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The Farm Entrepreneurial Population, 1988-90

Margaret A. Butler

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Abstract

About 5.7 million people lived in households affiliated with a farm business in 1990 compared with almost 4.6 million in the farm population as conventionally defined by place of residence. The economically defined group, called the farm entrepreneurial population, includes people who derive all or part of their livelihood from farm operations but do not necessarily live on a farm. This report analyzes census data on income, education, and other characteristics of the group identified by farm occupation and farm self-employment income criteria.

Keywords: Farm entrepreneurial population, farm operator population, farm-in-come-only population, demographic characteristics, social characteristics, economic characteristics, households, families

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Summary

About 5.7 million people lived in households affiliated with a farm business in 1990 compared with almost 4.6 million in the farm population as conventionally defined by residence. The economically defined group, called the farm entrepreneurial population, includes people who derive all or part of their livelihood from farming but do not necessarily live on a farm. This report analyzes data from the Census Bureau's March Current Population Survey for 1990 on income, education, and other characteristics of the farm entrepreneurial population.

Since first counted in the 1920 census, the farm population has been defined as people who live on farms or ranches, regardless of occupation or income. Today, some people live on farms but work in nonagricultural occupations, and some people who operate farms or derive income from their farms do not live there. This report quantifies and describes the characteristics of those who have business ties to farming but do not necessarily live on farms.

The farm entrepreneurial population consists of people who live in households in which someone's primary occupation is operating or managing a farm, or in which someone receives income from self-employed farming.

Findings include the following:

- Most farm people were white males. The median age of the farm entrepreneurial population in 1990 was 34.8 years, which was older than the national median age of 32.7 years.
- Educational attainment among farm people varied by sex. Females in the farm entrepreneurial population were more likely than their male counterparts to continue their education beyond high school.
- The farm population ranked high in labor force participation and low in unemployment in 1990. About 3.4 million farm entrepreneurs were in the labor force, with an unemployment rate of just 2.6 percent. Over 50 percent of people in farm entrepreneurial households worked in nonagricultural industries.
- The median income of farm entrepreneurial families was \$34,138 in 1989, less than one-half of 1 percent below the national average. The poverty rate for farm families was 9.1 percent, but fewer than 1 percent received welfare benefits. The national poverty rate was 10.3 percent with 5 percent on welfare. The main sources of income for farm entrepreneurial families were farm self-employment and wages and salaries earned from farm or nonfarm jobs.
- The farm population's social structure was more traditional and homogeneous than that of the total population. Of the 1.7 million farm entrepreneurial families, 94 percent were headed by married couples. Only 2.8 percent of families were headed by women. Largely because of the population's older age structure, more than half of all farm families had no children of their own living at home.

This report also contains tables for revised 1988 and new 1989 data on the farm entrepreneurial population.

The Farm Entrepreneurial Population, 1988-90

Margaret A. Butler*

Introduction

In March 1990, approximately 5.7 million persons, or 2.3 percent of the total population, lived in households associated with the operation of farms, as indicated by a household member's occupation or source of income. The 1990 estimate of the farm entrepreneurial population was unchanged from previous years (table 1). Based on the conventional farm residence definition, there were an estimated 4.6 million persons living on farms in 1990 (USDC and USDA, 1992).¹

Since first separately counted in the 1920 census, the farm population has been defined as people living on farms or ranches, regardless of occupation or source of income. At that time, the vast majority of people tied to farming lived on farms. But rural life became more diverse, as agricultural science and technology cut labor requirements and off-farm job opportunities grew. As a result, the majority of people who live on farms today are not employed primarily in agriculture (55 percent in 1990), and those employed in agriculture often do not live on farms (66 percent in 1990). Thus, the farm residence approach has lost much of its former validity. Alternative criteria for identifying farm-related people and the differences in the criteria used are detailed elsewhere (Banks, Butler, and Kalbacher, 1989).

To provide more complete coverage and a more precise concept, this report identifies the farm population based on farm operator or manager occupation and/or self-employment income from farming. This group and its household members are called the farm entrepreneurial population. Data are presented on the social, economic, and demographic characteristics of the total farm entrepreneurial population and its com-

ponents for 1990. Revised 1988 and new 1989 data appear in appendix IV.

No attempt is made here to identify the population associated with hired farmworkers. Many persons who do hired farmwork have only a tenuous connection with farming based on short-term seasonal work, and are also incompletely identified by occupational survey questions unless the questions relate to an entire year. Such questions were asked in the Agricultural Work Force Survey for 1987, which estimated the population of hired farmworker households (Oliveira and Cox, 1989). This survey has since been discontinued. The objective in this report is to define and characterize in its own right the population of farmer households.

Method of Identification

Data used to identify the farm entrepreneurial population in 1990 were drawn from the public-use computer files of the March Current Population Survey (CPS), conducted annually by the Bureau of the Census, U.S. Department of Commerce. The household is the unit of observation and consists of all persons who occupy a given housing unit. A house, an apartment, a group of rooms, or a single room are all considered housing units when occupied as separate living quarters.

People who fell into the CPS farm occupation and farm self-employment income categories were combined with members of their households to form the farm entrepreneurial population analyzed in this report. Definitions of these CPS categories are as follows:

- **Farm operator population:** All persons living in households where at least one member is employed primarily as a farm operator or farm manager. A

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¹Names in parentheses refer to sources listed in the References section.

household is also included if at least one unemployed member indicated that his or her last full-time job was farm operator or farm manager. An advantage in using occupation as a criterion is that there is no residence requirement, enabling those who farm but live off-farm to be included. A shortcoming is that, except for the CPS December supplement, which lacks detailed demographic data, CPS employment data refer only to a respondent's primary occupation. Households in which one or more members have only part-time, secondary jobs in farming are missed, unless another member works primarily as a farmer.

- **Farm income population:** Persons in households with at least one member who received farm self-employment income in the preceding year. Farm self-employment income is net money income (gross receipts minus operating expenses) from the operation of a farm received by a person on his or her own account, as an owner, renter, or sharecropper. This criterion also has no residency requirement but misses households of people who run incorporated farms.

The total farm entrepreneurial population consisted of all persons in households identified by either or both of the farm occupation and farm income criteria. The two populations overlapped substantially; households often qualified under both criteria (fig. 1). Because most farm operators were self-employed as farmers the preceding year, about 51 percent of the total farm entrepreneurial population was in households with both a farm operator or manager and a farm self-employment income recipient. Forty percent of the farm entrepreneurial population was in households where one or more persons received farm self-employment income and no one was primarily employed as a farm operator or farm manager. The remaining 9 percent resided in households with an operator or manager but had no reported farm self-employment income.

This report focuses on characteristics of the entire farm entrepreneurial population. The components of this population are farm operators or farm self-employment income recipients, their families, and other household members. Some data are available on characteristics of farm operators and farm income recipients alone (see app. III).

Table 1—Farm entrepreneurial population, families, and households, 1986-90¹

Item	1986	1987	1988	1989	1990
	<i>Thousands</i>				
Population	5,650	5,700	5,715	5,702	5,705
Income only ²	2,128	2,142	2,336	2,349	2,291
Operator only ³	520	631	508	533	518
Income and operator	3,002	2,926	2,871	2,820	2,895
Families	1,633	1,671	1,661	1,667	1,671
Income only	606	638	669	664	657
Operator only	149	196	139	158	159
Income and operator	878	837	853	845	854
Households	1,824	1,856	1,859	1,848	1,861
Income only	668	703	763	752	752
Operator only	174	212	171	177	172
Income and operator	982	940	926	918	936
Farm operators and farm self-employment income recipients:					
Farm operators	1,288	1,286	1,247	1,223	1,267
Farm income recipients only	759	761	852	853	852

¹Totals may not add due to rounding.

²Persons receiving farm self-employment income and no one is primarily employed as a farm operator or farm manager.

³Persons primarily employed as a farm operator or farm manager but who receive no reported farm self-employment income.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Regional Distribution

Slightly more than half of the farm population lived in the South in 1950, and about one-third lived in the Midwest (USDC and USDA, 1992). But mechanization of cotton production and the near abandonment of the share-tenant system of farming resulted in heavy movement of people off the farm and a smaller southern share of the total farm population.

By 1990, as measured by the entrepreneurial definition, 45 percent of the farm population lived in the Midwest, although less than a quarter of the Nation's total population lived in that region (table 2 and fig. 2). The South had the second largest share, at 32 percent of the farm entrepreneurial population.

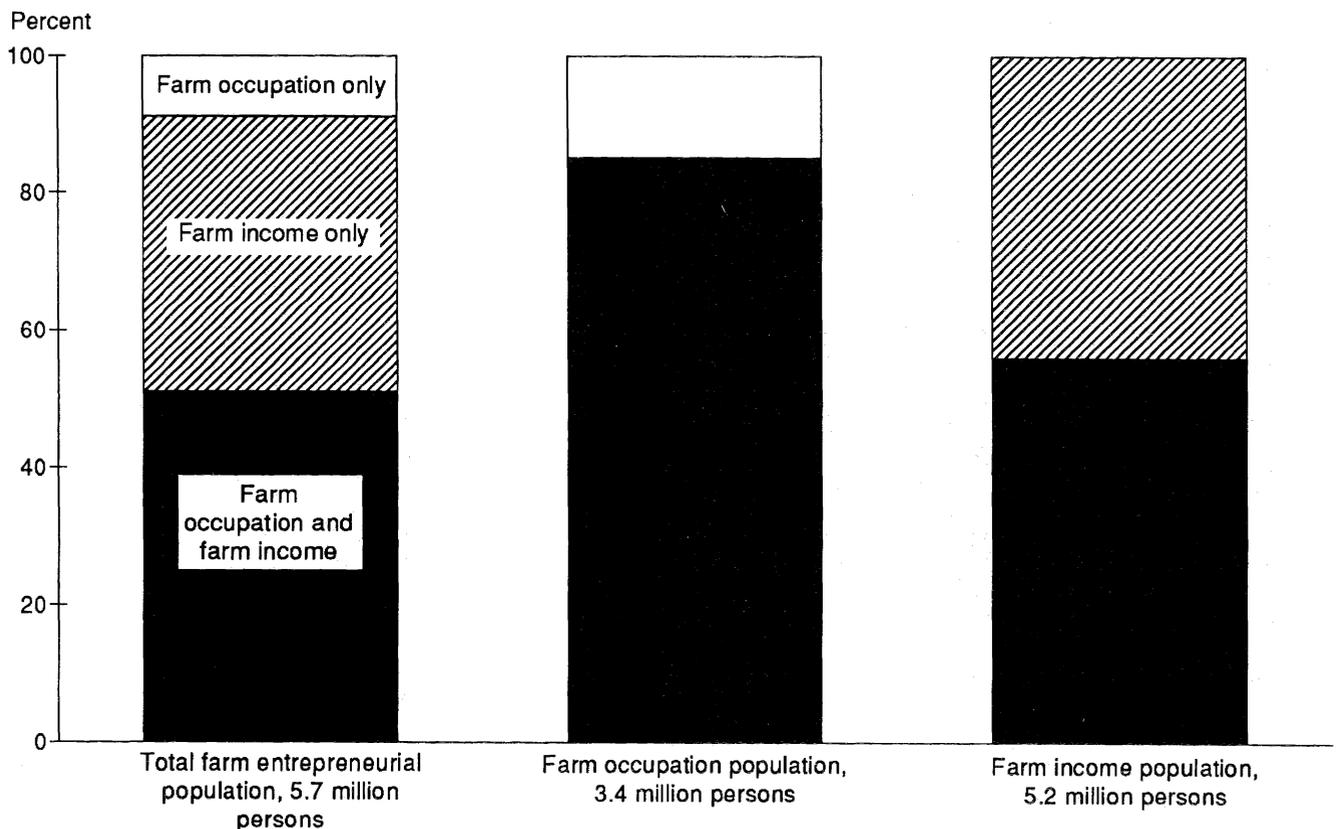
Southerners in the farm entrepreneurial population were more likely than their counterparts elsewhere to receive farm self-employment income without having

a primary farm occupation. Thirty-five percent of the farm-income-only population lived in the South compared with 30 percent of the farm operator population. This reflects the more frequent small-scale nature of southern farming and the greater reliance on off-farm work as the chief source of employment.

