Income

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Farm Family Incomes Improve:
Farmers Scarcely Keep Up

by

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In the last few years increasing attention has been given to an important trend affecting incomes of farm people. As jobs became available within commuting range, farm families often turned to wage work. This development paralleled the large scale outmigration from agriculture and can be thought of as part of the same adjustment process [1,7,8].

It would be easy to assume that off-farm income offers the solution to remaining low income problems of farm people. In 1972, off-farm income accounted for about half of the total income of farm operator families [5, p. 72]. However, there are still families who have not been able to take advantage of this means of improving their income or who have benefited in only a minor way. Viewing off-farm earnings as a panacea for income problems of farm people could thus lead to policy errors.

This article considers recent changes in total family income of two major groups with close ties to farming; farm families (residence concept) and farmer and farm manager families (occupation concept).1/ These two

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groups overlap but are not identical populations. Farm families are families living on farms. 2/ Farmer and farm manager families are families headed by persons who worked more during the survey week as farmers or farm managers than at any other occupation. 3/

Most farmer and farm manager families live on farms, but some have nonfarm residences and are thus counted as nonfarm families. Many family heads living on farms work mainly at nonfarm jobs and thus are not considered farmers and farm managers under the occupation concept. The relationship between the residence concept and occupation concept is illustrated in figure 1.

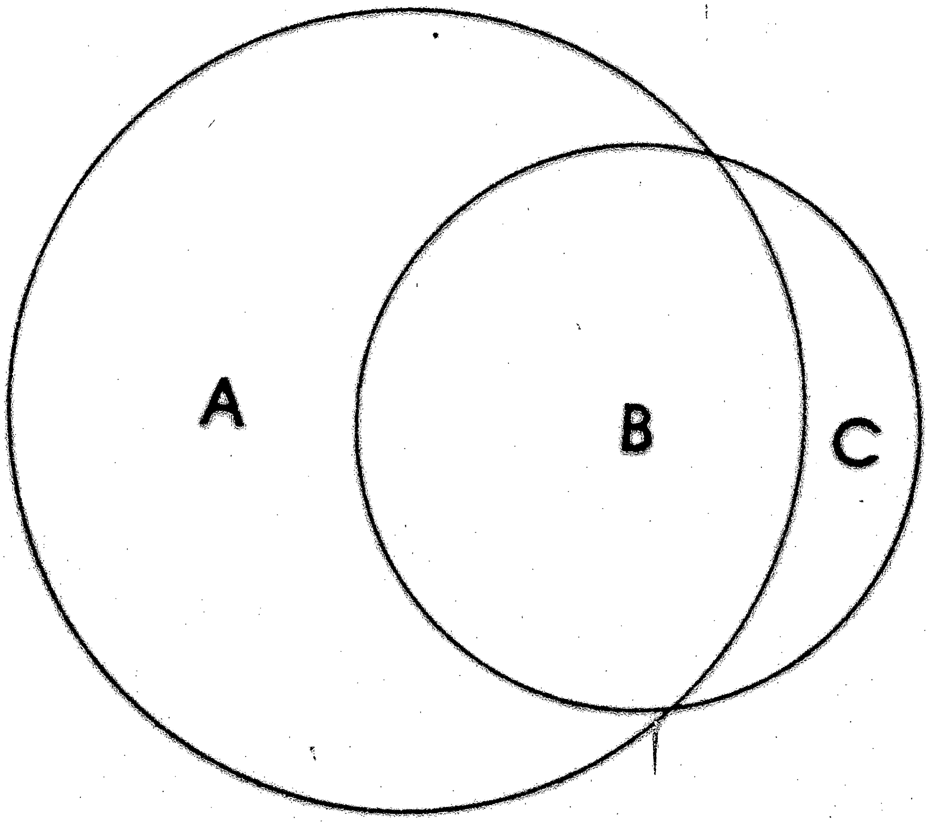
Most of the income data used for this article are from the Current Population Survey of the Bureau of the Census [9]. Median family incomes for the years being studied were converted to constant 1972 dollars to account for changes in price levels. These survey data were supplemented with information from the Census of Agriculture and from Federal income tax returns of persons with farm income.

Income gains of families living on farms and of the occupation class farmers and farm managers were compared with gains made by all U.S. families. There were 2.6 million farm families and 1.4 million farmers and farm manager families in 1971, complete data for 1972 are not yet available.

