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Exits From Farming in Southwestern Wisconsin, 1982-86. By Susan E. Bentley and William E. Saupe. Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 631.

Abstract

One in every five farm operators in southwestern Wisconsin left farming in the early 1980's. About 37 percent of farmers who left the sector exited because of financial stress. The majority who exited (63 percent) left voluntarily to retirement or to another occupation. Data from two surveys of the same farm operators in eight Wisconsin counties in 1982 and 1986 were analyzed to determine the demographic and financial characteristics of farm operators who left the sector.

Keywords: Farm households, farm financial stress, farm exit, farm family income, farm household well-being.

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Summary

Financial Problems Not the Cause of Most Exits From Farming in Southwestern Wisconsin

One in every five farm operators in southwestern Wisconsin left farming in the early 1980's. The majority who exited (63 percent) left voluntarily to retirement or to another occupation. The 37 percent who left for financial reasons emerged with improved income but many moved from their communities and retained farm debt.

This report examines the link between financial stress and the decision to leave farming in the early and mid-1980's. Farm operators in eight Wisconsin counties in 1982 and 1986 were studied using longitudinal surveys. The surveys permitted us to follow farm operators, see if they remained in farming, and identify the reasons for their exits from farming. The majority of the operators continued farming (table 1). Of those who left farming, voluntary exits (those who retired or changed occupations) outnumbered the involuntary exits (those who left because of financial stress).

We then compared the groups based on the characteristics identified in the initial 1982 survey. Farmers who later would exit voluntarily were generally older than other operators, while the involuntary exits and continuing operators were generally the same age. Despite this, involuntary exits had fewer years of education than continuing farmers.

Farmers who later would exit the sector for financial reasons were worse off financially in 1982 than other operators. The exit operators, on average, held fewer assets in 1982 than the operators who continued to farm. The voluntary exit operators' average net worth was nearly the same as the continuing farmers', as continuing farmers had higher levels of debt. Those who would exit for reasons of financial stress owed nearly $100,000 in debt, which resulted in a much lower net worth than other operators surveyed. The involuntary exits also had significantly lower net cash farm income and total household income than other farmers in the initial survey.

When we compared the financial conditions in 1986 of operators who exited with their initial financial status in 1982, we found that, on average, the voluntary exit operators were able to maintain their level of household income, while the involuntary exit operators increased their average household income by $7,500. Most of those who left involuntarily were able to raise their income through off-farm employment. Approximately 85 percent of the involuntary exit operators and over half of their spouses had nonfarm jobs in 1986.

About three-fourths of the voluntary exits still owned some farmland at the time of the followup survey, compared with about one-half of the involuntary exits. Although they were no longer farming at that time, many former operators still retained farm-related debts.

The transition out of farming is a complex process that may include disposing of farm assets and debts, searching for new employment, and moving to a new home or community. At the end of 1986, three-quarters of the voluntary exits remained in their farm homes, compared with less than half of the involuntary exit operators. Almost 30 percent of the involuntary exits had moved out of their communities.

Table 1—Three groups of farm operators followed in southwestern Wisconsin

Operator group	Percent
Those who left farming:	
--Involuntarily, for financial reasons	7.6
--Voluntarily, for retirement or nonfarm employment	12.5
Those who continued farming	75.6
Deceased (not followed)	4.3

Longitudinal Farm Survey Data

The 1983 Wisconsin Family Farm Survey provided data from a random sample of farm families in eight counties in southwestern Wisconsin. In early 1987, researchers contacted and interviewed the identical farm operators. Information obtained from farmers who had left farming was used to describe the farm exit experience.

The early and mid-1980's were characterized by rapidly declining farmland prices and financial stress in the agricultural community. Families who left farming because of farm financial stress captured wide public attention, and the impression that farm exit and financial stress are universally linked grew.

In this report we examine the link between financial stress and exit for farm operators who left farming between 1982 and 1986, the period of greatest financial stress. Our data are from 2 surveys based on a random sample of 529 respondents, representing 12,240 farm operators in 8 southwestern Wisconsin counties (fig. 1). About one in every five farm operators in the study area left farming during that period.

The distribution of operators in the study after the 4-year period was:

- 76 percent continued to farm,
- 20 percent had left farming, and
- 4 percent had died.

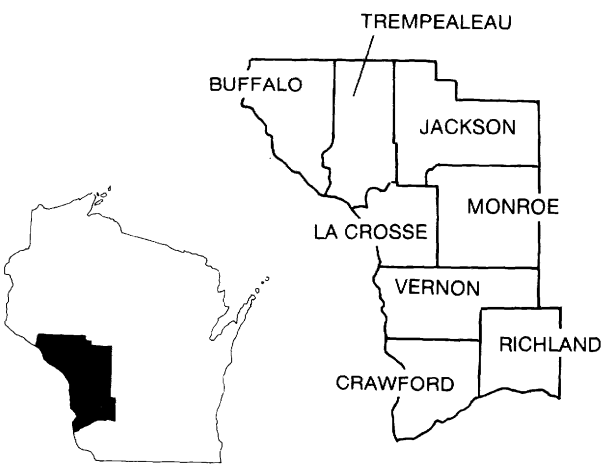
The sources of our data are the 1983 and 1987 Wisconsin Family Farm Surveys. The 1983 Wisconsin Family Farm Survey provided data from a random sample of 529 farm operators for calendar year 1982, with asset, debt, and net worth information as of January 1, 1983. The survey year 1982 marked the last of the "good economic times" for Wisconsin farmers, and unexpected financial reversals began emerging shortly thereafter. In early 1987, researchers contacted and interviewed, when possible, the identical 529 farm operators who had been surveyed 4 years earlier. We determined the status of all 529 operators and completed interviews with 92 of the exits and 342 of the continuing farmers.[1] The unit of observation in the 1987 survey was the (former) farm operator. For the operators who continued to farm, the questionnaire was similar to that used in 1983.

The questionnaire was modified for operators who had left farming to include information about how the operator's family had adjusted since leaving farming. Some of the questions added were about the employment status of adult family members, levels of wage and nonfarm transfer and asset income, levels of debt including remaining farm debt, reasons for leaving farming, and the transition process out of farming.