Racial and Ethnic Characteristics

Few minorities operated farms in the United States in 1990. An estimated 1.6 percent of the farm entrepreneurial population was black, and 2.6 percent was of Hispanic origin (table 3). Most minorities in agriculture were hired farm wage and salary workers. About 77 percent of blacks in agriculture were wage and salary workers. Eighty-nine percent of Hispanics with an agricultural occupation were wage and salary workers (USDC, 1986-90).

Figure 1
Composition of the farm entrepreneurial population, 1990



Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Sex and Age

Males outnumbered females in the farm entrepreneurial population in 1990, with 111 males for every 100 females compared with about 95 males per 100 females in the total U.S. population (USDC, 1986-90). The ratio was even higher in the farm operator population, where there were 117 males for every 100 females.

The historical movement of young adults off farms significantly altered the age structure of farm people.

The farm entrepreneurial population is older than the population nationwide. The median age in 1990 was 34.8 years (table 3) compared with 32.7 years for the total population (USDC, 1986-90).

Persons of prime working age (25-44 years old) constituted only 29.1 percent of the farm population in 1990. In contrast, 32.7 percent of the total U.S. population was in this age group. The initial capital investment needed for modern farming and the drop in the number of farms brought about by productivity gains

Table 2—Regional distribution of the farm entrepreneurial population, 1990¹

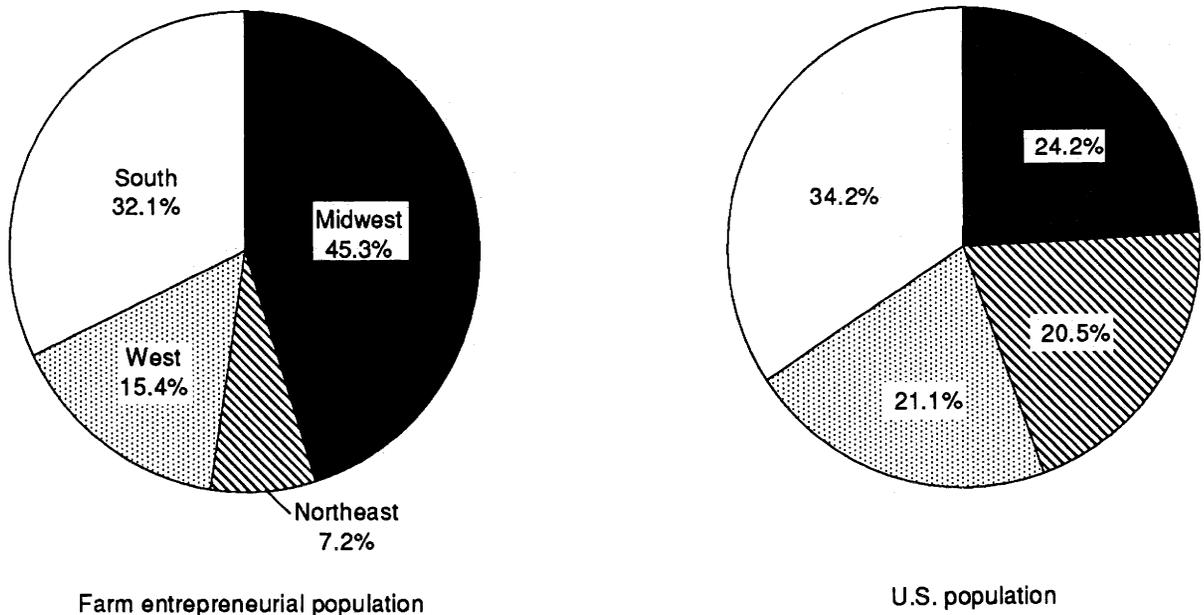
Region	Thousands			Percent		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
Total	5,705	3,413	2,291	100.0	100.0	100.0
Northeast	408	263	145	7.2	7.7	6.3
Midwest	2,587	1,621	966	45.3	47.5	42.2
South	1,831	1,022	809	32.1	29.9	35.3
West	879	508	372	15.4	14.9	16.2

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Figure 2

Regional distribution of the population, 1990



Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

have slowed the entry of young people into farming. There were 3.4 million farms in 1965. By 1990, the number had fallen to 2.1 million (USDA, 1990).

Because of the slower entry of young people into farming, persons 45-64 years old constituted a much higher share of the work force in the farm entrepreneurial population than in the total population (26.2 versus 18.9 percent). Retirement-age people, those 65 years and older, accounted for only 9.1 percent of the farm entrepreneurial population and 12 percent of the total population in 1990. The lower representation of retirement-age people in the farm population is forced partly by the employment-oriented definition used in this report. To be counted among the farm entrepreneurs, a person needed current or recent employment as a farm operator or manager or needed farm self-employment income.

Education

In 1990, farm entrepreneurs were more likely than the general population to complete high school and just as likely to attend college. Of the farm entrepreneurial population aged 25 years and over, 45 percent had completed only high school (table 4). An additional 38 percent had completed at least 1 year of college. In comparison, 38 percent of the U.S. population had completed only high school and an additional 39 percent had 1 or more years of college.

Women in the farm entrepreneurial population were much more likely than all U.S. women to have completed high school. Farm entrepreneurial women were also more likely than either farm entrepreneurial males or total U.S. males to be high school graduates. Only 14 percent of farm women did not complete high school compared with 19 percent of farm men and 22 percent each of men and women in the general

Table 3—Characteristics of the farm entrepreneurial population, 1990¹

Characteristic	-----Thousands-----			-----Percent-----		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
Total	5,705	3,413	2,291	100.0	100.0	100.0
Male	3,007	1,840	1,167	52.7	53.9	50.9
Female	2,698	1,574	1,124	47.3	46.1	49.1
Race and Hispanic origin:						
White	5,545	3,346	2,199	97.2	98.0	96.0
Black	91	41	50	1.6	1.2	2.2
Hispanic origin ²	151	81	70	2.6	2.4	3.1
Age (years):						
Under 18	1,534	936	599	26.9	27.4	26.1
18-64	3,654	2,096	1,558	64.0	61.4	68.0
18-24	505	276	229	8.9	8.1	10.0
25-34	827	517	310	14.5	15.1	13.5
35-44	831	446	385	14.6	13.1	16.8
45-54	780	444	336	13.7	13.0	14.7
55-64	711	413	298	12.5	12.1	13.0
65 and over	517	382	135	9.1	11.2	5.9
				<i>Years</i>		
Median age	34.8	34.6	35.2	—	—	—

— = Not applicable.

¹Totals may not add due to rounding.

²Persons of Hispanic origin may be any race.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

population. College attendance was more common for females in the farm entrepreneurial population and for males in the general population. Males in the farm entrepreneurial population were as likely as females in the general population to attend college (36.1 percent and 36.5 percent).

Labor Force Participation

Nearly 78 percent of the farm entrepreneurial population aged 16 years and older participated in the labor force in March 1990 (table 5) compared with 66 percent of the total U.S. population (USDC, 1986-90). Both men and women in the general population had lower labor force participation rates (75.4 percent and 57.2 percent) than their farm counterparts (87.9 percent and 66.5 percent). Within the farm population, men in farm operator households were more likely to participate in the labor force than men in farm-income-only households.

Agricultural and Nonagricultural Employment

Men in farm operator households were overwhelmingly (88 percent) employed in agriculture (table 5), as expected in view of the occupational basis used to identify the group. However, only 36 percent of

women in the farm operator population worked in agriculture. Few of the farm-income-only population were primarily employed in agriculture.

Most employed women in the farm operator population (over 60 percent) worked in nonfarm jobs. About 94 percent of employed women in farm-income-only households worked in nonagricultural industries.

Nonagricultural Industries

Farm entrepreneurial persons working primarily in nonagricultural industries were concentrated in professional and related services, trade, and manufacturing industries (table 6). Women were far more likely than men to be employed in professional and related services (41.1 percent compared with 13.6 percent). Trade was the leading industry for men.

Nonagricultural Occupations

Even among people living on farms, off-farm employment is not uncommon. Forty-six percent of employed farm entrepreneurial people living on farms had a nonfarm occupation as their primary job in 1990. Nearly 35 percent held technical occupations, and roughly 25 percent held managerial positions (fig. 3).

Table 4—Education of the farm entrepreneurial population aged 25 years and over, 1990¹

Education level	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
	-----Thousands-----			-----Percent-----		
Total	3,666	2,202	1,464	100.0	100.0	100.0
Not high school graduate	608	417	191	16.6	18.9	13.0
High school graduate	1,652	1,031	621	45.1	46.8	42.4
Some college or more	1,405	753	652	38.3	34.2	44.5
Males	1,931	1,177	753	100.0	100.0	100.0
Not high school graduate	371	270	102	19.2	22.9	13.5
High school graduate	862	540	321	44.6	45.9	42.6
Some college or more	698	367	331	36.1	31.2	44.0
Females	1,735	1,024	711	100.0	100.0	100.0
Not high school graduate	237	147	90	13.7	14.4	12.7
High school graduate	791	491	300	45.6	47.9	42.2
Some college or more	707	386	321	40.7	37.7	45.1

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

The proportion of farm entrepreneurial persons primarily employed in nonagricultural occupations differed between the farm operator and the farm-income-only subgroups. Only 3 of every 10 persons in the farm operator population held nonfarm jobs compared with 19 of every 20 persons in the farm-income-only population (USDC, 1986-90). Although fewer persons in the farm operator population than in the farm income-only population held nonfarm jobs as their primary occupation, the need for off-farm employment was probably greater for the farm operator population. As the main source of income for the farm operator population, farm income is so erratic that off-farm jobs are often necessary to supplement farm income. People in the farm-income-only population do not usually depend on farm income as their main source of income.

Unemployment

The rate of unemployment was relatively low among farm people compared with the total U.S. population.

Only 2.6 percent of the farm entrepreneurial labor force was unemployed (table 5) compared with nearly 6 percent of the total U.S. labor force. Men and women in the farm entrepreneurial labor force had similar unemployment rates. At the national level, men were somewhat more likely than women to be unemployed (5.9 percent versus 5.1 percent).

Unemployment was higher in the farm-income-only population than in the farm operator population, a difference due in part to the occupational selection criterion of the farm operator population. Both men and women in the farm-income-only population had higher jobless rates than their operator population counterparts.

Household and Family Structure

There were about 1.9 million farm households in the United States in 1990, accounting for nearly 2 percent

Table 5—Labor force participation of the farm entrepreneurial population aged 16 years and over, 1990¹

Labor force status	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
	-----Thousands-----			-----Percent-----		
Total	4,367	2,590	1,779	100.0	100.0	100.0
In labor force	3,397	2,045	1,353	77.8	79.0	76.1
Employed	3,310	2,008	1,303	97.4	98.2	96.3
Agriculture	1,438	1,390	48	42.3	68.0	3.5
Nonagriculture	1,872	618	1,255	55.1	30.2	92.8
Unemployed	87	37	50	2.6	1.8	3.7
Not in labor force	971	545	426	22.2	21.0	23.9
Men	2,301	1,387	915	100.0	100.0	100.0
In labor force	2,022	1,264	758	87.9	91.1	82.8
Employed	1,972	1,244	728	97.5	98.4	96.0
Agriculture	1,146	1,109	37	56.7	87.7	4.9
Nonagriculture	826	135	691	40.9	10.7	91.2
Unemployed	50	20	30	2.5	1.6	4.0
Not in labor force	278	121	157	12.1	8.7	17.2
Women	2,067	1,203	864	100.0	100.0	100.0
In labor force	1,375	780	595	66.5	64.8	68.9
Employed	1,338	763	575	97.3	97.8	96.6
Agriculture	292	281	11	21.2	36.0	1.8
Nonagriculture	1,046	482	564	76.1	61.8	94.8
Unemployed	36	17	20	2.6	2.2	3.4
Not in labor force	693	424	269	33.5	35.2	31.1

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

of all U.S. households. Farm households generally fit traditional family patterns. However, they had fewer young children at home because of a lower proportion of adults under age 35.

