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**FARMLAND  
TENURE PATTERNS  
IN THE  
UNITED STATES**

**U.S. DEPARTMENT OF AGRICULTURE  
ECONOMIC RESEARCH SERVICE**

## **ABSTRACT**

A significant amount of U.S. farmland, in terms of both acreage and total market value, is rented. There is wide variation, however, depending on farm size and type of enterprise. Reliance on leasing increases with size of operation. Compared with owned land, a higher percentage of all rented farmland is in the larger farms. Tenure patterns vary considerably by type of farm, with leasing being most important in cash grain enterprises. These relationships suggest that if the trend toward increasing farm size continues, an even higher percentage of all rented land will be in the larger farms. This implies greater reliance on part-owner operations, particularly among farming operations that require large acreages. Estimates are based on the 1969 Census of Agriculture and pertain chiefly to farms with gross annual receipts of \$2,500 or more.

**Keywords:** Farmland, Ownership, Real estate, Rent, Structure, Tenure.

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## SUMMARY

About one-fifth of the land in farms of less than 100 acres is rented, but the proportion increases to around one-half for farms of 1,000 acres or more. This relationship suggests that if the trend toward greater farm size continues, leased land will become increasingly concentrated in the larger farming operations.

About 38 percent of all farmland in the United States was rented in 1969, according to estimates based on the 1969 Census of Agriculture. The range was from 20 percent or less in the Northeast and Appalachian regions to over 40 percent in parts of the Corn Belt, Plains regions, and Western States.

Two thirds of the total rented acreage was leased by part owners (operators of owned land as well as rented land) and the remainder by full tenants.

Almost 90 percent of the rented land was owned by nonoperator landlords. Thus, land leasing must be considered an important source of external financing for the farming sector. Nearly 34 percent of the total market value of farm real estate was rented from nonfarm landlords—equivalent to roughly three times the value of operator farm mortgage debt outstanding.

Half the operators of farms with gross annual sales of \$2,500 or more (economic classes I-V in the Census of Agriculture) were full owners in 1969. However, they accounted for only 29 percent of the total acreage and 33 percent of the total market value of land. The average acreage of part-owner units was considerably larger than that of full-owner units. The difference was primarily the increment of land rented by part owners. Average acreage owned by part-owner operators closely paralleled that of full-owner units.

Both part-owner and full-tenant operations typically had larger cash receipts than full-owner units. Most class V farms (annual gross sales of \$2,500-\$4,999) were full-owner units. Only a third of class I farms (\$40,000 or more annual sales) were classified as full-owner operations. However, note the distinction between value of gross sales and income level of the farm operator. First, the full-owner operator is the recipient of total farm

receipts, so his volume of sales can be smaller than those of his full-tenant neighbors and still yield a comparable income to labor, management, and owned capital. Then, too, census data suggest that full owners generally rely more heavily on off-farm work as an income source.

Various forms of business organizations (sole proprietorships, partnerships, or corporations) showed no significant and consistent differences in tenancy patterns. There is no evidence in the Census of Agriculture to suggest a concentration of either land ownership or land rental by form of business organization.

Age of farmer had a big effect on tenancy patterns. The majority of operators in the youngest age class were full tenants, while those in the oldest age class were generally full owners. Because of an increase in acres owned and a decrease in acres rented in the later years, the percentage of rented land in farms dropped from 65 percent in the youngest age class to 27 percent in the oldest age group.

Reliance on leasing increased with increasing acreage. As a consequence, rented land is concentrated in the larger operations. The proportion of rented land rose from about 20 percent on farms of less than 100 acres to about 45 percent on farms of 1,000 acres or more.

The size and value of the land base and the percentage of rented land varied widely by type of farming enterprise. Leasing is extremely important to cash grain farming, which is concentrated in the Corn Belt and Northern Plains States. Census reports show that real estate values of class I cash grain farms exceeded \$300,000 per farm, and even class II farms (gross sales of \$20,000-\$39,999) approached \$200,000. As a result, more than half of the land in class I and class II cash grain farms was rented.