Income Position of Families Living on Farms

Even a brief study of income data reveals that farm families are often not as well-off as other U.S. families (table 1). For example, athough 1972 was a year of relatively high farm income, 26 percent of farm

Figure 1.--Relationship between Farm Families (Residence Concept) and Farmer and Farm Manager Families (Occupation Concept)



AREA		Estimate Number in 1971 thous.
AB	All Families living on farms	1/ 2,593
BC	All Families of persons whose occupations were farming or farm management	1/ 1,366
A	Families of persons living on farms with occupations other than farming or farm management	2/ 1,528
B	Families of persons living on farms with occupations of farming or farm management	2/ 1,065
C	Families of persons with occupation of farming or farm management but not living on a farm	2/ 301

1/ Based on "Money Income in 1971 of Families and Persons in the United States" Current Population Reports, Bureau of the Census, Series P. 60, No. 85, December 1972

2/ Estimated from relationships shown in "Income of the Farm Related Population," 1970 Census of Population, Bureau of Census, P C (2)-8C

Table 1.--Income of Farm Families and all U.S. Families, United States, 1972

Families by residence	Total family income of--				
	Less than $5,000	$5,000-$9,999	$10,000 $14,999	$15,000 or more	Median income
	Percent				Dollars
Farm	26	31	21	22	8,849
All U.S. Families	17	27	26	30	11,116

1/ From Current Population Reports, Consumer Income, "Money Income in 1972 of Families and Persons in the United States," Series P-60, No. 87, June 1973, table 2, p. 3, (Advance data from March 1973 Current Population Survey).

families reported incomes of less than $5,000; only 17 percent of all U.S. families reported such low incomes. About 56 percent of all U.S. families, but only 43 percent of farm families, reported incomes of $10,000 or more. The median income of farm families was about $2,300 lower than for all U.S. families in 1972.

Farm family median income, in constant 1972 dollars, increased from less than $4,100 in 1960 to more than $7,400 in 1971 and then increased sharply to about $8,850 in 1972 (table 2). These increases are consistent with trends in farm and off-farm income suggested by other studies [5, p. 72, 7 p. 7 and 3]. What is particularly significant is the way the "income gap" between families living on farms and all U.S. families seems to be narrowing. 4/ Median incomes of farm families have been substantially lower than for all U.S. families in recent years. However, the average annual growth rate for income between 1960 and 1972 has been greater for farm families (6.7 percent) than for all U.S. families (2.8 percent).

Linear regressions of the income gap between farm and all U.S. families on time showed a downward trend of nearly $80 per year in the income gap between 1960 and 1972 (table 3). In general, the more recent the period considered the greater the apparent narrowing of the income gap. For example, the shorter 1963-72 trend line indicated that the gap was narrowing by about $136 per year in that period. When 1972--a record income year--was omitted, the trend line for 1963-71 suggested a gain of about $90 per year.

Income Gains of Farmer and Farm Manager Families

When classified under the occupation concept, farmer and farm

Table 2. Median Income of Families 1960-72 1/
(constant 1972 dollars)

Year	Median income --			Income Gap	
	All U.S. Families	Farm Families	Farmer and Farm Manager Families	Farm Families	Farmer and Farm Manager Families
	Dollars				
1960	7,941	4,061	3,972	3,880	3,969
1961	8,019	4,533	4,408	3,486	3,611
1962	8,247	4,728	4,602	3,519	3,645
1963	8,543	4,693	4,336	3,850	4,207
1964	8,861	4,802	4,495	4,059	4,366
1965	9,221	5,463	5,301	3,758	3,920
1966	9,667	6,238	6,184	3,429	3,483
1967	9,940	6,373	5,892	3,567	4,048
1968	10,375	6,934	6,507	3,441	3,868
1969	10,768	7,289	6,474	3,479	4,294
1970	10,632	7,298	6,614	3,334	4,018
1971	10,625	7,430	6,917	3,195	3,708
1972	11,116	8,849	8,303	2,267	2,813
	Percent				
Average annual growth rate (1960-72)	2.8	6.7	6.3	-	-

1/ U.S. Bureau of the Census, Current Population Reports, Series P-60

Table 3.--Regression of Income Gap between Farm and all U.S. Families on Time

Period	Correlation coefficient	Y axis intercept	Regression coefficient	t value
1960-72---------	-0.70	4036	-79	-3.30**
1961-72---------	-.68	4069	-83	-2.92*
1962-72---------	-.76	4289	-105	-3.50**
1963-72---------	-.85	4591	-136	-4.51**
1960-71---------	-.65	3879	-46	-2.72*
1961-71---------	-.58	3857	-43	-2.15
1962-71---------	-.73	4029	-62	-3.02*
1963-71---------	-.90	4280	-89	-5.30**

* Significant at .05 level.