Farm Entrepreneurial Households

An average of 3.1 persons lived in each farm entrepreneurial household in 1990 (table 7). Although

small by historical standards for farm households, the size of farm households remained somewhat larger than the national average of 2.6 persons (USDC, Dec. 1990). Farm entrepreneurial households were more likely than households in general to be classified as family households (84 percent versus 71 percent), reflecting the relative absence of one-person households among farm people who are still economically active.

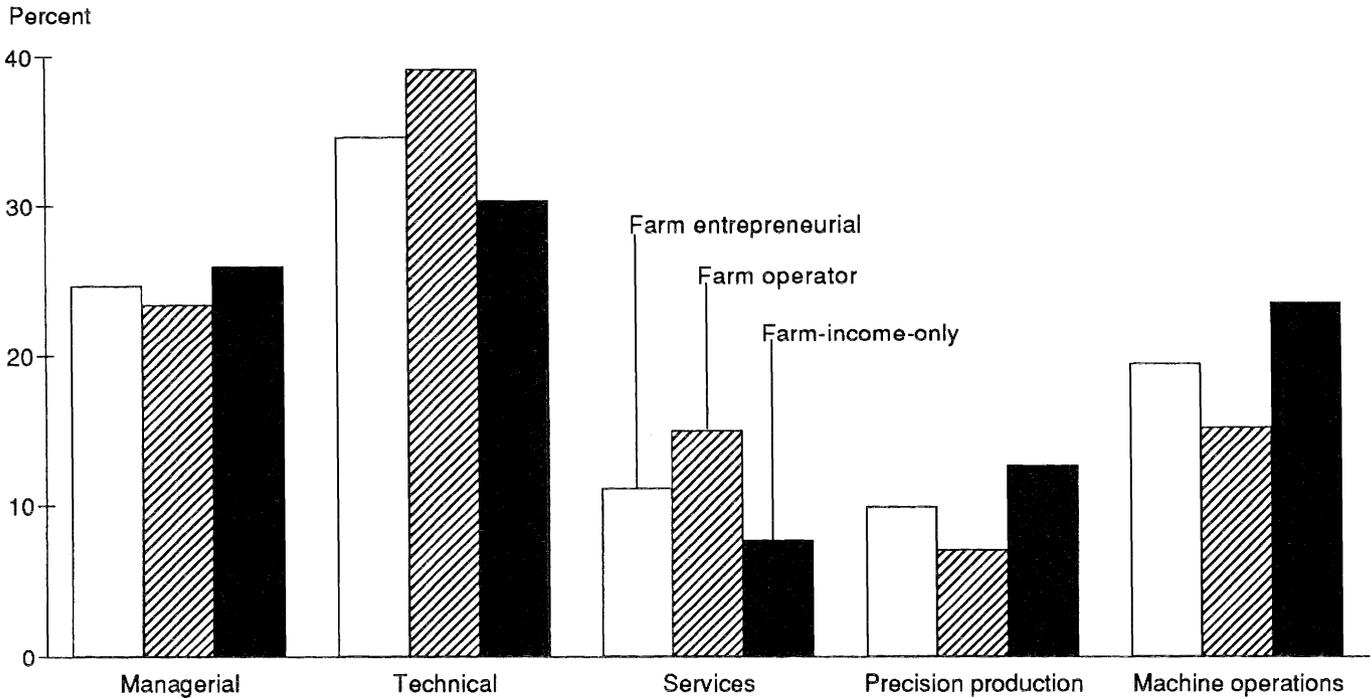
Table 6—Employment in nonagricultural industries of the farm entrepreneurial population aged 16 years and over, 1990¹

Nonagricultural industry	Thousands			Percent		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
Total	1,872	618	1,255	100.0	100.0	100.0
Forestry and fisheries	4	2	2	.2	.3	.2
Mining and construction	149	29	120	8.0	4.7	9.6
Manufacturing	267	74	193	14.3	12.0	15.4
Transportation, communications, and other public utilities	148	36	113	7.9	5.8	9.0
Trade	390	133	258	20.8	21.5	20.6
Finance, insurance, and real estate	136	44	92	7.3	7.1	7.3
Professional and related services	543	214	329	29.0	34.6	26.2
All other services	150	55	95	8.0	8.9	7.6
Public administration	86	32	53	4.6	5.2	4.2
Men	826	134	691	100.0	100.0	100.0
Forestry and fisheries	2	2	0	.2	1.5	0
Mining and construction	135	25	110	16.3	18.7	15.9
Manufacturing	159	25	134	19.2	18.7	19.4
Transportation, communications, and other public utilities	100	23	79	12.1	17.2	11.4
Trade	184	35	149	22.3	26.1	21.6
Finance, insurance, and real estate	42	2	40	5.1	1.5	5.8
Professional and related services	112	5	107	13.6	3.7	15.5
All other services	43	7	36	5.2	5.2	5.2
Public administration	49	10	39	5.9	7.4	5.6
Women	1,047	483	564	100.0	100.0	100.0
Forestry and fisheries	2	0	2	.2	0	.4
Mining and construction	14	4	11	1.3	.8	2.0
Manufacturing	108	48	59	10.3	9.9	10.5
Transportation, communications, and other public utilities	48	13	35	4.6	2.7	6.2
Trade	207	98	109	19.8	20.3	19.3
Finance, insurance, and real estate	94	41	53	9.0	8.5	9.4
Professional and related services	430	209	221	41.1	43.3	39.2
All other services	107	48	59	10.2	9.9	10.5
Public administration	37	22	15	3.5	4.6	2.7

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Figure 3
Nonagricultural occupations of the farm entrepreneurial labor force living on farms, 1990



Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Table 7—Characteristics of farm entrepreneurial households, 1990¹

Characteristic	Thousands			Percent		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
Total households	1,861	1,109	752	100.0	100.0	100.0
Family households	1,563	945	618	84.0	85.2	82.2
Nonfamily households	298	164	134	16.0	14.8	17.8
Number of persons in household:						
One	152	72	80	8.2	6.5	10.6
Two	673	432	240	36.2	39.0	31.9
Three	377	218	158	20.3	19.7	21.0
Four	389	222	167	20.9	20.0	22.2
Five or more	271	164	106	14.5	14.8	14.1
Average number of persons per household	3.07	3.08	3.05	—	—	—

— = Not applicable.

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Farm Entrepreneurial Families

Farm entrepreneurial families accounted for 2.5 percent of the approximately 66.1 million U.S. families in 1990 (USDC, 1986-90). The average size of farm entrepreneurial families (3.4 persons) did not differ significantly from that of all families (3.2 persons) (table 8) (USDC, Dec. 1990).

The married-couple family remains the dominant household type in the United States, despite substantial increases in other family types during the 1980's. The structure of farm families seems to be more stable and traditional than for U.S. families overall. Married-couple families accounted for 94 percent of farm entrepreneurial families in 1990 (table 8) but for 79 percent of U.S. families overall (USDC, Sept. 1990). Females headed only 2.8

percent of farm families but 16.5 percent of all U.S. families.

Despite the predominance of married-couple families, a majority of farm families had no children present. This is consistent with the older age structure of farm people and their lower birth rate. Slightly more than half of both farm entrepreneurial and U.S. families had no children of their own under 18 years of age living at home (table 8) (USDC, Dec. 1990). Of the farm families with children at home, nearly 60 percent had only school-age children (age 6-17 years). Roughly 18 percent of the families had only pre-school-age children (under 6 years), and 23 percent had both preschool and older children. There were no significant differences in the proportion of children in the two age groups, school-age and younger, between farm and all U.S. families with children.

Table 8—Characteristics of farm entrepreneurial families, 1990¹

Characteristic	Thousands			Percent		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
Total families	1,671	1,014	657	100.0	100.0	100.0
Married-couple family	1,563	945	618	93.5	93.2	94.1
Other, male householder	61	44	18	3.7	4.3	2.7
Other, female householder	47	26	22	2.8	2.6	3.3
Own children aged under 18 years:						
None	874	540	333	52.3	53.3	50.7
One or more	797	474	324	47.7	46.7	49.3
One or more own children	797	474	324	100.0	100.0	100.0
All aged under 6 years	145	92	53	18.2	19.4	16.4
Some aged under 6 years, some aged 6-17 years	179	108	71	22.5	22.8	21.9
All aged 6-17 years	473	274	200	59.3	57.8	61.7
Number of persons in family:						
Two	656	418	237	39.3	41.2	36.1
Three	371	221	150	22.2	21.8	22.8
Four	378	212	166	22.6	20.9	25.3
Five or more	267	162	105	16.0	16.0	16.0
Average number of persons in family	3.41	3.37	3.49	—	—	—

— = Not applicable.

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Income

Income of farm entrepreneurial families kept pace with the rest of the Nation. Farm families and households differed from those in the general population in both the amount and source of income received. Income data are for calendar year 1989 and are shown separately for households and families.

Household Income

Household income includes the income of all related persons plus the income of any unrelated persons in the household. In the CPS, income data show gross money income received before payments of Federal, State, local, or Social Security (FICA--Federal Insurance Contributions Act) taxes and before deductions, such as union dues or Medicare premiums.

The median income for farm entrepreneurial households was \$33,338 in 1989 (table 9). This median was significantly higher than that of \$28,910 for all U.S. households (USDC, Sept. 1990).

However, median income was not evenly divided between farm operator and farm-income-only households. The 1989 median income of farm operator households (\$28,419) was far lower than that of farm-income-only households (\$42,098). Thus, the households with at least one person working solely or primarily as a farm operator or manager in 1990 did not fare nearly as well as those households having farm income but no primary occupational commitment to the business. This was true despite the fact that 1989 was by far the best year for farm income since 1979 (USDA, 1990).

Family Income

There was no significant difference in the median income of farm entrepreneurial families and all U.S. families. The median income of farm entrepreneurial families was \$34,138 in 1989, which was less than half of 1 percent below the median of \$34,210 for families nationwide (table 10) (USDC, Sept. 1990).

Table 9—Income of farm entrepreneurial households, 1989¹

Household income	Thousands			Percent		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
Total households	1,861	1,109	752	100.0	100.0	100.0
Household income (dollars):						
Under 5,000	85	73	12	4.6	6.6	1.6
5,000-9,999	82	60	21	4.4	5.4	2.8
10,000-14,999	136	108	28	7.3	9.7	3.7
15,000-19,999	167	123	44	9.0	11.1	5.9
20,000-24,999	168	105	63	9.0	9.5	8.4
25,000-29,999	188	125	63	10.1	11.3	8.4
30,000-34,999	170	108	62	9.1	9.7	8.2
35,000-39,999	144	91	53	7.7	8.2	7.0
40,000-44,999	131	59	72	7.0	5.3	9.6
45,000-49,999	113	41	71	6.1	3.7	9.4
50,000-59,999	154	76	78	8.3	6.9	10.4
60,000-74,999	138	58	79	7.4	5.2	10.5
75,000-99,999	110	40	70	5.9	3.6	9.3
100,000 and over	76	41	35	4.1	3.7	4.7
				<i>Dollars</i>		
Median household income	33,338	28,419	42,098	—	—	—

— = Not applicable.

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Nor were there significant differences in the income distribution between farm families and families nationwide (fig. 4). Approximately 40 percent of both farm entrepreneurial families and families nationwide reported income of \$40,000 or more.

However, within the farm population, the income of farm operator families lagged behind that of farm-income-only families. The median income for farm-income-only families was significantly higher than that for either farm operator families or for all families nationwide. Farm operator families were more likely than farm-income-only families to be in the lower income categories (fig. 5). Only 29 percent of farm operator families reported income of \$40,000 or more compared with 57 percent of farm-income-only families.