[1] We had extensive information about the nonrespondents from the 1983 survey. We made statistical tests of the differences between the means for important variables for the respondents and nonrespondents for both the continuing farmers and those who left farming. The respondents and nonrespondents were not different at the 95-percent confidence level with respect to farm size (gross sales and crop acreage), age of operator, net cash farm income, total household income, total assets, total debts, and net worth. They were different only in that the nonrespondents on average had completed 1 less year of formal education. We concluded that nonrespondents were not different from a random subsample, and that data from respondents were appropriate for generalizing to all continuing farmers and farm exit households in the study area.

Figure 1

Identification of the eight-county study area in southwestern Wisconsin.
The area is similar to over 200 counties in the North Central and Northwestern United States in matters of farm size, emphasis on dairy farming, and use of family labor.



The Study Area and Economic Environment

The farm adjustments reported here can best be understood in the environment in which they took place. The rural nature of the study area, the characteristics of the farming sector, and the economic conditions of that era all influenced the decisions made by the farm families.

The Rural Nature of the Study Area

The eight-county study area is predominately rural. Five of the counties are rated as "farming-dependent," with 20 percent or more of average annual labor and proprietor income in the county coming from farming (*1*). [2] Two other counties received about 14 percent of total income from farming. One county in the study area contains the city of La Crosse (population about 50,000) and is a Metropolitan Statistical Area. After La Crosse, the 4 largest towns contained from 5,000 to 8,000 persons each. Only 4 other towns had populations over 2,500.

The rural nature of the area is also reflected in the off-farm work patterns of farm operators in the study area. Thirty-eight percent of operators reported working off the farm, and 22 percent worked off-farm for 200 days or more in the study area, compared with 40 percent and 26 percent, respectively, in the State as a whole (*3*).

Farm Characteristics

The study area is a part of the unglaciated section of the upper Midwest that lies in the contiguous corners of Minnesota, Iowa, Illinois, and Wisconsin. Farms contained 241 acres on average, but only 135 acres in cropland. This relatively low percentage of cropland is attributable to the steepness of the terrain. Ridgetops and valleys are farmed and the steeper sidehills are left in permanent pasture and woods.

About one-fourth of the cropland is devoted to corn and other row crops and nearly three-fourths to small grains and hay. This cropping system and the extensive use of contouring and strip cropping reflect the steep topography and farmers' soil and water conserving practices. This cropping system yields extensive production of forage for livestock, particularly dairy cattle. The Wisconsin site is geographically similar to a larger area extending into contiguous parts of adjacent States, and is similar to over 200 counties in the North Central and Northeastern United States in farm size, emphasis on dairy farming, and use of family labor. We do not suggest that we can generalize beyond the study area, only that with care our findings can have relevance to decisionmakers beyond the survey area.

Economic Conditions in the 1980's

Wisconsin's dairy farmers were somewhat insulated from the financial stress and uncertainty that hit the Nation's farmers during the early to mid-1980's. During the 1970's, greatly increased export demand for grains and oilseeds produced in the United States led to higher product prices and farm income. Farmland prices were bid up, facilitated by accessible farm credit and encouraged by high rates of inflation. Dairy products were not a part of the export boom, but land in dairy farms was also bid up because of inflation, rising income from higher support prices for milk, and access to credit.

These conditions were reversed early in the 1980's, bringing lower farm commodity prices, reduced farm income, falling farmland prices, and difficulty for some farmers in servicing their farm debt. Owning the farm that they operate has been a tradition among farmers in Wisconsin, and the value of their farmland and buildings is the largest component of most operators' assets. Beginning in late 1981, the price of farmland in Wisconsin leveled after decades of generally rising prices, and in 1982, it declined slightly. In 1983, the decline became precipitous.

Because of the importance of dairy farming in the study area, Federal farm programs supporting the price of milk had considerable influence on the economic environment for farmers. Federal dairy price support levels rose steadily from about $7 per hundredweight in early 1975 until reaching $13 in late summer 1980. The support price continued at $13 until the end of 1983. Legislation then lowered support prices in several steps. Other Federal dairy programs encouraged farmers to reduce production, and in response to reduced supplies the market price at times exceeded the Government support price. During 1986, the period covered by our second survey, milk prices ranged from $11 to $13 per hundredweight. Since then, milk prices have varied from about $10.50 to over $15.00.

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[2] Italicized numbers in parentheses refer to items cited in the References section at the end of this report.

Why Farm Operators Left Farming

To determine why farm operators left farming, we asked the former farm operators to rate a list of factors by the importance each had in the decision to quit. We then classified farm operators into "voluntary exits," who generally left farming for age, health, or occupational mobility reasons, and "involuntary exits," who generally left farming because of the financial situation of their farm or of the farm economy. Sixty-three percent left farming voluntarily.

The farm operator's reasons for leaving farming are complex and not subject to simple classification. The reasons might be explored from two different perspectives: a) what the farmers say about the circumstances of their leaving, or b) an outside evaluation of the financial and business data that are available from the farm business. In the 1987 Wisconsin Farm Survey, we used the first option, and developed two sets of questions for the farm operators about why they left farming. The first set was open-ended, seeking in the farmers' own words their reasons for leaving farming. The second set of questions required rating the importance of several reasons we presented.

In many cases, operators had multiple reasons for exiting the sector, or ambiguities among the reasons. In a farm foreclosure or liquidation bankruptcy, the reason for farm exit was unequivocally financial stress. Other reasons for farm exit included poor health, advanced age, low income from farming, or the ability to obtain off-farm employment. Some of these factors may also contribute to a financially stressful situation. For example, ill health or advanced age may diminish an operator's ability to operate the farm and lead to financial difficulties. Many farm families have also used off-farm employment to relieve financial stress. For some operators, however, the off-farm job may offer opportunities or security unavailable in farming. When these factors occur together, it is difficult to determine the main cause for farm exit.

To determine why farm operators left farming, we asked the former farm operators to rate a list of factors from "not important" to "very important" on a scale of 1 to 5 (table 2). Each factor was rated separately, so that more than one factor could be rated as "very important." Approximately 21 percent of the respondents stated that advanced age was a very important factor in their decision to leave farming, but 57 percent indicated that age was not an important factor at all. Low income from farming and the future financial outlook of farming were very important to over a quarter of the respondents.