** Significant at .01 level.

manager family median incomes were substantially lower than those of all U.S. families in all years 1960-72 (table 2); they were also less than for families identified as farm families by residence. Though relatively low, farmer and farm manager family incomes, in constant 1972 dollars, improved from less than $4,000 in 1960 to $8,300 by 1972.

In an earlier study Boyne found that farmer and farm manager families were falling behind [2]. He wrote:

> The marked shift to higher real-income levels of the distribution of all U.S. families dwarfs the upward shift for farmer and farm-manager families. Thus, the relative income position of farmers and farm managers deteriorated considerably between 1950 and 1960.

Growth rates computed on real income changes confirm that farmers and farm managers were making little progress relative to all U.S. families during 1950-60 (table 4). Income growth rates were small or negative throughout the decade of the 1950's. Growth rates for farmer and farm manager families were consistently less than for all U.S. families. The relatively high income experienced by farmers and farm managers in 1950 was matched only once between 1951 and 1958. However, when growth rates were calculated from 1960 forward, a somewhat different picture emerged. In percentage terms incomes of farmer and farm manager families gained more rapidly than incomes of all U.S. families.

But rapid growth alone is not enough. When regressed on time the dollar gap between median incomes of farmer and farm manager families and

Table 4.--Comparative Median Income Growth Rates for Farmer and Farm Manager Families, and all U.S. Families 1950-62 and 1960-72 (constant 1972 dollars) 1/

Beginning year 1950			Beginning year 1960		
Ending year	Family Income Growth		Ending year	Family Income Growth	
	Farmer and farm manager families	All U.S. families		Farmer and farm manager families	All U.S. families
	Percent			Percent	
1951	-3.4	3.4	1961	5.9	1.0
1952	0.1	3.0	1962	7.6	1.9
1953	-6.3	4.8	1963	2.9	2.5
1954	-6.3	3.0	1964	3.1	2.8
1955	-3.8	3.7	1965	5.9	3.0
1956	-0.7	4.1	1966	7.7	3.3
1957	-0.1	3.5	1967	5.7	3.8
1958	0.8	3.1	1968	6.4	3.4
1959	0.8	3.8	1969	5.6	3.4
1960	1.3	3.6	1970	5.2	3.0
1961	2.1	3.0	1971	5.2	2.7
1962	2.3	3.3	1972	6.3	2.8

1/ For the method used in computing growth rates see [10, p. 115]. Growth rates are sensitive to the choice of a base year. Annual income growth rates were computed for farmer and farm manager families and for all U.S. families for all possible periods between 1950 and 1972. The complete tables are available from the author.

incomes of all United States families did not show a significant upward or downward trend, even when account was taken of the impressive gain in 1972 (table 5). Thus, with a relatively large percentage gain the income gap between farmer and farm manager families and all U.S. families did not narrow significantly. That is, farmer and farm manager families were scarcely keeping up in dollars, although they were making faster percentage gains.

Understanding the Limited Gains of Farmers

The difference in income gains made by farm resident families and families headed by persons who were farmers or farm managers by occupation needs to be rationalized. Why should the income gap close for farm families but not narrow significantly for farmer and farm manager families?

One major contributor to improved incomes of families living on farms is off-farm income. By 1969, more than half of farm operators reported off-farm work and nearly 4 in 10 reported 100 days or more of work off the farm. The increases were relatively large between the 1964 and 1969 Agriculture censuses (table 6).

Federal income tax returns of persons reporting farm income also show important increases in off-farm income.[5/] In recent years, wage and salary earnings accounted for about two-thirds of off-farm income reported on tax returns [8, p. 13]. In 1963, about half of taxpayers reporting farm receipts also reported wages or salaries. By 1969, nearly 60 percent reported such earnings (table 7). Gains in average wages and salaries of farm taxpayers were equally significant--up from $5,300 in 1963 to about

Table 5.--Regression of Income Gap between Farmer and Farm Manager Families and all U.S. Families on Time