The overall financial conditions of farm families has improved considerably since the mid-1980's. In 1989, 16.9 percent of all farm entrepreneurial fami-

lies who received farm self-employment income reported a net loss from farming. This is not significantly higher, in a statistical sense, than the percentage that reported a net loss in 1988 (15.2 percent). However, it was an improvement over 1985, when 28.2 percent had a net loss due to farming (Butler, 1989). The overall improvement in the farm sector's earnings in 1989 is reflected by the resurgence in farm income following the 1988 drought and by increasing real estate values over the last 4 years (Morehart, Johnson, and Banker, 1990).

A loss from farming however, did not necessarily accurately reflect the overall socioeconomic well-being of farm families because income from other sources helped compensate for losses in agriculture. The percentage of farm families that lost money from all income sources did not change significantly between 1988 and 1989. Total income was negative for 1.9 percent of farm entrepreneurial families in 1989 compared with 1.4 percent in 1988 (USDC, 1986-90).

Table 10—Income and poverty among farm entrepreneurial families, 1989¹

Income and poverty	Total			Total		
	Farm operator	Farm income only		Farm operator	Farm income only	
	-----Thousands-----			-----Percent-----		
Total families	1,671	1,014	657	100.0	100.0	100.0
Family income (dollars):						
Under 5,000	70	60	10	4.2	5.9	1.5
5,000-9,999	67	53	14	4.0	5.2	2.1
10,000-14,999	111	95	17	6.6	9.4	2.6
15,000-19,999	143	104	39	8.6	10.3	5.9
20,000-24,999	149	100	48	8.9	9.9	7.3
25,000-29,999	173	122	51	10.4	12.0	7.8
30,000-34,999	148	99	49	8.9	9.8	7.5
35,000-39,999	141	86	54	8.4	8.5	8.2
40,000-49,999	227	92	135	13.6	9.1	20.5
50,000-74,999	268	126	143	16.0	12.4	21.8
75,000-99,999	99	37	63	5.9	3.6	9.6
100,000 and over	75	41	34	4.5	4.0	5.2
Below poverty level	152	125	27	9.1	12.3	4.1
				<i>Dollars</i>		
Median family income	34,138	28,893	43,444	—	—	—

— = Not applicable.

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Poverty

Poverty thresholds are based solely on money income and vary by family size. The poverty threshold for a family of four was \$12,675 for income received in 1989 (USDC, Sept. 1990). The poverty rate of 9 percent for farm entrepreneurial families was not significantly lower than the 10-percent rate for families nationwide in 1989 (table 10) (USDC, Sept. 1990).

Poverty rates for farm entrepreneurial families have declined steadily for the past 5 years, while rates for families in the general population have not significantly changed (fig. 6). The decrease in the number of farm families that sustained a net loss from farming may partially explain the decline in poverty rates.

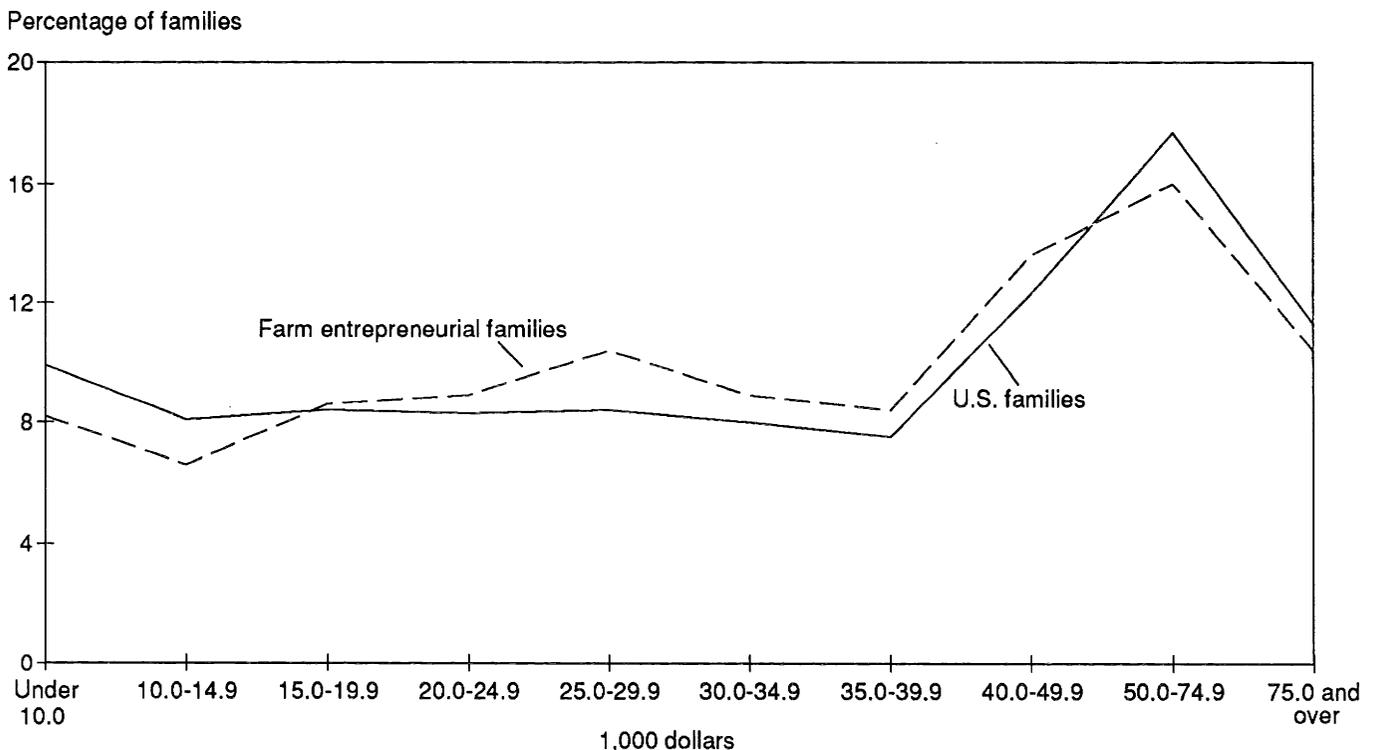
Poverty is more prevalent among farm operator families than among farm-income-only families. Although the poverty rate for farm operator families has significantly declined over the past 5 years, their rate was still about three times higher than that for farm-income-only families in 1989 (12.3 versus 4.1 percent). One might think that if 25 percent of

farm-income-only families reported a net loss from farming (compared with only 11 percent of farm operator families), then the former group would have the higher poverty rate. But, farm-income-only families tended to rely more heavily on wage and salary than farm self-employment income as their main source of earnings. Eighty percent of the total earnings for farm-income-only families came from wage and salary compared with only 50 percent of earnings for farm operator families. In contrast, only 10 percent of the total earnings of farm-income-only families came from farm self-employment income versus 47 percent of the total earnings for farm operator families (USDC, 1986-90).

Sources of Income

Farm entrepreneurial families received income from various sources, but, as expected, most (90 percent) reported farm self-employment income (or loss) in 1989 (table 11). About 16 percent of farm operator families reported no farm self-employment income, a situation likely to occur in families with farm managers or new operators. About 37 percent of the total in-

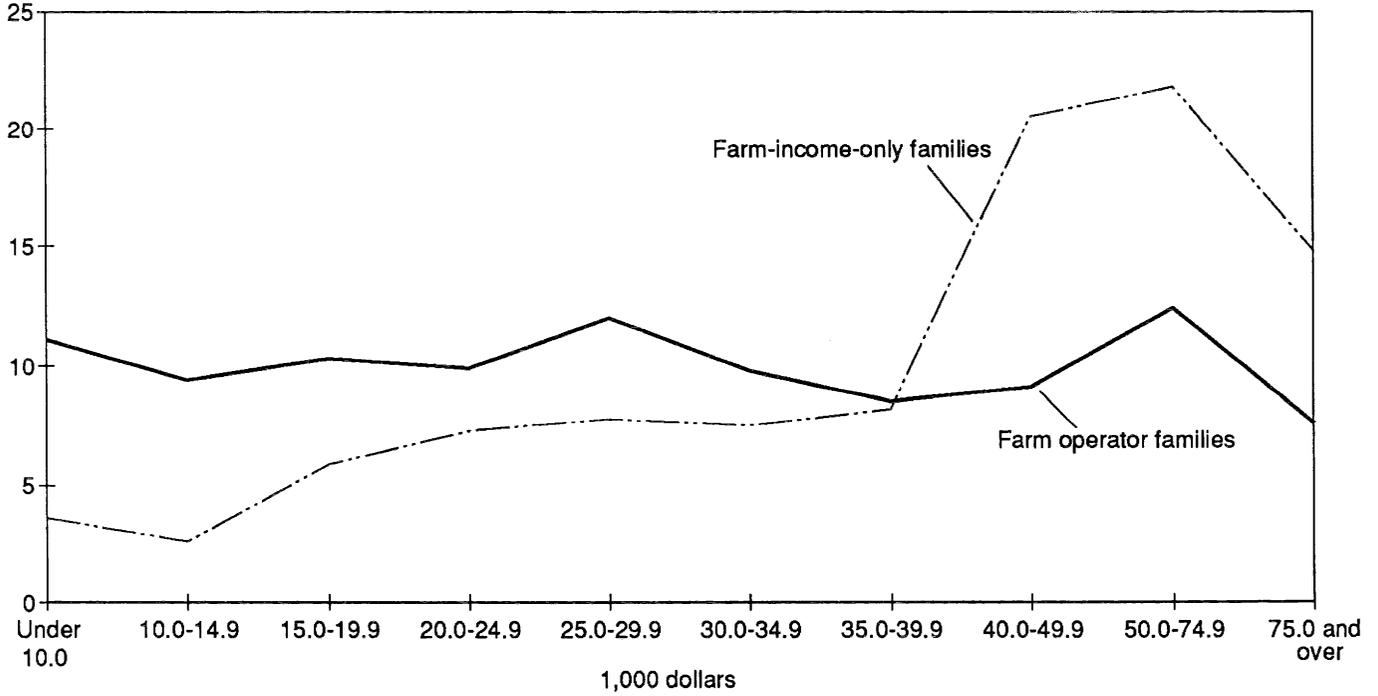
Figure 4
Income distribution of U.S. families and farm entrepreneurial families, 1989



Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Figure 5
Income distribution of farm operator and farm-income-only families, 1989