The extent of change in future farmland tenure patterns is uncertain, in part because of the inherent stability of ownership and leasing contracts. Nonetheless, characteristics of the present situation and the past changes in farm size imply that more of the rented land will be in large part-owner farms in the future.

# FARMLAND TENURE PATTERNS IN THE UNITED STATES

By Bruce B. Johnson, Agricultural Economist, National Economic Analysis Division

## INTRODUCTION

With farmland representing more than two-thirds of total asset value in the farming sector, the control of farm real estate, via ownership or rental, significantly influences income distribution, intergenerational transfer, and farm consolidation.<sup>1</sup> This study provides an empirical base for future research on the interrelationship of land tenure with these various issues. More specifically, the objectives are to:

- a. Identify differences in farmland ownership and rental patterns by various characteristics of the farming operation and the operator.

- b. Measure and analyze the degree of farmland ownership and rental concentration, and the relative importance of farmland rented from nonfarm landlords.

- c. Draw implications from this point-in-time analysis concerning the relationship of land tenure to broader structural trends.

The primary data source is the 1969 Census of Agriculture. Due to changes in definitions pertaining to land tenure and the lack of comparable data from earlier censuses, analysis of change over time is necessarily limited.<sup>2</sup> However, the 1969 census provided tabulation of the acreage of land owned and land rented by various characteristics of the operator and the farming operation, for farms in economic classes I through V.<sup>3</sup> Previously, most census data were only classified into the broader, more ambiguous groups of the farm operator's tenure; i.e., full owners, part owners, managers, and tenants. Since the largest tenure group (in terms of acres) was the part owner, past data gave only rough indication of the actual ownership and control of farmland. Therefore, this study, while admittedly a "snapshot-in-time" analysis of a dynamic subject, does bring into much sharper focus the relationships that govern access to and use of the farmland resource.

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<sup>1</sup>In this analysis, control of farm real estate refers to the access to use rights to farmland.

<sup>2</sup>The primary change in the 1969 Census was the dropping of the "Manager" category from the tenure classification. Because this concept was believed to be no longer descriptive of a distinct type of farm management, farms that would have qualified as managed in the prior census definition were distributed among full owners, part owners, and tenants according to the reported ownership of the land in the 1969 Census.

<sup>3</sup>Class I farms are those with gross annual receipts of \$40,000 or more; class II, \$20,000 to \$39,999; class III, \$10,000 to \$19,999; class IV, \$5,000 to \$9,999; class V, \$2,500 to \$4,999.

The report has seven parts. Part 1 provides a measure of the extent of farmland rental, who is renting, and from whom, for all farms. All following sections relate to classes I-V only (farms with annual gross sales of \$2,500 or more).<sup>4</sup> Part 2 looks at the more traditional tenure classifications of full owner, part owner, and tenant, noting the similarities and differences among tenure groups. Part 3 shows the changing composition of landownership and rental over the life cycle of the operator. Because the individual or family-farm type of farm organization still dominates U.S. agriculture, many policy issues relating to structure are influenced by this single-generation cycle. Tenure patterns by age also are useful in appraising the traditional "tenure ladder" concept. Size of farm, too, is highly interrelated with tenancy patterns and is examined in part 4. While acreage is one measure of farm size, the heterogeneity of farming operations limits the analysis of this size breakdown. Hence, part 5 is an analysis by economic class, another size measure. This size distinction helps to relate tenure patterns to varying levels of income-generating capacity. Part 6 limits the analysis by economic class to cash-grain farms only. Part 7 draws implications concerning future developments in farmland ownership and rental and the interrelationships with structural characteristics.