Period	Correlation coefficient	Y axis intercept	Regression coefficient	t value
1960-72-------	-0.29	4056	-31	-1.01
1961-72-------	- .28	4047	-33	- .93
1962-72-------	- .42	4183	-55	-1.37
1963-72-------	- .58	4353	-87	-2.00
1960-71-------	.10	3893	8	.32
1961-71-------	.14	3875	12	.43
1962-71-------	-.04	3979	-4	-.13
1963-71-------	-.31	4149	-32	-.85

Table 6. Farm operators reporting off-farm work and those reporting 100 days or more of off-farm work, for Census years, 1949-1969 1/

Year	Number of farms	Percent of all operators with-- Any off-farm work	100 days or more off-farm work
	Thousand	Percent	
1949	5,386	38.9	23.3
1954	4,783	45.0	27.9
1959	3,708	44.9	29.9
1964	3,158	46.3	32.1
1969	2,730	54.3	39.9

1/ From Census of Agriculture.

Table 7 -Persons with Farm Income reporting Wages and Salaries and Average amount reported, United States, Selected Years 1/

Year	Wages and Salaries (in 1969 dollars)	
	Percent Reporting	Average Amount
1963	50	$5,300
1966	56	6,110
1969	60	7,010

1/ Based on [11] and on special tabulations by U.S. Department of the Treasury, Internal Revenue Service.

$7,000 by 1969 in constant 1969 dollars. These increases in off-farm income seem consistent with higher incomes experienced by families living on farms. Many farm families now receive much of their income from off-farm sources.

Unlike families who live on farms but have a variety of occupations, farmer and farm manager families work mainly at farming. Given their occupational tie to farming, farmer and farm manager families would be expected to depend heavily on farming for income. Thus, the recent increase in off-farm income probably did not help farmer and farm manager families as much as it did all families living on farms. Also, some farmer and farm manager families would have been reclassified into other occupations as off-farm employment increased.

This analysis does not reflect the record farm incomes of 1973. Because of their heavy dependence on farming much of the increase would be expected to accrue to farmers and farm managers and would be expected to improve the relative position of these families. Whether income levels experienced after 1971 will be maintained or further increased remains to be seen. Continuation of recent rapid gains in farm income would be expected to significantly narrow the income gap between farmer and farm manager families and all U.S. families. Also, the data do not account for increases in wealth which need to be considered along with income to measure economic well-being [4]. Finally, no consideration was given to changes in returns to capital as investments of farmers increased.

Summary and Implications

Farm families have had a history of low incomes compared with nonfarm families. However, recent data do not support the view that families living on farms are losing ground, in fact, just the opposite may be true. The income gains may be explained by increasing reliance on off-farm income by farm residents.

Farmers and farm managers--a subpopulation based on occupation--also appear to be improving their incomes. And the percentage gains seem to be greater than for all U.S. families. However, because they are so far behind, the rates of increase in income experienced between 1960 and 1972 will just maintain the income gap between farmers and farm managers and other U.S. families. More rapid increases in income will be needed to close the gap.

An important implication of these findings is that the farm population is different from the farmer and farm manager population. Statistics on the farming sector need to distinguish between these populations to better describe the farming sector and allow more effective economic policies. Whether or not a family lives on a farm has little relevance in an age when many families living on farms earn most of their income off-farm and some families live in nonfarm residences but work as farmers.

As incomes of families living on farms approach those of nonfarm families, researchers will need to better identify low income groups that have not been able to use wage work to realize gains in income. While it will no longer be correct to believe that all people living on farms have low family incomes, neither can we assume that all farmers have adequate earnings.

Footnotes

1/ Total family income includes money wages and salaries, net income from self-employment, social security and veterans benefits, dividends, interest, income from estates and trust, rental income, royalties, welfare, unemployment compensation, private pensions, alimony, contributions from persons not living in the household, and other money income.

2/ Farms were defined as places of 10 acres or more with annual sales of farm products of $50 or more or places of less than 10 acres with sales of $250 or more.

3/ The occupation classification based on data for the survey week was used because these data are available for a longer time period. A second method of classifying families by occupation in Current Population Survey data is based on the longest job held during the income year.

4/ The income gap is defined as the difference in median income between the two groups.

5/ Use of tax records was limited to published data and special tabulations made by Internal Revenue Service showing aggregated data. Individual tax records were not analyzed. Tax data exclude a significant number of persons with so little income that they are not required to report. Taxpayers use special rules for reporting which tend to minimize taxable income. Welfare and social security payments are not taxable and are thus not reported.

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