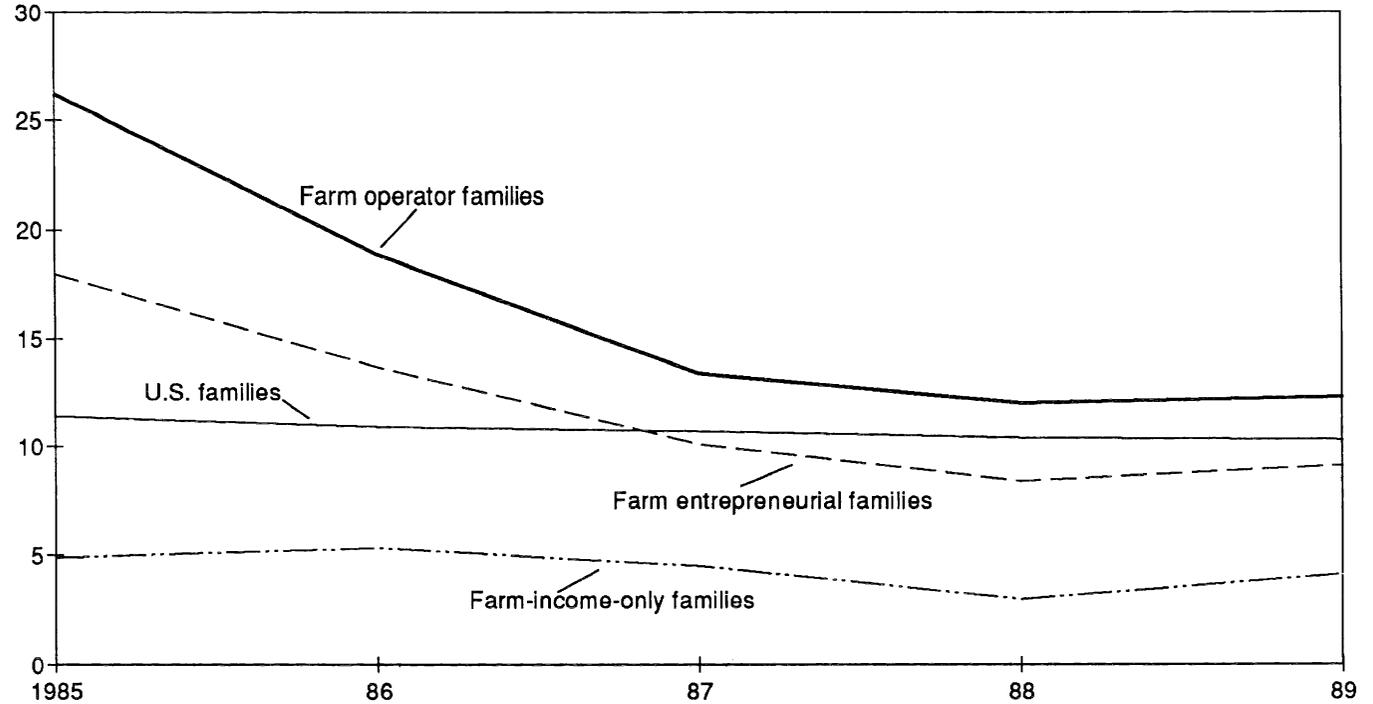
Percentage of families



Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Figure 6
Poverty among farm entrepreneurial families compared with all families, 1989

Percent



Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

come of farm operator families came from farming compared with 8 percent for farm-income-only families (fig. 7). While the percentage of income from farming for farm-income-only families did not change, farm operator families were less dependent on off-farm sources of income in 1989 than in 1986. In 1986, only 28 percent of farm operator family income came from farming (Butler, 1989).

Wage and salary income was the most frequently reported source of earnings, after farm self-employment income, for farm entrepreneurial families (table 11). Wage and salary income was the main source of income for families nationwide. Seventy-seven percent of farm families and 82 percent of families nationwide received wage and salary income in 1989 (USDC, 1986-90). Nearly 68 percent of the total income of farm-income-only families came from wage

and salary versus only 40 percent of that for farm operator families (fig. 7).

Interest, the most frequently reported source of property income, is widely received by farm entrepreneurial families. Farm families were more likely than families nationwide to have savings or investments that earned interest, with about four-fifths of farm families and more than two-thirds of U.S. families reporting interest income in 1989 (table 11) (USDC, 1986-90). Somewhat less than one-fourth of farm families received other property income, such as dividends and rents. This, too, is a larger proportion than found among U.S. families as a whole.

Income from interest differed between the two subgroups in the farm population. Farm operator families were less likely than farm-income-only families

Table 11—Sources of income of farm entrepreneurial families, 1989

Source of income	Total	Farm operator	Farm income only
		<i>Thousands</i>	
Total families	1,671	1,014	657
		<i>Percent</i>	
Families receiving:			
Wage and salary income	77.6	68.7	91.3
Self-employment income—			
Nonfarm	18.9	15.6	24.1
Farm	90.2	84.2	100.0
Property income—			
Interest	79.7	77.0	83.9
Dividends	23.6	19.1	30.6
Rent	20.9	19.9	22.6
Transfer payments—			
Social security and railroad retirement income	20.6	25.1	13.7
Supplemental security income ¹	2.1	1.7	2.5
Public assistance and welfare ²	.4	.5	.3
Unemployment compensation, veterans' payments, and workers' compensation	8.5	6.0	12.3
Retirement ³	9.5	8.7	11.1
Alimony and child support ⁴	7.1	4.5	10.9

¹Includes payments made by Federal, State, and local welfare agencies to low-income persons who are aged 65 years and over, blind, or disabled.

²Includes payments from Aid to Families with Dependent Children and general assistance.

³Includes private pensions and annuities, military retirement, and Federal, State, or local government pensions.

⁴Includes other regular contributions from persons not in the household.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

to get interest, dividends, or rent, although this property income accounted for a larger proportion of the total income of farm operator families than for farm-income-only families (11 percent versus 8.8 percent) (USDC, 1986-90).

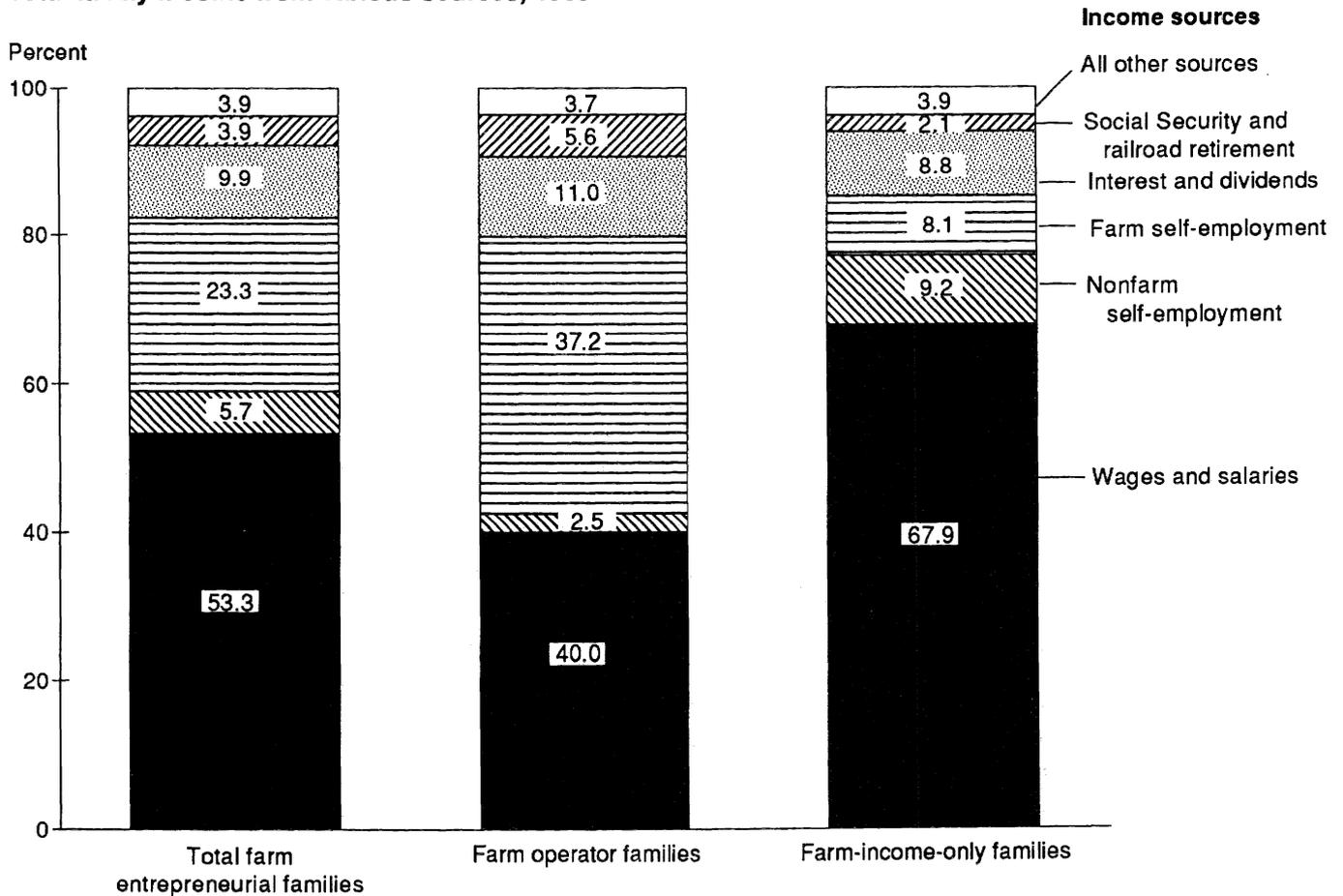
Some farm families received income from public assistance, unemployment compensation, and retirement programs, but they were the exceptions. Our classification of the farm population as those in households where a member had a farm-related job or farm self-employment income reduces the likelihood that farm entrepreneurial families would receive these kinds of payments, which go to people who are not working.

Welfare benefits ranked at the bottom of the list of income sources for farm entrepreneurial families. Fewer than 1 percent of farm families received public assistance compared with more than 5 percent of fami-

lies nationwide (USDC, 1986-90). The employment- and income-based selection of the farm group certainly plays a role in this difference, as mentioned above. Additionally, farm families tend to have more assets than families nationwide and the farm population has far fewer female-headed families with minor children. As a result, a smaller proportion of farm families qualify for assistance.

People in farm entrepreneurial families may have received other types of benefits less often than families in the general population because they chose not to participate. Wage and salary workers and/or their employers are required to enroll in unemployment compensation and retirement benefit programs. But the self-employed have an option not to enroll. The higher proportion of self-employed persons in farm entrepreneurial families explains part of the difference in the rate at which farm families receive these benefits compared with the rate for families nation-

Figure 7
Total family income from various sources, 1989



Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

wide. Nearly 9 percent of farm entrepreneurial families and 12 percent of all families received unemployment compensation, veterans' payments, and workers' compensation in 1989 (USDC, 1986-90).

Farm families were also less likely to collect retirement income (9.5 percent versus 15 percent). Within the farm entrepreneurial population, farm operator families were more likely than farm-income-only families to receive Social Security payments, an indication of their older average age.

Conclusions

People with ties to farming are a diverse group. Although farming can still be considered a way of life for some people, the use of farm occupation and farm self-employment income as criteria for identifying farm people emphasizes farming as a business. Many people who make their living by farming today must have appropriate skills for the farm business as well as the necessary skills to compete for off-farm jobs.

The education gap that historically existed between the farm and nonfarm population has disappeared. Within the farm entrepreneurial population, women were more likely than men to be high school graduates and to attend college. With the unemployment rate for farm people well below the national average, the farm entrepreneurial population seems to be competing successfully for jobs available in their area.

Lower debt/asset ratios and increasing net farm business incomes are indicators that farmers are recovering from the financial stress of the early and mid-1980's. Farm entrepreneurial families kept pace with families nationwide in income in 1989. Although the percentage of farm families in poverty did not differ from that of families nationwide, farm entrepreneurial families were less likely to receive welfare benefits. These farm families typically depended on both farm self-employment and wage and salary earnings as their main sources of income.

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Appendix I: Definitions and Explanations

Population coverage. Estimates in this report are based on data tabulated from the March 1986 through 1990 Current Population Survey (CPS) of the Bureau of the Census. They relate to the civilian noninstitutional population of the United States and members of the armed forces living off post or with their families on post.

Race. The population is divided into three groups on the basis of race: white, black, and "other races."

The last category includes Indians, Japanese, Chinese, and any other race except white and black. Data for "other races" are not shown in this report.

Hispanic origin. People of Hispanic origin are those who indicate that their origin is Mexican, Puerto Rican, Cuban, Central or South American, or some other Hispanic origin. People of Hispanic origin may be of any race.

Age. The age classification is based on the age of the person at last birthday.

Median. The median is the value which divides a distribution into two equal parts, one-half of the cases falling below this value and one-half of the cases exceeding this value.

Labor force. People are classified as in the labor force if they were employed or unemployed during the survey week.

Employed. Employed people include all civilians aged 16 and over who, during the specified week, (1) did any work as paid employees, in their own business or profession, or on their own farm, or who worked 15 hours or more as unpaid workers on a farm or in a business operated by a member of the family, or (2) were not working but who had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, or labor-management dispute, or because they were taking off for personal reasons, whether or not they were paid by their employers for time off, and whether or not they were seeking other jobs.