Classifying Voluntary and Involuntary Exits

Despite the myriad of reasons for leaving farming, we found it useful to separate operators who left farming into two mutually exclusive categories. Voluntary exit may not be free of stresses related to finances, but it contains the notion of being "pulled" from the farm because of perceived nonfarm occupational advantages, such as a better job, or retirement. For involuntary exits, in contrast, the preferred occupation is farming, but for financial reasons the operator (reluctantly) shifts to a nonfarm occupation; the operator is "pushed" from farming.

Responses that indicated the importance of "low income received from farming," "repayment of debts," and the "possibility of foreclosure by a creditor" as reasons for leaving farming were used in sorting involuntary from voluntary exits (table 2). Farmers who rated any of the above three reasons more than "somewhat important" (scores of 4 or 5), plus those who said that all three reasons were "somewhat important" (score of 3), were considered to be financially stressed and viewed as involuntary exits.

Many Factors Played a Role in Decision

The voluntary and involuntary classification scheme reflects the operators' most important reasons for leaving farming. But other factors were also important in their decision. In table 3, we report how the voluntary and involuntary exits differed in assigning a rating of importance to reasons for exiting. Age of the farm operator and the operator's health were considered to be at least somewhat important (a score of 3 or more) by about half of the voluntary exits. The age or health of a family member other than the operator was rated an "important" reason for exit by almost one-fifth of the voluntary exits.

Low income from farming, repayment of debt, and the possibility of foreclosure were "important" reasons for 94 percent, 62 percent, and 47 percent of the involuntary exits, respectively. Nonfarm employment

provided some "pull" effect for the involuntary exits, as half mentioned the availability of off-farm employment as having some importance. Family stress related to farming was also an important factor for half of the involuntary exit operators.

We also asked respondents the question: "In your case, what were the major factors contributing to your decision to cease farming?" The voluntary exits most often mentioned the age of the farm operator (44 percent) or the operator's health (35 percent) as major factors in the open ended questions. Among the involuntary exits, over half mentioned low farm income as a reason for exit, one-fifth mentioned the possibility of foreclosure, and one-tenth cited repayment of debt.

Another factor that may be considered in the decision to exit is the operator's plans for the future. In the 1982 survey, we asked farm operators about their farming plans for the next 5 years. The two groups did not differ in their plans. About 60 percent of the voluntary exits and 65 percent of the involuntary exits had planned to continue farming for 5 or more years (table 3). Neither exit group was particularly successful in carrying out those plans.

Table 2—Farm exits' ratings of factors affecting their decision to leave farming.

All operators who left farming were asked these questions and we used their responses to classify them into voluntary and involuntary exits.

QUESTION: When you decided to stop farming, how important was each of the following factors in deciding to leave? On a scale where 5 is "very important" and 1 is "not important," how would you rate these factors?

	Very important		Somewhat important		Not important
	5	4	3	2	1
			Percent		
Age of the farm operator	20.9	7.7	8.8	5.5	57.1
Health of the farm operator	18.7	4.4	11.0	4.4	61.5
Age or health of another family member	4.4	3.3	5.5	1.1	85.7
Availability of off-farm employment	15.4	3.3	12.1	3.3	65.9
Low income received from farming	26.4	8.8	9.9	4.4	50.5
Future financial outlook for farming	30.8	9.9	7.7	2.2	49.5
Family stress related to farming	8.8	14.3	8.8	4.4	63.7
Repayment of debt/loans	17.6	3.3	3.3	4.4	71.4
Possibility of foreclosure by a creditor	14.3	1.1	2.2	0	82.4

Table 3—The voluntary and involuntary exit classification scheme reflects operators' most important reasons for leaving farming.

Most operators had multiple reasons for leaving farming.

Item	Voluntary exit operators	Involuntary exit operators
	Percent	
Farm operators who exited	62.6	37.4
Reasons for exit that were rated at least "somewhat important:"[1]		
Low income from farming	15.8	94.1
Repayment of debt	1.8	61.8
Possibility of foreclosure	0	47.1
Operator's age	49.1	17.6
Operator's health	45.6	14.7
Age or health of another family member	17.5	5.9
Availability of off-farm employment	19.3	50.0
Family stress related to farming	14.0	50.0
Farmers who had planned to farm 5 or more years after 1983	59.6	64.7

[1] Respondent rated the reason a score of 3 or higher in the exit decision. Each reason was rated separately, so that respondents could cite more than one reason as important in the decision to exit.

Who Left Farming? Demographic Characteristics

To place the characteristics of the farm operators who left farming in perspective, their characteristics in 1982 were compared with the characteristics of operators who continued to farm through 1986. Operators who left voluntarily were older than other operators; almost 75 percent were over age 55. The involuntary exit and continuing operators were similar in age, but the involuntary exit operators had less education and smaller families.

The 1982 characteristics of the farm operators who exited were compared with the 1982 characteristics of those who remained in farming ("continuing farm operators"). Seventy-six percent of the operators in the 1982 survey were still farming in 1987.[3]

Demographic Characteristics

Operators who left voluntarily were older than both continuing and involuntary exit operators (table 4).[4] Over 75 percent were age 55 and over, and almost 30 percent experienced a health disability in 1982. Voluntary exit households were relatively small (a majority were one- or two-person households), consistent with the older operator age.

The involuntary exit and continuing farm operators had some similar characteristics. The average age of operators in both groups was 47, and relatively few of the operators were over age 65. Most of the farm operators were married and living with their spouses.

Despite the similarities in the age and marital status of the operators, the continuing farm operator households were larger than the involuntary exit households. Almost 40 percent of the continuing farm households were larger than four persons, compared with 15 percent of the involuntary households. The average size of the involuntary exit households was 3.5 persons.

Although the continuing farmers and the involuntary exits were very similar in age, the involuntary exits had completed fewer years of schooling, slightly more than 2 years of high school on average. Approximately 70 percent of the continuing farmers completed high school, while just over half of the involuntary exit operators did. Almost a third of the involuntary exits had not advanced past eighth grade. The causes of their high school dropout status are unknown.

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[3] The 1982 responses of these 400 continuing operators were used in the analysis that follows.

[4] Unless otherwise noted, all differences between means and proportions reported in the text are significant at the 95-percent confidence level based on the t-statistic for comparing means and the chi-square statistic for comparing distributions.