## 1. NEARLY TWO-FIFTHS OF FARMLAND IS RENTED

Table 1 indicates the distribution of total farmland acreage among the 48 States and 10 farm production regions.<sup>5</sup> The portion of land rented is not available directly from the census, but is estimated in the following way: (1) The rented portion of part-owner farms at the State level is available in the census for farms in classes I-V, and the same ratio is assumed for the remaining farms; and (2) All land rented by part

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<sup>4</sup>While representing roughly two-thirds of total farm numbers, classes I-V account for 86 percent of all land in farms, 95 percent of farmland rented, and over 95 percent of annual cash receipts from farm marketings. Consequently, the analysis is not believed to be limited by the exclusion of "other farms" categories.

<sup>5</sup>Due to the specialized nature of their land resources and agricultural enterprises, Alaska and Hawaii are not included in this analysis.

Table 1. Total farmland, acreage and percent rented, and percent rented by part owners and from nonfarm landlords, 48 States, 1969

Region and State	Total land in farms	Rented farmland			
		Acreage <sup>1</sup>	Percent of total	Percent of rented land	
				Rented by part owners	Rented from nonfarm landlords
	----- 1,000 acres -----			----- Percent -----	
Northeast	29,159	5,774	19.8	67.4	91.5
New England States <sup>2</sup>	5,597	758	13.5	78.1	93.0
New York	10,149	1,754	17.3	76.6	90.8
New Jersey	1,036	349	33.7	58.7	89.0
Pennsylvania	8,900	1,742	19.6	63.8	87.3
Delaware	674	252	37.4	65.5	98.6
Maryland	2,803	919	32.8	51.6	86.7
Lake States	58,858	14,643	24.9	64.2	86.0
Michigan	11,903	2,588	21.7	76.2	88.3
Wisconsin	18,110	3,074	17.0	57.9	74.4
Minnesota	28,845	8,981	31.1	62.9	89.3
Corn Belt	130,586	53,775	41.2	52.1	89.0
Ohio	17,112	5,970	34.9	58.0	90.6
Indiana	17,573	7,223	41.1	61.0	90.5
Illinois	29,914	16,255	54.3	47.6	91.1
Iowa	33,569	15,329	45.7	43.6	88.1
Missouri	32,418	8,998	27.8	63.5	84.5
Northern Plains	183,927	78,315	42.6	65.4	89.5
North Dakota	43,118	16,953	39.3	67.1	91.3
South Dakota	45,584	15,678	34.4	68.5	90.3
Nebraska	45,834	19,989	43.6	57.6	88.9
Kansas	49,391	25,695	52.0	68.5	88.4
Appalachian	58,749	11,746	20.0	62.9	83.7
Virginia	10,650	2,126	20.0	69.0	86.7
West Virginia	4,340	541	12.5	72.2	90.1
North Carolina	12,734	3,273	25.7	61.1	84.8
Kentucky	15,968	2,741	17.2	53.8	79.1
Tennessee	15,057	3,065	20.4	67.1	83.7
Southeast	50,485	12,269	24.3	70.3	78.4
South Carolina	6,992	1,704	24.4	75.1	89.6
Georgia	15,806	3,155	20.0	69.1	67.5
Florida	14,032	4,148	29.6	67.6	79.9
Alabama	13,655	3,262	23.9	72.2	81.6
Delta States	41,523	14,596	35.2	62.8	82.8
Mississippi	16,040	4,388	27.4	68.4	83.7
Arkansas	15,694	5,976	38.1	58.1	83.0
Louisiana	9,789	4,232	43.2	63.4	81.5
Southern Plains	178,575	79,926	44.8	61.1	85.5
Oklahoma	36,008	14,790	41.1	70.4	87.7
Texas	142,567	65,136	45.7	59.0	85.0
Mountain	256,526	94,204	36.7	76.8	93.4
Montana	62,918	21,638	34.4	78.5	92.7
Idaho	14,416	5,098	35.4	70.3	90.4
Wyoming	35,477	14,358	40.5	75.4	93.0
Colorado	36,697	13,937	38.0	74.2	87.4
New Mexico	46,792	18,284	39.1	77.7	95.1
Arizona	38,203	11,441	29.9	85.1	97.9
Utah	11,314	3,973	35.1	90.6	93.7
Nevada	10,709	5,475	51.1	56.2	98.3

See footnotes at end of table.