Unemployed. Unemployed people are those civilians aged 16 and over who, during the survey week, had no employment but were available for work and (1) had engaged in any specific job-seeking activity within the past 4 weeks, (2) were waiting to be called back to a job from which they had been laid off, or (3) were waiting to report to a new wage or salary job within 30 days.

Not in the labor force. All civilians aged 16 and over who are not classified as employed or unemployed are defined as "not in the labor force." This group includes people engaged only in own-home housework, attending school, or unable to work be-

cause of long-term physical or mental illness, people who are retired, seasonal workers for whom the survey week fell in an off-season, and the voluntarily idle.

Industry and occupation. Data on industry and occupation refer to the job held during the survey week. People with more than one job during the survey week were classified as employed in the industry or occupation in which they worked the greatest number of hours during the week. The industry and occupation groups are based on the classification system used in the 1980 Census of Population.

Family. A family is a group of two or more people (one of whom is the householder) related by birth, marriage, or adoption and who reside together; all such people are considered as members of one family.

Family household. A family household is a household maintained by a family (as defined above). A married-couple family household consists of a husband and wife, with or without children. Other family households consist of a male or female householder with dependents but no spouse present.

Nonfamily household. A nonfamily household consists of a householder who lives alone or with one or more nonrelatives. It may also contain subgroups of people related to each other but not to the householder.

Own children. Own children in a family are sons and daughters, including stepchildren and adopted children of the householder. The count of own children under 18 years old is limited to single (never married) children.

Family income. The total income of a family is the sum of the amounts received by all income recipients in the family.

Rounding. The individual figures in this report are rounded to the nearest thousand and have not been adjusted to group totals, which are independently rounded. Percentages are rounded to the nearest tenth of a percent; therefore, the percentages in a distribution do not always add to exactly 100.0 percent. The totals, however, are always shown as 100.0.

Appendix II: Source and Reliability of Estimates

Estimates in this report are based on data obtained from the March 1986-90 CPS conducted by the Bureau of the Census. The monthly CPS deals mainly with labor force data for the civilian, noninstitutional population of the United States. Questions relating to labor force participation are asked about each member 15 years old and over in every sample household. Data on labor force participation in this report refer to persons 16 years old and over. Supplementary questions are also asked every March about household and family characteristics, and about money income and work experience for the previous year. For a more detailed description of the CPS, its sample size, and the estimating procedure, see (USDC, Dec. 1990, and USDC, Sept. 1990).

Since the CPS estimates in this report are based on a sample, they may differ somewhat from the figures obtained if a complete census had been taken using the same schedules, instructions, and enumerators. There are two types of errors possible in an estimate based on a sample: sampling and nonsampling. Standard errors that primarily indicate the magnitude of the sampling errors for data presented in this report are published in (USDC and USDA, 1992). Standard errors also partially measure the effect of some nonsampling errors in response and enumeration, but do not measure any systematic biases in the data. The full extent of nonsampling error is unknown. Particular care should thus be exercised in

the interpretation of figures based on a relatively small number of cases or on small differences between estimates.

All major statements of comparison made in the text of this report are statistically significant at the 90-percent confidence level. This means that the chances are at least 9 in 10 that a difference identified in the text indicates a difference in the populations that is greater than chance variation arising from the use of samples.

Appendix III: Characteristics of Farm Operators and Farm Income Recipients Only

Nearly 1.3 million individuals were primarily employed as farm operators or farm managers (app. table 1) in 1990. Around 852,000 individuals were farm self-employment income recipients, but were primarily employed in nonagricultural occupations. Farm income recipients were less likely than farm operators to reside on farms. Farm operators were slightly older than farm income recipients, although the difference was not large enough to be considered statistically significant. Farm operators were just as likely as farm income recipients to be high school graduates, although less than a third of farm operators continued their education beyond high school. Unemployment was practically nonexistent for farm operators and only 3.5 percent for farm income recipients. The unemployment rate for farm income recipients was low, considering the fact that nearly 94 percent worked outside agriculture.

Appendix table 1—Selected characteristics of individual farm operators and farm self-employment income recipients, 1990¹

Characteristic	Farm operators	Farm income recipients only	Farm operators	Farm income recipients only
	-----Thousands-----		-----Percent-----	
Total	1,267	852	100.0	100.0
Male	1,090	668	86.0	78.4
Female	177	184	14.0	21.6
Residence:				
Farm	841	302	66.4	35.4
Nonfarm	426	550	33.6	64.6
Race and Hispanic origin:				
White	1,248	819	98.5	96.1
Black	14	20	1.1	2.3
Hispanic origin ²	22	17	1.7	2.0
Age (years):				
Under 18	13	6	1.0	.7
18-64	1,034	769	81.6	90.3
18-24	51	26	4.0	3.1
25-34	255	142	20.1	16.7
35-44	229	209	18.1	24.5
45-54	252	197	19.9	23.1
55-64	247	195	19.5	22.9
65 and over	221	77	17.4	9.0
Education:				
Persons aged 25 years and over	1,203	820	100.0	100.0
Not high school graduate	263	106	21.9	12.9
High school graduate	570	338	47.4	41.2
Some college or more	370	377	30.8	46.0
Employment status:				
Persons in the labor force, aged 16 years and over	1,230	738	100.0	100.0
Employed	1,217	712	98.9	96.5
Agriculture	1,210	21	98.4	2.8
Nonagriculture	7	691	.6	93.6
Unemployed	13	26	1.1	3.5
			<i>Years</i>	
Median age	48.4	47.2	—	—

— = Not applicable.

¹Totals may not add due to rounding.

²Persons of Hispanic origin may be any race.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix IV: Tables for 1988 and 1989

Appendix table 2—Selected characteristics of individual farm operators and farm self-employment income recipients, 1988-89¹

Characteristic	Farm operators	Farm income recipients only	Farm operators	Farm income recipients only
	-----Thousands-----		-----Percent-----	
1988:				
Total	1,247	852	100.0	100.0
Male	1,075	669	86.2	78.5
Female	172	183	13.8	21.5
Residence—				
Farm	867	323	69.5	37.9
Nonfarm	380	529	30.5	62.1
Race and Hispanic origin—				
White	1,220	825	97.8	96.8
Black	16	19	1.3	2.2
Hispanic origin ²	14	15	1.1	1.8
Age (years)—				
Under 18	8	13	.6	1.5
18-64	1,029	754	82.5	88.5
18-24	45	37	3.6	4.3
25-34	246	159	19.7	18.7
35-44	238	184	19.1	21.6
45-54	231	225	18.5	26.4
55-64	269	149	21.6	17.5
65 and over	211	85	16.9	10.0
Education—				
Persons aged 25 years and over	1,195	802	100.0	100.0
Not high school graduate	285	135	23.8	16.8
High school graduate	578	363	48.4	45.3
Some college or more	332	304	27.8	37.9
Employment status—				
Persons in the labor force, aged 16 years and over	1,223	721	100.0	100.0
Employed	1,216	699	99.4	96.9
Agriculture	1,214	23	99.3	3.2
Nonagriculture	3	677	.2	93.9
Unemployed	7	22	.6	3.1
			<i>Years</i>	
Median age	48.7	46.5	—	—

See footnotes at end of table.

Continued—

Appendix table 2—Selected characteristics of individual farm operators and farm self-employment income recipients, 1988-89¹—Continued

Characteristic	Farm operators	Farm income recipients only	Farm operators	Farm income recipients only
	-----Thousands-----		-----Percent-----	
1989:				
Total	1,223	853	100.0	100.0
Male	1,063	662	86.9	77.6
Female	160	191	13.1	22.4
Residence—				
Farm	814	315	66.6	36.9
Nonfarm	409	538	33.4	63.1
Race and Hispanic origin—				
White	1,205	832	98.5	97.5
Black	10	15	.8	1.8
Hispanic origin ²	9	25	.7	2.9
Age (years)—				
Under 18	9	7	.7	.8
18-64	991	772	81.0	90.5
18-24	46	47	3.8	5.5
25-34	217	166	17.7	19.5
35-44	240	210	19.6	24.6
45-54	216	211	17.7	24.7
55-64	272	138	22.2	16.2
65 and over	223	74	18.2	8.7
Education—				
Persons aged 25 years and over	1,168	799	100.0	100.0
Not high school graduate	285	132	24.4	16.5
High school graduate	560	308	47.9	38.5
Some college or more	324	359	27.7	44.9
Employment status—				
Persons in the labor force, aged 16 years and over	1,183	771	100.0	100.0
Employed	1,177	739	99.5	95.9
Agriculture	1,173	26	99.2	3.4
Nonagriculture	4	713	.3	92.5
Unemployed	6	31	.5	4.0
			<i>Years</i>	
Median age	49.6	44.7	—	—

— = Not applicable.

¹Totals may not add due to rounding.

²Persons of Hispanic origin may be any race.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 3—Regional distribution of the farm entrepreneurial population, 1988-89¹

Region	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
	-----Thousands-----			-----Percent-----		
1988:						
Total	5,715	3,379	2,336	100.0	100.0	100.0
Northeast	408	242	166	7.1	7.2	7.1
Midwest	2,752	1,729	1,023	48.2	51.2	43.8
South	1,675	833	843	29.3	24.7	36.1
West	880	576	304	15.4	17.0	13.0
1989:						
Total	5,702	3,353	2,348	100.0	100.0	100.0
Northeast	403	226	177	7.1	6.7	7.5
Midwest	2,662	1,653	1,010	46.7	49.3	43.0
South	1,628	850	778	28.6	25.4	33.1
West	1,008	624	384	17.7	18.6	16.4

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 4—Characteristics of the farm entrepreneurial population, 1988-89¹

Characteristic	-----Thousands-----			-----Percent-----		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
1988:						
Total	5,715	3,379	2,336	100.0	100.0	100.0
Male	3,059	1,840	1,219	53.5	54.5	52.2
Female	2,656	1,539	1,117	46.5	45.5	47.8
Race and Hispanic origin—						
White	5,542	3,293	2,248	97.0	97.5	96.2
Black	125	58	67	2.2	1.7	2.9
Hispanic origin ²	119	64	56	2.1	1.9	2.4
Age (years)—						
Under 18	1,461	843	618	25.6	24.9	26.5
18-64	3,749	2,188	1,560	65.6	64.8	66.8
18-24	608	365	243	10.6	10.8	10.4
25-34	833	512	321	14.6	15.2	13.7
35-44	762	428	333	13.3	12.7	14.3
45-54	824	430	394	14.4	12.7	16.9
55-64	722	453	269	12.6	13.4	11.5
65 and over	506	349	157	8.9	10.3	6.7
Years						
Median age	34.5	34.4	34.6	—	—	—
1989:						
Total	5,702	3,353	2,349	100.0	100.0	100.0
Male	3,003	1,820	1,183	52.7	54.3	50.4
Female	2,698	1,533	1,166	47.3	45.7	49.6
Race and Hispanic origin—						
White	5,579	3,296	2,282	97.8	98.3	97.1
Black	80	30	49	1.4	.9	2.1
Hispanic origin ²	109	55	54	1.9	1.6	2.3
Age (years)—						
Under 18	1,543	887	656	27.1	26.5	27.9
18-64	3,647	2,084	1,561	64.0	62.2	66.5
18-24	580	295	285	10.2	8.8	12.1
25-34	767	449	318	13.5	13.4	13.5
35-44	828	450	377	14.5	13.4	16.0
45-54	800	421	378	14.0	12.6	16.1
55-64	672	469	203	11.8	14.0	8.6
65 and over	512	380	132	9.0	11.3	5.6
Years						
Median age	34.5	36.7	32.3	—	—	—

— = Not applicable.

¹Totals may not add due to rounding.