Table 4—Selected demographic characteristics in 1982 of Wisconsin farmers who would continue to farm or exit.[1]

Despite the similiarity in age between continuing farmers and involuntary exits, the involuntary exits were less likely to have finished high school.

Item	Unit	Continuing farm operators (1)	Voluntary exit operators (2)	Involuntary exit operators (3)
Farm operators[2]	Percent	75.6	12.5	7.6
Operator age:				
Mean	Years	47.0(2)	58.7(1,3)	46.9(2)
Distribution:				
Less than 35 years	Percent	19.7	7.0	20.6
35 to 44 years	do.	22.3	5.3	20.6
45 to 54 years	do.	28.5	8.8	26.4
55 to 64 years	do.	20.2	54.3	26.5
65 or over	do.	9.3	24.6	5.9
Health status of operator:				
Disabled[3]	do.	14.0(2)	29.8(1)	23.5
Education of operator:				
Mean	Years	11.5(3)	11.1	10.6(1)
Distribution:				
Eighth grade or less	Percent	20.0	29.8	32.4
Some high school	do.	9.5	10.5	14.7
Completed high school	do.	49.7	40.4	35.3
Attended college or postsecondary school	do.	14.0	10.5	11.7
Completed college	do.	6.8	8.8	5.9
Marital status:				
Married, spouse present	do.	89.3	82.5	91.2
Household size:				
Mean	Persons	4.0(2,3)	2.8(1,3)	3.5(1,2)
Distribution:				
One	Percent	3.5	10.5	2.9
Two	do.	21.7	45.6	26.5
Three	do.	16.7	17.5	14.7
Four	do.	20.5	10.5	41.2
Five	do.	19.5	12.3	11.8
Six or more	do.	18.0	3.5	2.9

[1] Numbers in parentheses refer to statistically significant differences in means and proportions at the 95-percent confidence level. For example, the mean age of operators in the "continuing farm operators" (column 1) was different from the mean age of voluntary exits (column 2).

[2] The three categories do not add to 100 because the remaining 4.3 percent of the farm operators in 1982 were deceased by 1986.

[3] Respondent had a disability that limited the amount or kind of work he or she could do in 1982.

Who Left Farming? Financial Characteristics

The 1982 financial characteristics of the farm operators who left farming were compared with the characteristics of operators who continued to farm. On average, the voluntary exits and the continuing operators had similiar levels of net worth and household income in 1982. The involuntary exits had much lower net worth and significantly lower average household income than the other operators in 1982.

By examining the financial characteristics of farm operators in the initial survey in 1982, we observed differences that may have signaled the events that followed. The 1982 characteristics of the farm operators who exited were compared with the 1982 characteristics of those who remained in farming ("continuing farm operators").

High levels of debt and a decline in asset values, primarily farmland, were major concerns in the farming sector during the early 1980's. On January 1, 1983, those farmers who would still be farming at the time of the followup survey in early 1987 held total assets worth about $350,000 on average. Average assets for both exit groups were significantly lower and not different from each other (fig. 2).[5] Those who would exit voluntarily owed less than $25,000 in debt compared with about $85,000 for the continuing farmers. The high debts of continuing farmers made their net worth nearly the same as voluntary exits, about $250,000. Those who would exit for reasons of financial stress, however, owed nearly $100,000 in debt, which resulted in a much lower net worth of under $170,000.

Farm earnings are in a general way related to the level of assets: the more assets owned, the more earnings. However, the greater the amount of debt, the more interest and principal payments that must be made from those earnings. Assets and debts can be related by constructing a debt-to-asset ratio. The higher the debt-to-asset ratio, the less favorable the financial circumstances for farms of similar size. Debt-to-asset ratios as of January 1, 1983, of farmers who later were forced out of farming did not show impending financial difficulty.

Individual farm differences in profitability or earning ability and the amount of off-farm income are also relevant in considering financial stress. Financial stress was evident when we examined the household income of the involuntary exit operators, particularly the annual earnings of the farm business. Average net cash farm income was less than $200, clearly a problem for those who would later be involuntary exits. Net cash farm income was low at its absolute level and also when compared with averages of $10,799 for the future voluntary exits and $15,997 for the continuing farmers (table 5).

The involuntary exits' average total household income of $15,173, was about half that received by the other two groups. This would have been inadequate to meet the families' financial obligations for family living expenditures, mandatory principal payments on their near $100,000 average debt, and replacement of depreciable farm capital items like farm machinery.

Off-farm employment, from off-farm wage work or nonfarm self-employment, was clearly an important source of income for many farm families. The involuntary exit operators were more likely to have worked off-farm during 1978-81 than either the voluntary or continuing farm operators. In 1982, about 53 percent of the involuntary exit operators worked off-farm, compared with almost 30 percent of the continuing farm operators (table 5). Thirty-four percent of the spouses of voluntary exit operators worked off-farm in 1982, as did 45.2 percent of the spouses of involuntary exit operators (the difference is not statistically significant at the 95-percent confidence level).

Annual hours of off-farm work by operators and spouses did not differ significantly among the three groups. For continuing farm operators who worked off-farm, off-farm work consumed an average of approximately 23 hours per week during 1982. Some operators worked a few hours a week year round, while others worked 60 hours a week part of the year. Involuntary exit operators who worked off-farm worked an average of 31 hours per week.

Average earnings of operators in each group were not significantly different. Average earnings by those operators who worked off-farm were $11,659 for the continuing farm operators, $15,412 for voluntary exit operators, and $15,660 for involuntary exit operators.

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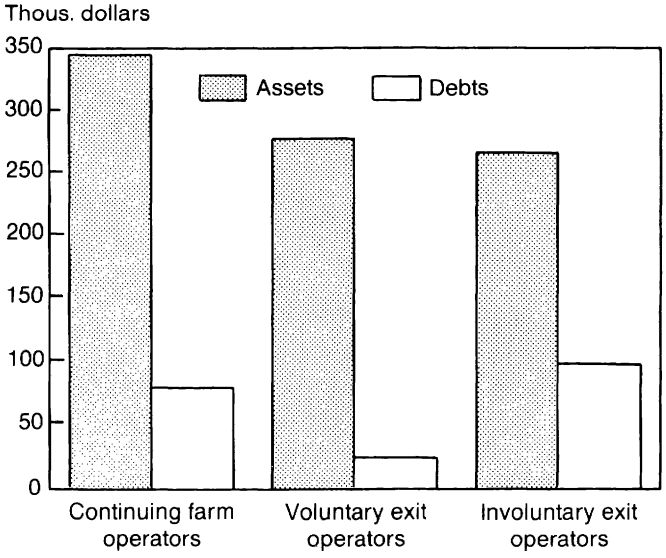
[5] The value of assets was determined by the operators' answers to the question: "If you had been a willing seller dealing with an interested buyer, what would the market value be of the (type of asset) on January 1, 1983?" This question was asked for each category of asset.