Continued

Table 1. Total farmland, acreage and percent rented, and percent rented by part owners and from nonfarm landlords, 48 States, 1969—Continued

Region and State	Total land in farms	Rented farmland			
		Acreage <sup>1</sup>	Percent of total	Percent of rented land	
				Rented by part owners	Rented from nonfarm landlords
	— — — 1,000 acres — — —			— — — — — Percent — — — — —	
Pacific	71,301	32,665	45.8	69.8	88.5
Washington	17,559	7,717	43.9	72.2	90.7
Oregon	18,019	5,838	32.4	75.4	92.4
California	35,723	19,110	53.5	67.1	86.5
48 States	1,059,689	397,913	37.5	65.8	88.6

<sup>1</sup>Derived from Census data with the assumptions that (1) the rented portion of part-owner farms at the State level is the same for all farms as it is for the economic classes I-V, and (2) all land rented by part owners and tenants is operated by them and not subleased.

<sup>2</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Source: 1969 Census of Agriculture, State Summary Volumes.

owners and tenants is assumed to be operated by them and not subleased.<sup>6</sup>

Based on the estimation procedure, about 38 percent of all land in farms was rented in 1969. The proportion rented ranged from about 20 percent in the Northeast and Appalachian States to over 40 percent in the Corn Belt, Northern and Southern Plains States, and portions of the Mountain and Pacific regions. Definitional changes in the 1969 Census prevent a valid comparison with prior estimates of land rented. In fact, the reallocation of what had previously been "manager" farm acreages significantly increased the portion estimated to be rented in the Mountain and Pacific regions.

Many factors contribute to the relative importance of land leasing. In the Corn Belt States, relatively high land values and the resulting large investment requirements encourage land rental as an alternative to owner operation. Then, too, the cash grain type of agriculture which predominates in the Corn Belt has a short planning horizon with fixed investments of secondary importance. In this setting, as noted by Dovring, the

relative instability of short-term tenancy proves tolerable.<sup>7</sup>

Rates of land rented are also high in many Western States. Much land is rented for the more extensive uses such as summer-fallow-wheat production and livestock grazing.<sup>8</sup> Throughout the Northeast, Appalachian, and Southeast regions, relatively lower percentages of land are rented—partly because of (1) smaller farm units which frequently depend primarily on dairy or livestock feeding enterprises, and (2) greater reliance on off-farm income sources. These factors reduce the relative importance of the land base in the operator's financial position.

#### Rental by Part Owners

Throughout the country, the major share of rented land was rented by part owners (operators of land they own as well as land rented from others). The portion rented by full tenants was greater in only two Corn Belt States (table 1). These States are characterized by intensive cash crop farming, which makes full tenancy economically viable. Although definitional changes in the 1969 census prevent a specific comparison, it is

<sup>6</sup>While these assumptions were not tested empirically, the proportion of total acreage affected by the assumption is minimal. For example, expanding the rented ratio from classes I-V to all farms is in effect using actual data from 96 percent of the total land area to estimate for the remaining 4 percent. Likewise, the question of subleasing is minor since land rented out by part owners is less than 3 percent of total land acreage in part-owner farms.

<sup>7</sup>Dovring, Folke. "Variants and Invariant in Comparative Agricultural Systems." American Journal of Agricultural Economics, Vol. 51, No. 5, Dec. 1969, p. 1266.

