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## Farmland Ownership and the Distribution of Land Earnings

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#### Abstract

Although the number of U S farms has declined substantially over the past four decades, the number of farmland owners and the proportion of rented farmland have remained relatively constant. In 1978, there were an estimated 3.9 million farmland owners, but fewer than 2.5 million farm operators. Of the nearly 1.9 million landlords in 1979, about one-third leased land to operators of farms with sales of \$100,000 or more, and three-fourths rented to operators with sales over \$20,000. Because land constitutes the major financial asset of the farm sector, widespread agricultural land-ownership by nonoperator landlords provides a mechanism for a substantial transfer of agricultural earnings and wealth away from farm operators and, potentially, away from the farm sector.

## Keywords

Farmland ownership, farm numbers, farm tenure, landlords

Considerable debate surrounding the 1985 farm bill has focused on farm program objectives and the distribution of program benefits. The number of farms is now about 23 million, while the farm population is near its lowest level ever. The agricultural sector is increasingly integrated into the rest of the economy. In 1978, only slightly over half the respondents classified as "farmers" by the Bureau of the Census considered farming their primary occupation. More entrepreneurial functions, including ownership of production assets, are now provided by those outside the traditional farm sector.

In this policy environment one has difficulty knowing who the intended beneficiaries of farm programs either are or should be. To the extent that land and other production factors are provided by individuals other than farm operators, for example, the true number of participants in agricultural production processes may be understated by traditional measures, and the actual distribution of factor earnings may be obscured.

issues raised by these statistics include questions of whether it is possible to design programs to help specific farmers or groups of farmers without conveying windfall benefits to unintended recipients

This article examines changes in U S farmland ownership and tenure over this century. It analyzes differences in the distribution of farm operators and farmland owners in 1979 and examines how land earnings may have been shared then Finally, it discusses some implications of differences in the distribution of claims to asset earnings for farm policy, data collection, and research

## Changes in Farm Tenure and Ownership

The statistics on farm numbers are familiar to most observers of the American agricultural scene From a peak of 68 million farms enumerated in the 1935 Agricultural Census, the number of farms has fallen to about 23 million currently (4) <sup>1</sup> From the perspective of asset control and contributions to agricultural production, however, one must consider the substantial change in farm numbers over time within the context of the relative stability of the

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<sup>&</sup>lt;sup>1</sup>Italicized numbers in parentheses refer to items in the References at the end of this article

number of farmland owners and the percentage of farmland leased

Data on farmland ownership are fragmentary Only a few Agricultural Censuses provide sufficient information to allow us to infer ownership estimates from tenure data <sup>2</sup> Wunderlich (9) has prepared estimates for four such Census years (table 1) For 1900, he estimates there were at least 3 7 million farmland owners, and possibly as many as 4 4 million In 1945, his estimate ranges from 4 8 to 5 2 million (These are range estimates because Census data do not always enable us to fully account for either operators who are also landlords or for rented land subleased to other operators) In 1969 and 1978, the Census of Agriculture yielded estimates of 3 7 million and 3 9 million farmland owners, respectively

The number of farm operators was 57 million in 1900, which fell to fewer than 25 million in 1978 In 1900 and 1945, however, about 20 million of the farm operators were "full" tenants—that is, operators who owned none of the land they operated By 1969, the number of full tenants had fallen to fewer than 300,000 Thus, the number of farm operators who own at least some of the land they farm has ranged from 40 million to 22 million over the last eight decades (table 1) The number of nonoperator-owners has grown from 700,000 or fewer in 1900 to 17 million in 1978

Since 1900, the amount of farmland operated under lease has been relatively constant. However, the relationships between farm operators and farmland owners has changed far more. Of the 40 million operator-owners in 1945, 82 percent were full owners, relatively few were part owners (662,000). The number of nonoperator-owners was small in 1945, especially in relationship to the large number (19 million) of tenant operators. However, nearly

Table 1—Farmland owners and operators, selected years

Item	1900	1945	1969	1978
	Mıllıons			
(1) Farmland owners	3 7-4 4	4 8-5 2	3 7	39
(2) Farm operators	5 7	5 9	27	2 5
(3) Full tenants	2 0	19	3	3
(4) Operator-owners <sup>1</sup>	3 7	4 0	2 4	22
(5) Nonoperator-owners <sup>2</sup>	0- 7	812	13	17
		Percer	ı t	
Farmland leased	31 6	37 7	35 7	399

Line (2) less line (3)

Source Operator data are from (4, tables 538 and 539, p 377) ownership data are from (9)

half (908,000) these tenants were sharecroppers, who mainly supplied farm labor. Thus, nonoperator-owners probably played a major role in supplying production assets and management to this segment of farm operators.