Figure 2

Assets and debts of Wisconsin farm operators, 1982.
Continuing farmers and voluntary exits had similar net worth, but involuntary exits' average net worth was significantly lower.



Assets minus debts equals net worth.
As of January 1, 1983.

Table 5—Household income and off-farm employment in 1982 of southwestern Wisconsin farmers who would continue to farm or exit.[1]

Over one-half of the involuntary exit operators were working off-farm in the initial survey, but their off-farm income did not offset their low farm income.

Item	Unit	Continuing farm operators (1)	Voluntary exit operators (2)	Involuntary exit operators (3)
Farm operators[2]	Percent	75.6	12.5	7.6
Household income:				
Net cash farm income	Dollars	15,997(3)	10,799(3)	139(1,2)
Off-farm earned income[3]	do.	7,264	8,404	10,913
Nonfarm transfer and asset income	do.	3,348(2)	6,900(1,3)	3,427(2)
Within household farm wage transfer	do.	1,869(2,3)	428(1)	694(1)
Total household income	do.	28,461(3)	26,531(3)	15,173(1,2)
Operator's off-farm employment:				
Percent working off-farm during 1978-81	Percent	37.0(3)	43.1(3)	67.6(1,2)
Percent working off-farm in 1982	do.	29.2(3)	36.8	52.9(1)
Hours per year	Hours	1,207	1,549	1,590
Earnings	Dollars	11,659	15,412	15,660
Percent of farm operators who were married in 1982	Percent	89.3	82.5	91.2
Spouses working off-farm during 1978-81	do.	44.3	40.6	58.1
Spouses working off-farm in 1982	do.	37.3	34.0	45.2
Hours per year	Hours	1,137	1,286	1,091
Earnings	Dollars	6,639	7,186	5,889

[1] Numbers in parentheses refer to signficant differences between means at the 95-percent confidence level. For example, the mean net cash farm income of "continuing farm operators" (column 1) was different from the mean in column 3.
[2] The three categories do not add to 100 because the remaining 4.3 percent of the farm operators in 1982 were deceased by 1986.
[3] Average for all farms, including those reporting no off-farm earned income. In the rest of the table, average earnings are only for those working.

What Were Their Farms Like?

The farms of former operators are compared with the farms of those who remained in farming, based on their characteristics during the initial survey in 1982. The continuing farm operators and involuntary exit operators had been farming about the same number of years and operated a similar number of acres, but the involuntary exits generated much less farm income in 1982 than other operators.

The majority (56 percent) of the involuntary exits started farming after 1970 (table 6). These producers entered business during a turbulent decade of rapidly rising land and other asset values, double-digit inflation, widely fluctuating interest rates, and unusually high crop prices buoyed by export demand. Farm credit in some cases was made available based on increased farm asset values and not on the profitability and debt-retiring capacity of the farm business. Farmers who borrowed during the 1970's, whether to enter farming or to expand an existing farm business, were particularly vulnerable in the early 1980's, when farm commodity prices fell, farm business income declined, and farm asset prices slumped.

Only one-fourth of the voluntary exits had entered farming after 1970 and two-thirds had been farming since 1965. These producers with more years in farming had purchased assets at much lower prices and probably obtained relatively low fixed interest rates. They also had more years of farming during which to pay off farm debts than operators who entered later. The continuing farm operators and involuntary exit operators had about the same number of years in farming. About 62 percent of the continuing farmers began farming before 1970, and 38 percent after 1970. About 16 percent of the farm businesses in the study area were organized with multiple operators as partnerships or family corporations.

Involuntary exits left farms averaging 264 operated acres, which were not significantly different in size from the farms operated by the continuing farmers. However, involuntary exit operators generated slightly less than $40,000 in gross cash farm income from the sale of farm products and almost no net cash farm income. This was significantly less than the continuing farmers, who generated nearly twice as much in gross cash farm income and about $16,000 in net cash farm income. Some of these differences may be attributable to the smaller percentage of involuntary exits who were dairy farmers. But with such a great difference, it is likely that those who would later exit involuntarily were less effective as farmers in producing farm products and generating net income from their farm resources.

Net earnings from the farm business were even more in contrast. The continuing farmers averaged about $16,000 in net cash farm income; involuntary exits averaged less than $200. The lower level of sales from similar size farms and higher interest payments for involuntary exit farms were factors influencing the difference in net farm income. Voluntary exit operators did not have significantly different net earnings from the continuing farm operators, and their average net cash farm income of $10,799 was significantly higher than that of the involuntary exit operators.

Table 6—Selected farm characteristics in 1982 of southwestern Wisconsin farmers who would continue to farm or exit.[1]

The level of cash farm income was the most striking difference between involuntary exits and other operators.

Item	Unit	Continuing farm operators (1)	Voluntary exit operators (2)	Involuntary exit operators (3)
Farm operators[2]	Percent	75.6	12.5	7.6
Year started farming:				
Before 1965	do.	50.8	66.7	38.2
1965-69	do.	11.7	8.7	5.8
1970-74	do.	17.5	7.1	29.4
1975-79	do.	15.5	15.7	23.6
1980-82	do.	4.5	1.8	2.9
Mean years in farming	Years	19.7(2)	26.6(1,3)	17.1(2)
Total acres operated:				
Mean	Acres	308.5(2)	206.0(1)	264.2
Median	do.	250.0	173.0	193.0
Gross cash farm income:				
Mean	Dollars	76,143(2,3)	40,300(1)	39,819(1)
Distribution:				
Less than $19,999	Percent	20.0	43.9	41.2
$20,000-$39,999	do.	14.7	19.3	20.6
$40,000-$99,999	do.	41.2	24.6	29.4
$100,000-$249,999	do.	22.0	12.3	8.8
$250,000 and over	do.	2.0	0	0
Net cash farm income:[3]				
Mean	Dollars	15,997(3)	10,799(3)	139(1,2)
Distribution:				
Negative	Percent	20.2	34.5	50.0
$1-$9,999	do.	21.0	25.5	32.4
$10,000-$19,000	do.	23.5	21.8	11.7
$20,000 and over	do.	35.3	18.2	5.9
Farm type:[4]				
Small dairy	do.	33.2	31.6	41.2
Large dairy	do.	38.2	24.6	14.7
Other	do.	28.5	43.9	44.1
Type of business organization:				
Sole proprietorship	do.	84.2	84.2	94.1
Partnership	do.	15.7	15.8	5.9