<sup>8</sup>Government grazing lands are not included in the census measure.



likely that the 1969 level of land rented by part owners is a continuation of a longrun trend. In approximately two decades, the proportion rented by part owners increased from less than one-half of the total rented land to roughly two-thirds.<sup>9</sup>

This trend closely parallels increases in farm size. Farming operations have expanded through purchase as well as rental of add-on units. Due to such factors as excess labor and machinery capacity, many operators have purchased additional land. Some of them are former full tenants who have moved into the part-ownership class. At the same time, capital limitations as well as limited availability of land to purchase have encouraged farm size expansion via rental. Many full-owner operators have chosen this route and thus have also been reclassified as part owners. Assuming the continuation of increasing farm size, more and more operators are likely to become part owners.

### Role of Nonoperator Landlords

In most States over 80 percent of the rented acreage was owned by nonoperator landlords. Only a small amount was rented from other farm operators. Nonoperator landlords must be considered an important source of capital input into the farming sector. Without this input, past trends in farm consolidation and growth would undoubtedly have been slowed.

The asset contribution by nonoperator landlords was a third of the market value of farm real estate assets. This, of course, varied widely among States, from 15 percent in Wisconsin to over 52 percent of total market value of Illinois farmland (table 2). Despite this variation, it is clear that rental has a far greater role than credit has in the acquisition of use rights to land assets. In fact, the value of rented real estate was about 3 times the level of farm mortgage debt outstanding held by farm operators (table 3).

In some respects, farmland investment by nonoperator landlords is similar to stockholder investment in corporations. However, the nonoperator landlord is not synonymous with the "Wall Street" type of investor. Evidence suggests the majority of these landlords are either retired farmers, members of farm families, or closely associated with agriculture through the small rural communities in which they live.<sup>10</sup> Moreover, a

significant portion are interfamily rental arrangements, frequently providing a phase in the process of intergenerational transfer. In the 1965 Sample Survey of Agriculture, one out of three farm operators renting farmland was leasing some land from a relative. So, while the financial aspects of land leasing parallel equity financing, the relationship between resource owner and resource user differs greatly—the landlord-tenant relationship being much more personal and informal.

## 2. FARM CHARACTERISTICS BY TENURE STATUS

Classification by tenure of operator is a crude form of breakdown due to the ambiguity of the part-owner category. A farm operator may own 1 percent or 99 percent of the land he operates and still be considered a part owner. Yet this classification scheme provides a useful starting point for tenure analysis.

About half of all class I-V farms were operated by full owners, yet the proportion of land operated by this group was less than 30 percent of the total (table 4).<sup>11</sup> There was considerable variation. The proportion ranged from less than 7 percent of farmland in Arizona to over 62 percent in Kentucky.

Part-owner farms were considerably larger than their full-owner counterparts throughout all regions (table 5). The difference was most extreme in the Western States, where the nature of the farming enterprise tended to differ with tenure. In the West, part-owner operations tended to be the more extensive land use operations, whereas full-owner farms were often smaller in acreage and more intensively used.

### Asset Values

Part-owner farms controlled substantially greater real estate assets than either full-owner or full-tenant operations. In the Western States the part-owner units, though larger in acreage than other units, generally consisted of lower valued land. However, in most other States, land in part-owner farms had a higher market value, due to the higher percentage of cropland in these farms (appendix table A-2). The large proportion of cropland and, hence, higher average value of part-owner land again reflects variation in the relative importance of various farming enterprises among tenure classes. Part owners and tenants generally rely more heavily on crop enter-

<sup>9</sup>Moyer, D. David, Harris, Marshall, and Harmon, Marie B. Land Tenure in the United States, Development and Status. U.S. Dept. Agr., Agr. Inf. Bul. No. 338, June 1969, p. 15.

<sup>10</sup>Johnson, Bruce B., The Farmland Rental Market—A Case Analysis of Selected Corn Belt Areas. Michigan State University, Department of Agricultural Economics, AER Report No. 235, September 1972, p. 12.

<sup>11</sup>Appendix table A-1 presents farm numbers, land in farms, and total market value of farm real estate by tenure of operator.