Between 1945 and 1978, both the number of claimants and the nature of claims to agricultural earnings changed substantially Tenants declined nearly 16 million, and the number of full owner-operators fell by more than half The decline in the number of operator-owners was partially offset, however, by the growth in the number of nonoperator owners Thus, farmland owners in 1978 exceeded farm operators by nearly 14 million

Because theoretically the labor, management, and production assets of operators are all residual claimants, it is difficult to determine if the distribution of factor returns has changed relative to changes in the number of farm operators and farmland owners. The Economic Indicators of the Farm Sector (5) series indicates that 66 percent of the total returns to labor, management, and production assets of operators were imputed to their labor in 1945. Only slightly over 25 percent of the total accrued to production assets. In 1978, by contrast, 73

<sup>&</sup>lt;sup>2</sup>The other sources of landownership information are the two national ownership surveys the U.S. Department of Agriculture (USDA) conducted in 1946 and 1978 (2). The 1946 survey sample frame was developed from the 1945 Census of Agriculture. It yielded an estimate of 5.2 million landowners, consistent with Wunderlich's upper limit (9). The 1978 survey, which was developed from an area sample frame surveyed all rural land (1). In that survey, 6.9 million respondents identified themselves as farmland owners. Although the disparity between Wunderlich's estimate for 1978 and the Farmland Ownership survey is large, the estimates are not necessarily inconsistent, given definitional and sample frame differences.

<sup>&</sup>lt;sup>2</sup>Line (1) less line (4)

percent of total income was allocated to production assets

Melichar has argued that the Economic Indicators series overestimates the proportion of residual returns that can be imputed to production assets, especially in recent years. He calculates that only 41 percent of 1978 income from labor, management, and assets should be imputed to assets (3, table 1121). Even Melichar's estimates, however, indicate some shifts in the proportion of factor returns accruing to land. Furthermore, the relative contribution of land to the value of all production assets increased—from 575 percent in 1945 to 752 percent in 1978.

## The Distribution of Landlords by Value of Farm Sales<sup>3</sup>

There were nearly 19 million farm landlords in 1979 (6) These landlords were predominantly associated with large-scale commercial farm operations (table 2) According to the "1979 Farm Finance Survey," 32 percent (591,000) of all landlords leased to operators of farms with sales of \$100,000 or more, 61 percent rented to operators with sales of \$40,000 or more, and nearly 75 percent rented to operators with sales over \$20,000 Landords outnumbered farm operators on farms with sales of \$100,000 or more by a ratio of 21 to 1 However, operators held most of the land, supplying about 56 percent of it in farms with sales of over \$20,000 (table 3)

Landlords renting land to farm operators with sales of \$100,000 or more were the majority of suppliers of rented land (table 4), receiving 59 percent of all rent. They also received the highest gross return (4.7 percent) on the value of their rental land and buildings.

In the aggregate, landlords received gross rents equivalent to 41 percent of the value of their land

Table 2—Farm operators and landlords, by value of sales, 1979

		•			
Sales class	Operators	Land-	Cumulative distribution		
	Operators	lords	Operators	Land- lords	
	——Number		Percent		
\$500,000 and over	23,890	51,902	1 0	28	
\$200,000-499,999	78,702	180,864	4 3	12 5	
\$100,000-199,999	173,737	358,522	11 7	31 6	
<b>\$</b> 40,000-9 <b>9,999</b>	373,676	549,119	27 6	60 9	
\$20,000-39,999	257,919	242,013	38 6	73 8	
\$10,000 19,999	270,845	169,333	50 1	82 8	
\$5,000 9,999	302,512	134,330	62 9	90 0	
\$2,500-4,999	326,277	88,596	76 8	94 7	
Under \$2,500	546,667	99,905	100 0	100 0	
Total	2,345,225	1,874,584			

-- = Not applicable

Source (6)

Table 3—Acres of land owned and rented, by tenure and value of farm sales, 1979

	Farmland			
Sales	Owned by operators	Rented from landlords	Proportion rented	
	1,000 acres		Percent	
\$100,000 or more	238,231	189,498	44 3	
\$20,000-\$99,999	179,614	140,148	43 8	
Under \$20,000	135,094	45,839	25 3	
Total	552,939	375,485	40 4	

Source (6)

<sup>&</sup>lt;sup>3</sup>In this article I distinguish between landlords" and 'non operator owners" depending on the data source. The terms are nearly synonymous as most landlords are also nonoperator owners. However, some landlords both operate farms and rent land. The "1979 Farm Finance Survey" (6) does not provide the information needed to separate operator- and nonoperator landlords but, according to the "Summary and State Data" of the 1978 Census of Agriculture (7), 11 percent of all farm operators (mostly full owners) also rented land to other farmers.

