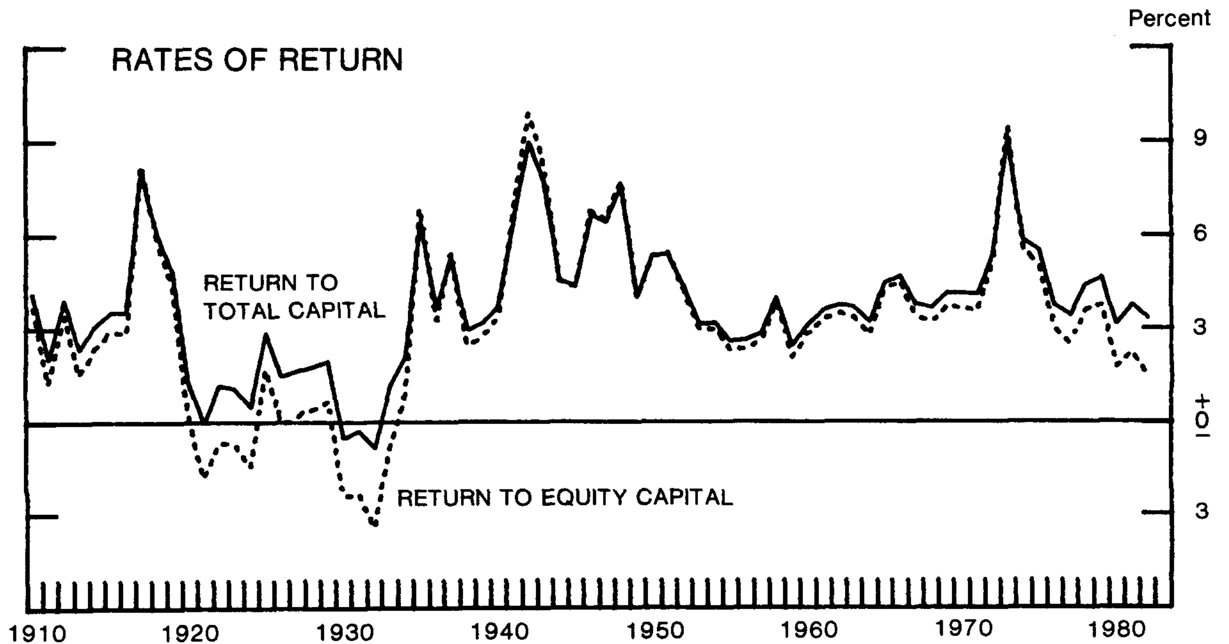
FARM ASSETS AND EARNINGS

1750 1500 1250 1000 750 500 250 0

70 60 50 40 30 20 10 0

EARNINGS BEFORE INTEREST

ASSETS



farmer with no debt, that was also his return to equity. Suppose next that the other farmers had outstanding debt on which they were paying the sector average rate of 11 percent in 1982. If such a farmer had a debt/asset ratio equal to the sector average of 20 percent, his return to equity was 1.4 percent. At a debt/asset ratio of 40 percent, a loss of 2 percent was experienced; at 60 percent, a loss of 8 percent; at 80 percent, a loss of 28 percent. Proportionately larger losses were suffered by farmers paying higher interest rates, as might especially be the case among operators who, as rates rose, were caught relying primarily on short-term loans.

Since the average return to equity last year was a positive 1.4 percent, it is evident that a majority of farm operators were not in debt positions leading to such Depression-like losses. Information on the distribution of farmers by debt/asset ratios has recently become available upon the release of results of the 1979 Farm Finance Survey conducted by the Census Bureau. In Table 1, these survey findings have been adjusted and updated to be more indicative of current conditions. The top panel indicates that only about 18 percent of operators have the level of debt--a debt/asset ratio above 40 percent--that has likely been associated with unprofitable operations. That proportion, however, varies from 44 percent of operators of large farms to 11 percent of operators of very small farms.

From the perspective of lenders, the picture looks much different. Well over half of the debt is owed by operators with debt/asset ratios over 40 percent, and thus lenders see much of their money in the hands of operators who are experiencing financial difficulties.

The significant minority of farmers whose main financial problem is a relatively heavy debt at a relatively high interest rate is likely to remain in serious difficulty until interest rates they pay fall sufficiently further to close much more of the gap that arose between these rates and the return on assets. The moderate rise in earnings now under way, while helpful, is miniscule compared to the rate gap faced by these farmers. The spread this year between the average return to capital and the average interest rate paid on farm debt will probably be almost as large as in 1982. To stop their progressive loss of equity, these farmers need a further significant drop in interest rates, which would close the rate gap by reversing the main development that opened it.

Table 1. Estimated distribution of farms by relative debt level within farm-size groups, January 1, 1983

Size of farm (annual sales, $000)	Relative debt level of farm operator (debt/asset ratio, percent)					Percentage distribution in classes with debt/asset ratio over 40 percent, by farm-size groups
	Total	0-10	11-40	41-70	71 and over	
	Percentage distribution of operators					Operators
All farm operators.............	100	58	24	11	7	100
Large farms (200 and over)....	100	20	36	25	19	10
Medium farms (40 to 199)......	100	34	35	18	13	39
Small farms (10 to 39)........	100	55	26	11	8	23
Very small farms (under 10)...	100	73	16	7	4	29
	Percentage distribution of debt					Debt
All farm operators.............	100	5	32	32	31	100
Large farms (200 and over)....	100	3	26	33	38	40
Medium farms (40 to 199)......	100	5	34	33	29	42
Small farms (10 to 39)........	100	7	37	29	26	10
Very small farms (under 10)...	100	8	37	32	23	8
	Percentage distribution of assets					Assets
All farm operators.............	100	47	31	14	8	100
Large farms (200 and over)....	100	26	38	22	14	38
Medium farms (40 to 199)......	100	38	37	16	8	43
Small farms (10 to 39)........	100	61	26	8	4	10
Very small farms (under 10)...	100	73	18	6	3	9

Data from the 1979 Farm Finance Survey, Bureau of the Census, as tabulated by ERS, USDA, and (a) adjusted for probable underreporting on the survey date and (b) updated to reflect changes during 1980-82, including increases in total debt and assets, an increase in the number of indebted operators, and liquidation by some operators with high debt/asset ratios. A description of the adjustment and updating will be available from the author.

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Copies of the above papers are available from the author upon request.

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