Table 2. Total value of farm real estate, value of rented portion and percent of total, and value of portion rented from nonfarm landlords and percent of total 48 States, 1969

Region and State	Total market value of farmland and buildings, March 1970 <sup>1</sup>	Market value of farmland and buildings rented			
		Amount <sup>2</sup>	Percent of total	Rented from nonfarm landlords	
				Amount <sup>3</sup>	Percent of total
	— — — Million dollars — — —		Percent	Million dollars	Percent
Northeast	11,154	2,824	25.3	2,520	22.6
New England States <sup>4</sup>	1,803	314	17.4	293	16.3
New York	2,772	581	21.0	527	19.0
New Jersey	1,132	403	35.6	358	31.6
Pennsylvania	3,319	804	24.2	702	21.2
Delaware	336	123	36.6	121	36.0
Maryland	1,793	599	33.4	519	28.9
Lake States	14,597	3,949	27.1	3,392	23.2
Michigan	3,883	923	23.8	815	21.0
Wisconsin	4,201	842	20.0	626	14.9
Minnesota	6,512	2,184	33.5	1,951	30.0
Corn Belt	49,600	22,901	46.2	20,484	41.3
Ohio	6,819	2,584	37.9	2,341	34.3
Indiana	7,136	3,115	43.7	2,819	39.5
Illinois	14,643	8,435	57.6	7,685	52.5
Iowa	13,733	6,397	46.6	5,636	41.0
Missouri	7,269	2,370	32.6	2,003	27.6
Northern Plains	22,773	10,133	44.5	9,047	39.7
North Dakota	4,045	1,598	39.5	1,459	36.1
South Dakota	3,815	1,389	36.4	1,254	32.9
Nebraska	7,076	3,241	45.8	2,881	40.7
Kansas	7,842	3,906	49.8	3,453	44.0
Appalachian	15,949	3,770	23.6	3,156	19.8
Virginia	3,047	680	22.3	589	19.3
West Virginia	589	84	14.3	76	12.9
North Carolina	4,244	1,265	29.8	1,073	25.3
Kentucky	4,041	831	20.6	657	16.3
Tennessee	4,028	910	22.6	761	18.9
Southeast	13,583	3,091	22.8	2,436	17.9
South Carolina	1,827	475	26.0	426	23.3
Georgia	3,701	745	20.1	503	13.6
Florida	5,330	1,205	22.6	963	18.1
Alabama	2,725	666	24.4	544	20.0
Delta States	10,972	4,393	40.0	3,633	33.1
Mississippi	3,746	1,134	30.3	949	25.3
Arkansas	4,081	1,803	44.2	1,497	36.7
Louisiana	3,145	1,456	46.3	1,187	37.7
Southern Plains	27,384	11,961	43.7	10,237	37.4
Oklahoma	6,214	2,577	41.5	2,260	36.4
Texas	21,170	9,384	44.3	7,977	37.7
Mountain	17,443	6,437	36.9	5,974	34.2
Montana	3,748	1,227	32.7	1,137	30.3
Idaho	2,545	881	34.6	796	31.3
Wyoming	1,445	531	36.7	494	34.2
Colorado	3,471	1,314	37.9	1,149	33.1
New Mexico	1,959	734	37.5	698	35.6
Arizona	2,664	1,213	45.5	1,187	44.6
Utah	1,040	333	32.0	312	30.0
Nevada	571	204	35.7	201	35.2

See footnotes at end of table.