[1] Numbers in parentheses refer to statistically significant differences at the 95-percent confidence level. For example, the mean years in farming of "continuing farm operators" (column 1) was different from the mean in column 2.
[2] The three categories do not add to 100 because the remaining 4.3 percent of the farm operators in 1982 were deceased by 1986.
[3] For farm partnerships, this amount refers to the share attributed to the operator's household.
[4] Small dairy farms were defined as those with gross farm sales of less than $65,000 in 1982. The distribution of farms by type (small dairy, large dairy, and other) of the continuing farm operators significantly differed from the voluntary and involuntary exit operators.

What Happened to Those Who Left?

About three-fourths of the voluntary farm operators still owned some farmland in early 1987, and while the value of their assets and debts fell, they suffered no signficant reduction in net worth. On average, the net worth of the involuntary exits declined significantly, but household income was up to an average of $22,700 in 1986.

We explore the "before and after" characteristics of farm operators who left farming. The "before" information is from the 1982 survey, when the farm operator was farming, and the "after" is from the followup survey in early 1987, when the farm operator was no longer operating a farm. For example, household size and composition changed significantly from the first survey to the followup. Both the voluntary and involuntary groups had changed in ways that would be expected for people who were 4 years older than in 1982. Households had fewer children present and were smaller.[6]

Financial Status

By the time of our followup survey in early 1987, the erosion in asset values was severe. On average, the farmers who continued to farm in early 1987 had suffered about a $100,000 decline in the value of their assets, mainly because of the decline in farmland values.

About three-fourths of the voluntary farm exits in our study still owned some farmland early in 1987. The average assets of this group had declined about $55,000 and they had reduced their debts by about $12,000 during the years between our surveys (fig. 3). Their average net worth as of January 1, 1987, was $210,000, not significantly different from their average net worth on January 1, 1983.[7]

However, about one-third of this group had sold some farmland during the intervening 4 years, and if they had provided seller financing they were at some risk of not collecting from the buyer.[8] The value of assets and net worth for sellers financing the sale includes any outstanding balances from buyers. Thus net worth would have been overstated, because the farm property returned to them would have declined in value because of the decline in land prices.

Slightly less than half of the involuntary exits retained ownership of any farmland as of January 1, 1987. Their assets had declined in value by about $180,000, both from decline in the value of their farmland and because of no longer owning farmland. The fall in the value of assets was partially offset by a reduction in debts from nearly $100,000 in early 1983 to just under $50,000 in early 1987. However, their average net worth still decreased significantly by over $130,000 during the 4 years, and stood at $36,500 on January 1, 1987. In 1983 constant dollars, which adjust for inflation using the Consumer Price Index, average net worth declined to $32,600 for the involuntary exits, from $168,500 in 1983. The average value of assets declined from about $266,000 to $75,000, and average debt was reduced by $55,000 to approximately $43,000.

The involuntary exits had increased their total household income in 1986 by $7,500 over their 1982 level. The increase came about from substantial increases in nonfarm earned income (fig. 4). In 1983 constant dollars, average income increased from $15,173 to $20,288 (statistically significant at the 93-percent confidence level).

Voluntary exits were able to maintain their 1982 income levels, although the composition of their income changed. Their net cash farm operating income had declined, but the loss was replaced by increased nonfarm transfer and asset income.[9] Their total household income averaged approximately $25,400 in 1986. In 1983 constant dollars, the voluntary exit operators' average household income declined from $26,531 in 1982 to $22,712 (not a

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[6] Unless otherwise noted, all differences between 1982 and 1986 characteristics for each group reported in the text are significant at the 95-percent confidence level based on the t-statistic for comparing mean differences among pairs (a paired t-test).

[7] These amounts are in nominal dollars. This enables us to see how much progress was made in reducing debt as farm operators paid it off. In 1983 constant dollars, which adjust for inflation using the Consumer Price Index, the voluntary exits significantly reduced their debts. The value of their assets, in real terms, also declined (statistically significant at the 94-percent confidence level) between 1982 and 1986, but they experienced no statistically significant reduction in net worth.

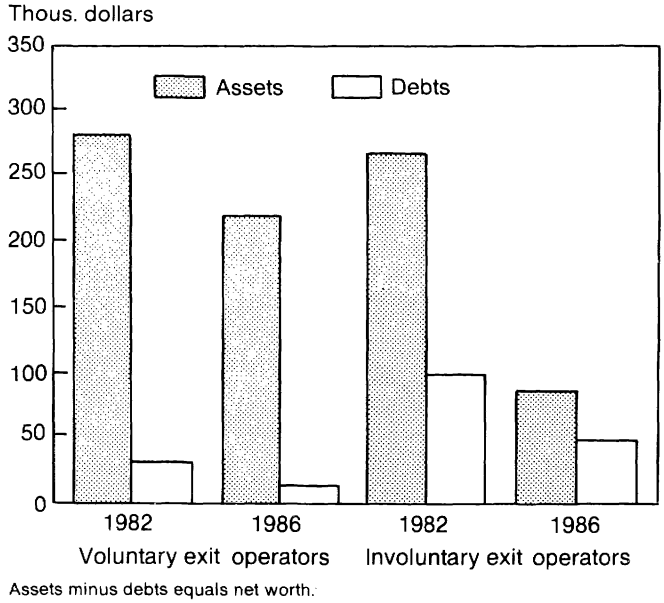
[8] About one-fourth of all farm real estate sales during this period were seller financed. The ensuing decline in land values made holders of these land contracts, as well as the institutional lenders, vulnerable to defaults by borrowers (2).