²Persons of Hispanic origin may be any race.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 5—Education of the farm entrepreneurial population aged 25 years and over, 1988-89¹

Education level	Thousands			Percent		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
1988:						
Total	3,646	2,171	1,475	100.0	100.0	100.0
Not high school graduate	706	434	272	19.4	20.0	18.4
High school graduate	1,740	1,071	669	47.7	49.3	45.4
Some college or more	1,200	666	534	32.9	30.7	36.2
Males						
Total	1,929	1,173	755	100.0	100.0	100.0
Not high school graduate	441	284	157	22.9	24.2	20.8
High school graduate	871	545	326	45.2	46.5	43.2
Some college or more	616	344	273	31.9	29.3	36.2
Females						
Total	1,718	998	720	100.0	100.0	100.0
Not high school graduate	265	150	115	15.4	15.0	16.0
High school graduate	869	526	343	50.6	52.7	47.6
Some college or more	584	322	262	34.0	32.3	36.4
1989:						
Total	3,579	2,170	1,408	100.0	100.0	100.0
Not high school graduate	677	443	234	18.9	20.4	16.6
High school graduate	1,648	1,068	580	46.0	49.2	41.2
Some college or more	1,253	660	594	35.0	30.4	42.2
Males						
Total	1,883	1,163	720	100.0	100.0	100.0
Not high school graduate	400	274	126	21.2	23.6	17.5
High school graduate	835	555	280	44.3	47.7	38.9
Some college or more	648	334	314	34.4	28.7	43.6
Females						
Total	1,696	1,007	688	100.0	100.0	100.0
Not high school graduate	277	169	108	16.3	16.8	15.7
High school graduate	813	513	300	47.9	50.9	43.6
Some college or more	605	325	280	35.7	32.3	40.7

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 6—Labor force participation of the farm entrepreneurial population aged 16 years and over, 1988-89¹

Labor force status	-----Thousands-----			-----Percent-----		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
1988:						
Total	4,464	2,656	1,808	100.0	100.0	100.0
In labor force	3,349	2,037	1,311	75.0	76.7	72.5
Employed	3,269	2,013	1,256	97.6	98.8	95.8
Agriculture	1,464	1,409	54	43.7	69.1	4.1
Nonagriculture	1,805	604	1,202	53.9	29.7	91.7
Unemployed	80	25	55	2.4	1.2	4.2
Not in labor force	1,116	619	497	25.0	23.3	27.5
Men						
Total	2,387	1,439	948	100.0	100.0	100.0
In labor force	2,079	1,317	763	87.1	91.5	80.5
Employed	2,039	1,305	734	98.1	99.1	96.2
Agriculture	1,174	1,136	38	56.5	86.3	5.0
Nonagriculture	865	169	696	41.6	12.8	91.2
Unemployed	40	12	29	1.9	.9	3.8
Not in labor force	308	123	185	12.9	8.5	19.5
Women						
Total	2,077	1,217	861	100.0	100.0	100.0
In labor force	1,269	721	549	61.1	59.2	63.8
Employed	1,230	708	522	96.9	98.2	95.1
Agriculture	290	273	17	22.9	37.9	3.1
Nonagriculture	940	435	505	74.1	60.3	92.0
Unemployed	39	13	26	3.1	1.8	4.7
Not in labor force	808	496	312	38.9	40.8	36.2
1989:						
Total	4,343	2,575	1,768	100.0	100.0	100.0
In labor force	3,378	2,001	1,377	77.8	77.7	77.9
Employed	3,281	1,963	1,318	97.1	98.1	95.7
Agriculture	1,397	1,336	61	41.4	66.8	4.4
Nonagriculture	1,884	626	1,257	55.8	31.3	91.3
Unemployed	97	38	58	2.9	1.9	4.2
Not in labor force	966	574	392	22.2	22.3	22.2
Men						
Total	2,278	1,370	908	100.0	100.0	100.0
In labor force	2,042	1,268	774	89.6	92.6	85.2
Employed	1,981	1,250	730	97.0	98.6	94.3
Agriculture	1,133	1,095	38	55.5	86.4	4.9
Nonagriculture	848	155	692	41.5	12.2	89.4
Unemployed	61	18	43	3.0	1.4	5.6
Not in labor force	236	102	134	10.4	7.4	14.8
Women						
Total	2,065	1,205	860	100.0	100.0	100.0
In labor force	1,335	732	603	64.6	60.7	70.1
Employed	1,300	712	588	97.4	97.3	97.5
Agriculture	264	241	23	19.8	32.9	3.8
Nonagriculture	1,036	471	565	77.6	64.3	93.7
Unemployed	35	20	15	2.6	2.7	2.5
Not in labor force	730	473	257	35.4	39.3	29.9

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 7—Employment in nonagricultural industries of the farm entrepreneurial population aged 16 years and over, 1988-89¹

Nonagricultural industry	-----Thousands-----			-----Percent-----		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
1988:						
Total	1,805	604	1,202	100.0	100.0	100.0
Forestry and fisheries	3	2	1	.2	.3	.1
Mining and construction	127	30	97	7.0	5.0	8.1
Manufacturing	290	72	218	16.1	11.9	18.1
Transportation, communications, and other public utilities	129	24	105	7.1	4.0	8.7
Trade	370	151	219	20.5	25.0	18.2
Finance, insurance, and real estate	108	36	72	6.0	6.0	6.0
Professional and related services	501	181	320	27.8	30.0	26.6
All other services	164	66	98	9.1	10.9	8.2
Public administration	114	42	72	6.3	7.0	6.0
Men						
Total	865	169	696	100.0	100.0	100.0
Forestry and fisheries	3	2	1	.3	1.2	.1
Mining and construction	113	26	87	13.1	15.4	12.5
Manufacturing	212	36	176	24.5	21.3	25.3
Transportation, communications, and other public utilities	94	13	81	10.9	7.7	11.6
Trade	167	49	118	19.3	29.0	17.0
Finance, insurance, and real estate	46	6	40	5.3	3.6	5.7
Professional and related services	118	15	103	13.6	8.9	14.8
All other services	60	16	44	6.9	9.5	6.3
Public administration	52	7	46	6.0	4.1	6.6
Women						
Total	940	435	505	100.0	100.0	100.0
Forestry and fisheries	0	0	0	0	0	0
Mining and construction	13	4	9	1.4	.9	1.8
Manufacturing	78	36	43	8.3	8.3	8.5
Transportation, communications, and other public utilities	35	11	24	3.7	2.5	4.8
Trade	203	103	101	21.6	23.7	20.0
Finance, insurance, and real estate	62	30	33	6.6	6.9	6.5
Professional and related services	383	166	217	40.7	38.2	43.0
All other services	104	50	54	11.1	11.5	10.7
Public administration	62	35	27	6.6	8.0	5.3
1989:						
Total	1,884	626	1,257	100.0	100.0	100.0
Forestry and fisheries	10	1	9	.5	.2	.7
Mining and construction	186	32	154	9.9	5.1	12.3
Manufacturing	299	57	242	15.9	9.1	19.3
Transportation, communications, and other public utilities	134	37	96	7.1	5.9	7.6
Trade	350	144	206	18.6	23.0	16.4
Finance, insurance, and real estate	122	51	71	6.5	8.1	5.6

See footnotes at end of table.

Continued—

Appendix table 7—Employment in nonagricultural industries of the farm entrepreneurial population aged 16 years and over, 1988-89¹—Continued

Nonagricultural industry	Thousands			Percent		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
Professional and related services	490	197	293	26.0	31.5	23.3
All other services	184	65	119	9.8	10.4	9.5
Public administration	109	42	67	5.8	6.7	5.3
Men	848	155	692	100.0	100.0	100.0
Forestry and fisheries	9	1	8	1.1	.6	1.2
Mining and construction	157	26	131	18.5	16.8	18.9
Manufacturing	190	26	164	22.4	16.8	23.7
Transportation, communications, and other public utilities	86	14	72	10.1	9.0	10.4
Trade	146	50	96	17.2	32.3	13.9
Finance, insurance, and real estate	31	7	24	3.7	4.5	3.5
Professional and related services	110	17	93	13.0	11.0	13.4
All other services	59	6	53	7.0	3.9	7.7
Public administration	61	9	52	7.2	5.8	7.5
Women	1,036	471	565	100.0	100.0	100.0
Forestry and fisheries	1	0	1	.1	0	.2
Mining and construction	29	6	23	2.8	1.3	4.1
Manufacturing	109	31	78	10.5	6.6	13.8
Transportation, communications, and other public utilities	48	23	25	4.6	4.9	4.4
Trade	205	94	111	19.8	20.0	19.6
Finance, insurance, and real estate	91	45	46	8.8	9.6	8.1
Professional and related services	380	180	200	36.7	38.2	35.4
All other services	125	59	66	12.1	12.5	11.7
Public administration	48	33	15	4.6	7.0	2.7

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 8—Characteristics of farm entrepreneurial households, 1988-89¹

Characteristic	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
	-----Thousands-----			-----Percent-----		
1988:						
Total households	1,859	1,097	763	100.0	100.0	100.0
Family households	1,569	938	636	84.4	85.5	83.4
Nonfamily households	290	159	127	15.6	14.5	16.6
Number of persons in household—						
One	156	82	74	8.4	7.5	9.7
Two	684	403	281	36.8	36.7	36.8
Three	355	228	127	19.1	20.8	16.6
Four	391	219	172	21.0	20.0	22.5
Five or more	273	164	109	14.7	14.9	14.3
				<i>Number</i>		
Average number of persons per household	3.07	3.08	3.06	—	—	—
	-----Thousands-----			-----Percent-----		
1989:						
Total households	1,848	1,096	752	100.0	100.0	100.0
Family households	1,563	939	624	84.6	85.7	83.0
Nonfamily households	285	157	128	15.4	14.3	17.0
Number of persons in household—						
One	140	72	68	7.6	6.6	9.0
Two	654	417	237	35.4	38.0	31.5
Three	380	228	152	20.6	20.8	20.2
Four	421	232	190	22.8	21.2	25.3
Five or more	252	148	104	13.6	13.5	13.8
				<i>Number</i>		
Average number of persons per household	3.09	3.06	3.12	—	—	—

— = Not applicable.

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 9—Characteristics of farm entrepreneurial families, 1988-89¹

Characteristic	-----Thousands-----			-----Percent-----		
	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
1988:						
Total families	1,661	992	669	100.0	100.0	100.0
Married-couple family	1,569	933	636	94.5	94.1	95.1
Other, male householder	50	36	14	3.0	3.6	2.1
Other, female householder	42	23	19	2.5	2.3	2.8
Own children aged under 18 years—						
None	931	569	362	56.1	57.4	54.1
One or more	730	423	307	43.9	42.6	45.9
One or more own children	730	423	307	100.0	100.0	100.0
All aged under 6 years	157	102	55	21.5	24.1	17.9
Some aged under 6 years, some aged 6-17 years	154	90	65	21.1	21.3	21.2
All aged 6-17 years	419	232	187	57.4	54.8	60.9
Number of persons in family—						
Two	670	398	271	40.3	40.1	40.5
Three	338	215	123	20.3	21.7	18.4
Four	393	221	172	23.7	22.3	25.7
Five or more	261	157	104	15.7	15.8	15.5
				<i>Number</i>		
Average number of persons in family	3.44	3.41	3.49	—	—	—
1989:						
Total families	1,667	1,003	664	100.0	100.0	100.0
Married-couple family	1,563	939	624	93.8	93.6	94.0
Other, male householder	44	33	11	2.6	3.3	1.7
Other, female householder	61	31	29	3.7	3.1	4.4
Own children aged under 18 years—						
None	874	553	320	52.4	55.1	48.2
One or more	793	449	344	47.6	44.8	51.8
One or more own children	793	449	344	100.0	100.0	100.0
All aged under 6 years	163	101	62	20.6	22.5	18.0
Some aged under 6 years, some aged 6-17 years	182	103	79	23.0	22.9	23.0
All aged 6-17 years	449	245	204	56.6	54.6	59.3
Number of persons in family—						
Two	631	411	220	37.9	41.0	33.1
Three	366	215	151	22.0	21.4	22.7
Four	422	230	192	25.3	22.9	28.9
Five or more	248	147	101	14.9	14.7	15.2
				<i>Number</i>		
Average number of persons in family	3.42	3.34	3.54	—	—	—

— = Not applicable.