Continued

Table 2. Total value of farm real estate, value of rented portion and percent of total, and value of portion rented from nonfarm landlords and percent of total, 48 States, 1969—Continued

Region and State	Total market value of farmland and buildings, March 1970 <sup>1</sup>	Market value of farmland and buildings rented			
		Amount <sup>2</sup>	Percent of total	Rented from nonfarm landlords	
				Amount <sup>3</sup>	Percent of total
	— — — Million dollars — — — —		Percent	Million dollars	Percent
Pacific	23,593	9,728	41.2	8,523	36.1
Washington	3,930	1,450	36.9	1,315	33.5
Oregon	2,707	802	29.6	741	27.4
California	16,956	7,476	44.1	6,467	38.1
48 States	207,053	79,187	38.2	69,402	33.5

<sup>1</sup>Based on estimates of current market value provided in the 1969 Census of Agriculture.

<sup>2</sup>Value of land and buildings rented by tenants is taken directly from census values. Value for the rented share of part-owner land and buildings derived by assuming State per-acre values of owned and rented land are equal; therefore, the percent of land acreage rented can be used as a proxy for the value breakdown of owned and rented land in part-owner farms. Since the above data are available for economic classes I-V farms only, value and total acreage rented of "other farms" was assumed to be a residual, with the value of rented land in this category again derived using the proportion of acreage rented as a proxy.

<sup>3</sup>Based on assumption that per-acre value of farmland rented from farm and nonfarm landlords is identical. Consequently the percent of land acreage rented from nonfarm landlords is used to estimate value at the State level and then summed to regions.

<sup>4</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Table 3. Value of farmland and buildings, percent rented from nonfarm landlords, and percent represented by farm mortgage debt, selected dates, 1969 and 1970

Region	Total market value of farmland and buildings, Mar. 1970	Percent of total value	
		Rented from nonfarm landlords, 1969	Farm mortgage debt outstanding of farm operators, Jan. 1, 1970 <sup>1</sup>
	Million dollars	Percent	Percent
Northeast	11,154	22.6	12.9
Lake States	14,597	23.2	15.1
Corn Belt	49,600	41.3	9.0
Northern Plains	22,778	39.7	8.6
Appalachian	15,949	19.8	9.8
Southeast	13,583	17.9	11.8
Delta	10,972	33.1	12.2
Southern Plains	27,384	37.4	7.7
Mountain	17,443	34.2	12.1
Pacific	23,593	36.1	15.5
48 States	207,053	33.5	10.8

<sup>1</sup>Total regional debt outstanding adjusted by applying operator share of total aggregate debt as estimated in The Balance Sheet of the Farming Sector—1969, U.S. Dept. Agr., p. 29.

Table 4. Farm numbers, land in farms, and market value of land and buildings: Percent held by farm operators in economic classes I-V, by tenure, 48 States, 1969<sup>1</sup>