[9] The exit from farming occurred in 1986 for some voluntary and involuntary exit households. As they closed out their farm businesses, some net cash farm income and farm-home wage transfers were generated and are included in the group averages. None of these persons would have net cash farm income in 1987, however.

statistically significant difference). In 1986, the average household incomes of the two groups of exits were not significantly different.

Figure 3

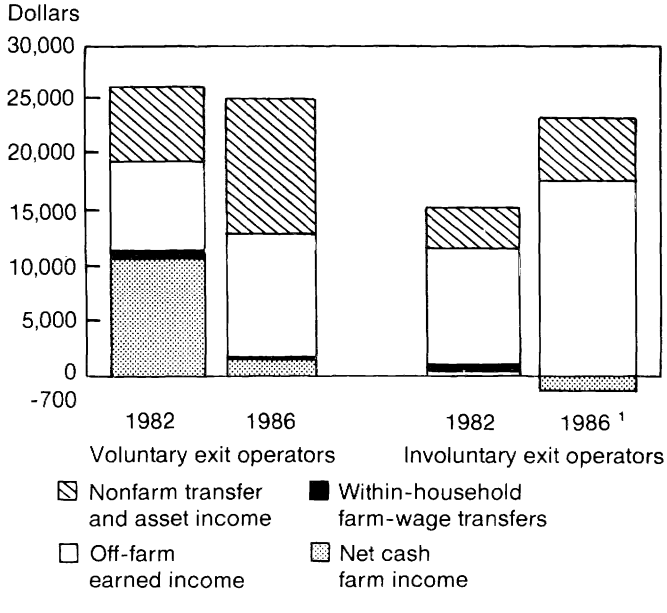
Assets and debts of farm exit operators in Wisconsin.
Falling farmland values and land sales explained most of the decline in assets.



Assets minus debts equals net worth.
As of January 1, 1983 and 1987.

Figure 4

Components of income of farm exit operators in Wisconsin, 1982 and 1986.
Higher nonfarm earned income raised total income of operators who left farming involuntarily.



[1]Average total household income was $22,719.

After they left farming, approximately 40 percent of the voluntary exit operators and 85 percent of the involuntary exit operators were working in 1986 (table 7). Those operators who were not working were either retired (49.1 percent of the voluntary exit operators) or disabled and unable to work. Over half of the spouses in both groups were also working.

The average hours worked (for those working) were similar for both groups of former farm operators, and the majority of workers were employed full-time. About a quarter of the former operators were still working for the same employer they had worked for while they were farming.

By increasing nonfarm earnings, involuntary exit operators increased their total household income from an average of $15,173 in 1982 to $22,700 in 1986. The average income in 1986 was probably adequate to cover family living expenditures (for a family of three persons) and make principal payments on their remaining $48,000 in debt. Because they no longer were farming, no funds were needed to replace depreciating farm machinery and other capital. Relative to their financial obligations, their total household income was much improved in 1986 over their circumstances in 1982.

Table 7—Employment of farm exit operators and their spouses after leaving farming, 1986.

Jobs off the farm enabled involuntary exits to raise household income.

Item	Unit	Voluntary exit operators	Involuntary exit operators
Operator:			
Working	Percent	40.4	85.3[1]
Hours per year	Hours	1,720	1,783
Earnings	Dollars	15,985	14,983
Full-time[2]	Percent	60.9	58.6
Same employer[3]	do.	35.0	17.9
Retired	do.	49.1	2.9[1]
Disabled	do.	10.5	8.8
Looking for work	do.	0	2.9
Married as of 1986	do.	75.4	85.3
Spouse's age	Years	60.0	46.8[4]
Spouse's education	do.	11.2	12.3[4]
Spouse working	Percent	51.2	69.0[4]
Hours per year	Hours	1,197	1,116[4]
Earnings	Dollars	10,102	6,276[4]
Full-time[2]	Percent	31.8	30.0[4]

[1] Involuntary exit operators are significantly different from the voluntary exit operators at the 95-percent confidence level.
[2] Full-time is defined as 1,600 or more hours per year.
[3] Percent of wage and salary workers working for the same employer they worked for while farming.
[4] Estimates are based on fewer than 30 sample observations, and statistical testing was not attempted.

Transition and Adjustment to Farm Exit

The transition out of farming is a complex process, for it may include disposing of farm assets and debts, searching for new employment, and moving to a new home or community. While 77 percent of the voluntary exit operators retained farmland, only 47 percent of the involuntary exit operators did. At the end of 1986, three-quarters of the voluntary exits remained in their farm homes, compared with only 40 percent of the involuntary exit operators.

Place of Residence After Farm Exit

When they first left farming, the majority of farm exit operators remained in the house they had lived in while farming (table 8). By the time of the followup survey in early 1987, 74 percent of the voluntary exits had not yet moved from their farming residence, but about three-fifths of the involuntary exits had moved. About one-fifth of all exit operators moved to a residence in the same community as their farm. However, almost one-third of the involuntary exit operators had moved out of their community on January 1, 1987, compared with approximately 9 percent of the voluntary exits. About 10 percent of all exits planned to move in the future.

Geographic stability has benefits, but can have some costs as well. By staying in their home communities, particularly in the same residence, families may minimize the stress associated with leaving farming. The family continues to live in a familiar environment, attend the same schools and churches, and keep the same friends. However, persons leaving farming may limit their employment opportunities by remaining in the rural community.

Table 8—Farm exit operators' changes in residence, as of January 1, 1987.

While most voluntary exit operators remained in the same residence, over half of the involuntary exits moved after they left farming.

Item	Voluntary exit operators	Involuntary exit operators
	Percent	
Percent of operators	62.6	37.4
Place of residence:		
Initially same farm (at time of exit)	75.4	55.9
As of January 1, 1987:		
Same farm	73.7	41.1[1]
Moved within same community	17.5	29.4
Moved out of the community	8.8	29.4[1]
Plan to move in the future	12.3	5.9

[1]Significantly different from the voluntary exit operators at the 95-percent confidence level.

Disposition of Farm Assets

Some farm assets, such as inventories of grain and livestock, can readily be sold through well-established markets in Wisconsin. Farm machinery and equipment are often sold through an auction on the farm premises when closing out a farm business. However, the sale of farm real estate, particularly on a declining market, can be a time consuming, lengthy process. The proportion of exit operators who sold land did not differ significantly by type of exit (table 9). About one-third of the voluntary exit households sold some land, as did about one-fourth of the financially stressed group.