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 10—Income of farm entrepreneurial households, 1987-88¹

Household income	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
	-----Thousands-----			-----Percent-----		
1987:						
Total households	1,859	1,097	763	100.0	100.0	100.0
Household income (dollars)—						
Under 5,000	98	74	25	5.3	6.7	3.3
5,000-9,999	104	73	31	5.6	6.7	4.1
10,000-14,999	172	140	33	9.3	12.8	4.3
15,000-19,999	165	120	45	8.9	10.9	5.9
20,000-24,999	227	147	81	12.2	13.4	10.6
25,000-29,999	195	104	90	10.5	9.5	11.8
30,000-34,999	171	90	82	9.2	8.2	10.7
35,000-39,999	112	67	45	6.0	6.1	5.9
40,000-44,999	130	66	64	7.0	6.0	8.4
45,000-49,999	94	44	50	5.1	4.0	6.6
50,000-59,999	128	63	65	6.9	5.7	8.5
60,000-74,999	111	49	63	6.0	4.5	8.3
75,000-99,999	78	32	46	4.2	2.9	6.0
100,000 and over	74	29	45	4.0	2.6	5.9
				<i>Dollars</i>		
Median household income	29,194	23,282	34,664	—	—	—
	-----Thousands-----			-----Percent-----		
1988:						
Total households	1,848	1,096	752	100.0	100.0	100.0
Household income (dollars)—						
Under 5,000	61	53	8	3.3	4.8	1.1
5,000-9,999	105	85	20	5.7	7.8	2.7
10,000-14,999	147	106	40	8.0	9.7	5.3
15,000-19,999	225	153	72	12.2	14.0	9.6
20,000-24,999	159	107	52	8.6	9.8	6.9
25,000-29,999	146	95	51	7.9	8.7	6.8
30,000-34,999	196	111	84	10.6	10.1	11.2
35,000-39,999	155	81	74	8.4	7.4	9.8
40,000-44,999	130	78	52	7.0	7.1	6.9
45,000-49,999	84	37	47	4.5	3.4	6.3
50,000-59,999	134	62	72	7.3	5.7	9.6
60,000-74,999	117	53	64	6.3	4.8	8.5
75,000-99,999	105	36	68	5.7	3.3	9.0
100,000 and over	86	38	48	4.7	3.5	6.4
				<i>Dollars</i>		
Median household income	32,066	27,315	38,310	—	—	—

— = Not applicable.

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 11—Income and poverty among farm entrepreneurial families, 1987-88¹

Income and poverty	Total	Farm operator	Farm income only	Total	Farm operator	Farm income only
	-----Thousands-----			-----Percent-----		
1987:						
Total families	1,661	992	669	100.0	100.0	100.0
Family income (dollars)—						
Under 5,000	77	65	12	4.6	6.6	1.8
5,000-9,999	75	56	19	4.5	5.6	2.8
10,000-14,999	135	109	26	8.1	11.0	3.9
15,000-19,999	136	103	33	8.2	10.4	4.9
20,000-24,999	214	142	72	12.9	14.3	10.8
25,000-29,999	184	97	87	11.1	9.8	13.0
30,000-34,999	151	87	64	9.1	8.8	9.6
35,000-39,999	108	63	45	6.5	6.4	6.7
40,000-49,999	213	105	108	12.8	10.6	16.1
50,000-74,999	223	104	119	13.4	10.5	17.8
75,000-99,999	75	32	43	4.5	3.2	6.4
100,000 and over	71	29	42	4.3	2.9	6.3
Below poverty level	147	122	25	8.9	12.3	3.7
				<i>Dollars</i>		
Median family income	30,314	26,082	37,388	—	—	—
	-----Thousands-----			-----Percent-----		
1988:						
Total families	1,667	1,003	664	100.0	100.0	100.0
Family income (dollars)—						
Under 5,000	52	45	7	3.1	4.5	1.1
5,000-9,999	94	78	16	5.6	7.8	2.4
10,000-14,999	121	86	35	7.3	8.6	5.3
15,000-19,999	195	136	59	11.7	13.6	8.9
20,000-24,999	133	99	35	8.0	9.9	5.3
25,000-29,999	135	93	42	8.1	9.3	6.3
30,000-34,999	188	106	82	11.3	10.6	12.3
35,000-39,999	151	80	71	9.1	8.0	10.7
40,000-49,999	195	111	83	11.7	11.1	12.5
50,000-74,999	230	99	131	13.8	9.9	19.7
75,000-99,999	99	36	64	5.9	3.6	9.6
100,000 and over	73	33	40	4.4	3.3	6.0
Below poverty level	140	120	20	8.4	12.0	3.0
				<i>Dollars</i>		
Median family income	32,752	28,091	38,943	—	—	—

¹Totals may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

Appendix table 12—Sources of income of farm entrepreneurial families, 1987-88

Source of income	Total	Farm operator	Farm income only
<i>Thousands</i>			
1987:			
Total families	1,661	992	664
<i>Percent</i>			
Families receiving—			
Wage and salary income	77.6	69.1	92.8
Self-employment income—			
Nonfarm	20.7	14.7	29.1
Farm	91.5	86.0	100.0
Property income—			
Interest	78.2	75.5	83.5
Dividends	23.1	21.3	25.9
Rent	23.5	21.9	25.6
Transfer payments—			
Social security and railroad retirement income	21.8	24.5	13.9
Supplemental security income ¹	2.6	2.8	2.3
Public assistance and welfare ²	.6	.3	.3
Unemployment compensation, veterans' payments, and workers' compensation	8.1	6.0	12.5
Retirement ³	10.9	11.6	9.4
Alimony and child support ⁴	5.4	4.2	10.7
<i>Thousands</i>			
1988:			
Total families	1,667	1,003	664
<i>Percent</i>			
Families receiving—			
Wage and salary income	78.1	68.3	92.8
Self-employment income—			
Nonfarm	21.2	15.9	29.1
Farm	90.5	84.2	100.0
Property income—			
Interest	77.9	74.1	83.5
Dividends	22.1	19.7	25.9
Rent	24.0	22.9	25.6
Transfer payments—			
Social security and railroad retirement income	20.6	25.0	13.9
Supplemental security income ¹	2.2	2.2	2.3
Public assistance and welfare ²	.5	.6	.3
Unemployment compensation, veterans' payments, and workers' compensation	10.1	8.6	12.5
Retirement ³	9.1	8.9	9.4
Alimony and child support ⁴	6.9	4.4	10.7

¹Includes payments made by Federal, State, and local welfare agencies to low-income persons who are aged 65 years and over, blind, or disabled.

²Includes payments from Aid to Families with Dependent Children and general assistance.

³Includes private pensions and annuities, military retirement, and Federal, State, or local government pensions.

⁴Includes other regular contributions from persons not in the household.

Source: U.S. Department of Commerce, Bureau of the Census. Current Population Survey, March 1986-90. Unpublished tabulations developed by the U.S. Dept. Agr., Econ. Res. Serv.

SUMMARY OF REPORT

U.S. Farm Sector Continues Financial Recovery

Number 4, December 1992

Contact: Mitchell Morehart (202) 219-0800

In 1990, U.S. farm businesses continued to recover from the financial problems encountered during the early and mid-1980's, according to the most recent Farm Costs and Returns Survey. Based on their overall financial performance, a combination of net cash farm income and debt/asset ratio, farm businesses in 1990 were in the strongest financial condition since 1984.

Gross income more than kept pace with rising expenses, even with dramatic reductions in Government support. Following widespread drought in 1988, average net incomes rebounded strongly in 1989 and 1990. After several years of reductions in the use of debt capital, 1990 saw a moderate rise in debt-financed capital purchases. Farm businesses were also in a better position to service debt in 1990 than at any other time during the 1987-90 period.

Number of Vulnerable Farms Down

Each year, a segment of farms experiences extreme financial difficulties, but the size of that segment has been steadily declining over the past few years. Roughly 7 percent of farms entered 1991 in a vulnerable financial position, having a relatively high amount of debt in combination with negative net income. This level of vulnerability compares with 11.6 percent in 1986.

Nearly two-thirds of vulnerable farms had gross sales below \$40,000. These small, part-time operations are perhaps better able to cope with farm financial difficulties, since many have access to off-farm earnings to support their farm business.

Even though the composition of vulnerable farms has not changed much with regard to farm size, the geographic locations and production specialties associated with vulnerable farms have changed considerably since 1987. The Corn Belt had the largest concentration of vulnerable farms in both 1987 and 1990, yet its share of vulnerable farms went from 22 percent in 1987 to 16 percent in 1990. The Lakes States also had a substantial

reduction in the share of vulnerable farms. In contrast, the Southeast and Southern Plains regions had the largest 1987-90 increase in vulnerable farms.

The proportion of vulnerable farms that specialized in cash grains dropped from 26 percent in 1987 to 18 percent in 1990, the largest reduction for any production specialty.

Incomes Vary by Region and Commodity

The highest average net farm income occurred in the Northern Plains, Mountain, and Pacific regions. Increases in expenses outpaced income growth in 1990 for farms in the Northeast, Southeast, and Mountain regions, resulting in lower average net farm income than in 1989. Production specialties that, on average, had their most profitable year (since 1987) in 1990 were: tobacco; vegetables, fruits, or tree nuts; nursery or greenhouse; beef, hogs, or sheep; and other livestock.

To Order This Report...

The information presented here is excerpted from *Financial Performance of U.S. Farm Businesses, 1987-90*, AER-661, by Mitchell J. Morehart, James D. Johnson, and David E. Banker. The cost is \$14.00.

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SUMMARY OF REPORT

New State Rankings by Receipts from Agricultural Commodities

Number 3, December 1992

Cattle and calves, dairy products, corn, hogs, and soybeans were the leading agricultural commodities (in terms of farm cash receipts) in 1991. Those commodities had the same ranking in 1990. The leading States for each commodity were as follows:

- Cattle and calves: Texas, Nebraska, Kansas, Colorado, and Oklahoma.
- Dairy products: Wisconsin, California, New York, Pennsylvania, and Minnesota.
- Corn: Illinois, Iowa, Nebraska, Indiana, and Minnesota.
- Hogs: Iowa, Illinois, Minnesota, Nebraska, and Indiana.
- Soybeans: Illinois, Iowa, Minnesota, Indiana, and Ohio.

Those findings come from a new report by USDA's Economic Research Service, *Ranking of States and Commodities by Cash Receipts, 1991*. One set of tables lists the 25 leading agricultural commodities produced in each State and the United States, ranked by value of cash receipts. Another set of tables lists the major producing States for each of the 25 leading commodities and for several major commodity groupings.

Thirty States had livestock receipts exceeding crop receipts in 1991. In 13 States, the majority of receipts was from sales of a single commodity, indicating a high degree of dependence on the production and market conditions for that commodity.

Commodity Dependence

In 11 States, one livestock commodity had receipts for more than 50 percent of the State's total receipts. Wyoming showed 73 percent of its agricultural receipts as coming from **cattle and calves**; Kansas, 62 percent; Colorado, 60 percent; Oklahoma, 58 percent; Nebraska, 54 percent; Nevada, 51 percent; Texas, 51 percent; and New Mexico, 50 percent. **Dairy** accounted for 72 percent of receipts in Vermont and 52 percent of receipts in Wisconsin. Delaware relied on **broilers** for 63 percent

of receipts. In two States, **greenhouse/nursery** products accounted for more than 50 percent of the State's total receipts: Alaska (57 percent) and Rhode Island (55 percent).

Agricultural Diversity

Eight States had sufficient diversification in their agricultural production that the leading commodity accounted for no more than 20 percent of sales receipts. The States and their two leading commodities were: California, dairy (14 percent) and greenhouse (11 percent); Oregon, cattle (18) and greenhouse (15); Florida, oranges (19) and greenhouse (16); South Carolina, tobacco (16) and cattle (11); Minnesota, corn (18) and dairy (17); Virginia, cattle (20) and broilers (15); Ohio, soybeans (20) and corn (20); and Washington, apples (20) and dairy (14).

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