Table 4—Distribution of number of landlords, acres rented, rent received, and gross return on value of rented land and buildings

-	Sales	Landlords	Acres rented	Rent received	Gross return on value <sup>t</sup>
		Percent			
\$1	00,000 or more	31 6	50 5	59 0	47
<b>\$</b> 2	0,000-\$99,999	42 2	37 3	36 1	4 0
Uı	nder \$20,000	26 2	12 2	4 9	2 1
	Total	100 0	100 0	100 0	4 1

<sup>&</sup>lt;sup>1</sup>Rent received as a percentage of value of land and buildings rented to others. Includes landlords not receiving rent

Source (6)

and buildings in 1979 4 These gross rents may translate into a relatively low rate of income return to real estate assets Estimates from the Economic Indicators series indicate that all landlords received \$6.1 billion in net rents in 1979—including \$0.7 billion in rent received by operator-landlords (5) This amount is equivalent to a 23-percent return on the Census-estimated value of all rental land and buildings For comparison, Melichar estimates that all farm production assets earned an income return of 27 percent in 1979, whereas the US Department of Agriculture (USDA) calculates the income return to equity value of farm production assets to have been 3.7 percent (3, 5) By these standards, farm landlords appear to have earned a lower rate of return on their real estate assets than farm operators earned on all production assets

Capital gains represent the other component of land returns. Over the past several decades, capital gains (primarily in real estate) have been the main component of growth in US farm wealth Between 1971 and 1979, real capital gains on farm assets, in 1983 dollars, totaled \$465 billion (3) More than a third of these gains were given up between 1980 and 1984, but a substantial amount of new wealth

remains as a legacy of agricultural production, marketing, and farm policy developments of the seventies Farm landlords probably shared proportionately in these gains and losses

## Who Are the Farm Landlords?

A reasonable assumption is that many farm landlords are either retired farm operators or widows and heirs of former farmers. If so, one can argue that separating landownership from farm operations has few distributional consequences, as farm assets are still under the effective control of the family. Unfortunately, information to determine if this hypothesis is true is limited. Two sources are the "1979 Farm Finance Survey" (6) and the 1978 survey of Farmland Ownership in the United States (1). The "1979 Farm Finance Survey" compares landlords and farm operators, whereas the Farmland Ownership survey compares nonoperator-landlords and all farmland owners

Some results from the two surveys support an "extended family" hypothesis For example, both surveys indicate that the average farm landlord is likely to be older (24.2 percent over age 65 for landlords compared with 166 percent for farm operators) or female (23 percent compared with 52 percent) Nearly 20 percent of landlords reported their occupation in the "1979 Farm Finance Survey" (6) as "retired farmer," whereas the Farmland Ownership survey classified 458 percent as "retired" (from all occupations) The Farmland Ownership survey indicated that nonoperatorlandlords were more likely to have inherited land or to have received land as a gift than were all farmland owners (38.2 percent compared with 22.5 percent for all farmland owners) Nonoperatorlandlords also tended to have owned their land for longer periods than all farmland owners

Offsetting these statistics is other evidence from the Farmland Ownership survey that, at the upper end of the size distributions, nonoperator-landlords tended to hold proportionately more land and more highly valued land. The incidence of family ownerships was lower Relatively more landlords were sole proprietors, and the incidence of nonfamily corporations was slightly higher among landlords than among all farmland owners. Thus, the survey statistics do not rule out the possibility of a

<sup>&</sup>lt;sup>4</sup>According to the "1979 Farm Finance Survey," landlords received \$10.9 billion in gross rents in 1979 (6). They paid out just over \$3.0 billion in operating expenses and \$1.7 billion in capital expenditures

landlord population that consists of two groups one in which landlord status is a transitional role in the farm/family life process and another for which it is solely a business or investment

## Some Implications

Most measures of the economic health of the farm sector focus on a relatively small number of indicators, including such measures as farm numbers, size of the farm population, and distribution of farm sales From a larger perspective—that of the ownership of the factors of production—such measures are incomplete and possibly misleading. If landlords are considered, the number of claimants to factor returns in agriculture, particularly among the Nation's largest farms, is substantially greater than a count of farm operators alone would suggest. Thus, the "farm" clientele for agricultural policy, though still small, is larger, more dispersed, and more stable over time than is immediately apparent.

These observations are important because of the role of land as a residual claimant to agricultural earnings. Widespread agricultural landownership by nonoperator-owners provides a mechanism for substantial transfer of agricultural earnings and wealth away from farm operators and perhaps away from the farm sector. Conversely, to the extent that landlords have other wealth or income sources, they may help to stabilize the agricultural sector during periods of financial difficulty.

The continued search for efficiency in agricultural production could lead to further functional specialization among farm operators and landlords and, conceivably, to the separation of management and risk-bearing functions from asset ownership functions. Anecdotal reports of extensive farming operations established on those principles are common (8). Whether or not such arrangements become the norm for commercial agricultural operations should depend partly on how operators and landlords agree to share income and wealth returns. Data that identify these farm and nonfarm linkages are needed.

Many unanswered questions about the efficiency and distributional consequences of widespread factor ownerships remain Economic theory suggests that each factor in a competitive economy will be paid according to its marginal value of productivity But, theory needs to be related to actual agricultural conditions regarding such considerations as returns to scale, mobility of labor, and transfer of land among farms to achieve size efficiencies. Much of the secular rise in farmland earnings has presumably been captured by landowners. If farm programs are changed, how will the resulting changes in farm income be distributed among the owners of the factors of production? What do these changes imply for political forces promoting or resisting program changes?

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