Banks and others extending credit to farmers usually take a lien against the property purchased with the loan, and require a specific (but perhaps flexible) repayment schedule. A farmer with financial stress may be unable to make those regular principal and interest payments. Under severe financial stress, the farmer may have to consider selling the farm and other assets, paying off the debts, and leaving farming. In those circumstances, if the value of the farm assets has fallen below the amount of the outstanding loan, the farmer may instead negotiate to convey the assets back to the lender, in exchange for a complete discharge of the debt. Conveying property back to a lender is an option used only under extreme financial duress, and is thus an indicator of financial trouble. Among the involuntary exits, 18 percent conveyed land back to the seller under a seller-financed land contract agreement, 24 percent did so with a land mortgage holder, and 3 percent conveyed ownership of machinery or livestock to a lender.[10]

[10] By definition, no persons in the voluntary exit group were involved in such transactions, and because of the small sample of involuntary exit operators, we did not compare the involuntary exit operators who sold land and those who conveyed back land.

Remaining Links to the Farm Business

Although the farm exit operators were no longer farming at the time of our followup survey in early 1987, they still had some financial obligations remaining from their farm businesses. About one-fourth of the voluntary exit operators and one-third of the involuntary exit operators (not significantly different proportions) still owed debt that could be identified with the former farm business (table 10). Of the voluntary exit operators who had debts, average debt was about $44,000, compared with an average of $120,000 for the involuntary exit operators who had farm-related debts (significantly different at the 93-percent confidence level). About one-fifth of the involuntary exit operators still owed some past-due farm property taxes, and one-fifth still owed farm-related legal fees. Relatively small numbers in both exit groups owed capital gains taxes from the disposition of farm property.

While about three-fourths of the voluntary exit operators still owned some farmland, slightly less than half of the involuntary exit operators did. But the average holdings of both groups were about the same–172 acres and 164 acres for the voluntary exit operators and involuntary exit operators, respectively.

Table 9—Farm exit operators' disposal of assets, 1982-86.

At the time of the followup survey, over three-quarters of the voluntary exit operators still owned some farmland, compared with less than half of the involuntary exits.

Item	Unit	Voluntary exit operators	Involuntary exit operators
Percent of operators	Percent	62.6	37.4
Disposition of assets:			
Conveyed land back to seller under land contract:			
Persons	Persons	0	17.6
Acres	Acres	--	200
Conveyed land back to mortgage holder:			
Persons	Persons	0	23.5
Acres	Acres	--	264
Sold any land	Percent	31.6	23.5
Acres sold	Acres	154	140
Respondents owning land	Percent	77.2	47.1[1]
Acres owned	Acres	172	164

[1] Significantly different from the voluntary exit operators at the 95-percent confidence level.
-- = Not applicable.

Table 10—Farm exit operators' remaining debts, as of January 1, 1987.

Over a quarter of the exit operators continued to have farm-related debt even after leaving farming.

Item	Unit	Voluntary exit operators	Involuntary exit operators
Percent of operators	Percent	62.6	37.4
Farm debt remaining after exit:			
Households with debt	Percent	24.6	35.3
Dollars owed (average per operator)	Dollars	43,593	120,487
Past-due property taxes	Percent	1.8	17.6[1]
Legal fees owed	do.	1.8	20.6[1]
Capital gains taxes owed	do.	5.3	8.8

[1]Significantly different from the voluntary exit operators at the 95-percent confidence level.

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Glossary

Assets: The sum of the value of monetary and household assets, farmland and buildings, farm machinery, livestock, and crops and feed.

Cash farm operating expenses: Variable and fixed cash outlays associated with the operation of the farm business. Excludes principal payments and includes labor, fuel, interest payments, utilities, rent payments, and other such expenses.

Crops and feed (as a type of asset): The household's share of the value of all crops and feed on hand as of January 1, 1983 and 1987.

Continuing farm operators: The operator farmed in 1982 and continued to farm through all of 1986.

Debt: The household's share of all farm debt owed, accrued interest owed, and all personal and household debt, as of January 1, 1983 and 1987.

Farm: Any business in which agricultural commodities are produced as the major products of that business and in which gross annual sales equal or exceed $1,000.

Farm machinery (as a type of asset): The household's share of all farm machinery, trucks, and cars, as of January 1, 1983 and 1987.

Farm operator: Person who is responsible for major administrative and managerial functions of the farm as well as day-to-day decisions.

Farmland and buildings (as a type of asset): The household's share of the value of farm real estate on January 1, 1983 and 1987.

Gross cash farm income: The sum of gross sales from agricultural products, receipts from Federal farm commodity programs, net receipts from custom work, gas tax refunds, and miscellaneous farm-related receipts.

Involuntary exit operators: The farm operator left farming between 1982 and 1986 for reasons of financial stress; the financial situation of either the farm or the farm economy discouraged the farm operator from farming.

Monetary and household assets: Money owed to the farm and household; the approximate value of money in banks, savings and loan associations, stocks, bonds, and mutual fund shares owned by the household; and the value of nonfarm real estate, life insurance, and any nonfarm businesses owned by household members, as of January 1, 1983 and 1987.

Net cash farm income: The sum of gross sales of agricultural products, receipts from Federal farm commodity programs, net receipts from custom work, gas tax refunds, and miscellaneous farm-related receipts minus cash farm operating expenses and the original cost of livestock sold. Under this definition, no imputed charge is made for depreciation.

Net worth: The value of assets less debt of households on January 1, 1983 and 1987.

Nonfarm transfer and asset income: Income from transfer payments like Social Security, and investments such as dividends and interest.

Off-farm earned income: Primarily wages and salaries earned by household members from off-farm jobs. Also includes the net self-employment income from a nonfarm business.

Total household income: The sum of net cash farm income, off-farm earnings, nonfarm transfer and asset income, and within household farm wage transfers, for calendar years 1982 and 1986.

Voluntary exit operators: The farm operator left farming during the 1982-86 period because of perceived nonfarm occupational advantages, such as a better job or retirement, but generally for age or health reasons.

Within household farm-wage transfers: Transfers from the operator of the farm business to the spouse or other household members for work done on the farm. They are also included as a farm operating expense.

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