Region and State	Percent of farm numbers held by—			Percent of land in farms held by—			Percent of total market value of land and buildings held by—		
	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants
-----Percent-----									
Northeast	59.6	31.6	8.8	48.6	44.1	7.3	42.5	45.6	11.9
New England									
States <sup>2</sup>	61.9	32.8	5.3	52.3	44.3	3.4	45.8	49.0	5.2
New York	58.7	35.9	5.3	48.9	46.8	4.3	42.7	49.5	7.8
New Jersey	57.3	28.4	14.3	38.5	45.7	15.7	35.8	45.4	18.8
Pennsylvania	60.5	29.6	9.9	50.7	41.0	8.3	44.1	43.4	12.4
Delaware	55.1	31.4	13.5	31.7	54.9	13.4	35.2	50.1	14.7
Maryland	57.6	25.5	16.9	42.8	39.5	17.7	41.9	39.5	18.7
Lake States	60.9	29.5	9.6	48.2	42.1	9.6	44.3	44.4	11.3
Michigan	59.8	34.0	6.2	46.8	47.4	5.8	43.0	49.7	7.3
Wisconsin	68.5	23.7	7.7	60.2	32.1	7.7	53.9	36.4	9.7
Minnesota	54.9	32.1	12.9	41.5	46.3	12.2	39.0	46.7	14.2
Corn Belt	48.9	30.7	20.4	35.6	43.1	21.3	29.8	44.6	25.5
Ohio	53.1	31.6	15.3	38.1	45.1	16.8	34.1	47.1	18.8
Indiana	51.3	33.4	15.3	33.9	48.6	17.5	30.1	50.5	19.3
Illinois	37.5	34.2	28.4	24.7	46.0	29.4	21.6	45.3	33.1
Iowa	46.2	27.8	25.9	34.4	39.3	26.3	31.5	40.2	28.3
Missouri	61.0	27.9	11.2	48.1	40.7	11.2	41.0	43.9	15.1
Northern Plains	33.5	47.1	19.4	21.2	64.7	14.2	21.2	61.8	16.9
North Dakota	35.1	51.1	13.7	25.0	64.5	10.5	24.4	64.1	11.5
South Dakota	33.6	49.2	17.2	21.0	68.2	10.8	22.7	64.1	13.2
Nebraska	34.5	40.2	25.3	22.0	59.7	18.4	22.0	55.3	22.6
Kansas	31.5	49.8	18.7	17.4	66.5	16.2	18.1	65.5	16.4
Appalachian	58.5	27.3	14.2	54.2	36.7	9.2	47.6	40.2	12.2
Virginia	57.6	31.2	11.2	51.5	41.4	7.1	46.8	44.3	8.9
West Virginia	69.7	25.6	4.7	61.2	34.5	4.3	56.9	36.7	6.4
North Carolina	46.8	31.4	21.8	45.0	42.8	12.2	37.9	45.6	16.5
Kentucky	66.6	21.1	12.3	62.2	28.0	9.8	56.6	30.8	12.6
Tennessee	63.5	27.4	9.1	54.2	37.6	8.2	43.4	41.6	10.0
Southeast	59.4	29.7	10.9	49.6	42.6	7.8	53.5	38.5	7.9
South Carolina	45.2	38.5	16.4	42.2	51.3	6.6	38.0	53.5	8.5
Georgia	60.8	28.2	11.0	53.1	40.2	6.7	51.6	41.6	6.8
Florida	73.0	19.5	7.5	52.3	37.8	9.9	63.7	27.9	8.4
Alabama	56.6	33.5	9.9	45.5	47.3	7.2	43.0	48.8	8.2
Delta States	50.5	34.1	15.4	37.0	48.1	15.0	31.6	49.3	19.2
Mississippi	56.0	33.9	10.0	40.6	49.4	10.0	36.6	51.0	12.4
Arkansas	52.2	30.9	16.9	36.7	45.1	18.3	30.2	47.0	22.8
Louisiana	40.2	39.8	20.1	32.2	50.8	17.0	27.8	50.5	21.7
Southern Plains	42.9	38.8	18.3	27.8	54.5	17.7	28.3	53.7	18.0
Oklahoma	41.0	43.9	15.1	26.2	61.7	12.1	25.7	61.0	13.3
Texas	43.7	36.6	19.7	28.2	52.8	19.0	29.0	51.5	19.4
Mountain	44.8	42.5	12.7	16.1	74.6	9.3	25.8	62.4	11.8
Montana	36.4	52.0	11.7	15.8	76.6	7.7	21.4	70.5	8.1
Idaho	53.9	34.3	11.8	29.6	61.1	9.4	34.9	53.4	11.7
Wyoming	36.6	49.6	13.8	8.8	82.7	8.4	16.4	74.4	9.2
Colorado	42.6	40.6	16.8	20.5	69.7	9.8	27.3	57.8	14.9
New Mexico	40.2	46.5	13.3	15.1	74.9	10.0	22.3	65.9	11.8
Arizona	49.0	36.0	15.1	6.5	83.8	9.7	20.2	61.4	18.4
Utah	54.5	40.0	5.5	25.1	72.1	2.8	35.7	60.2	4.2
Nevada	69.1	23.4	7.4	19.6	56.4	24.0	43.6	43.0	13.4
Pacific	60.6	27.1	12.3	23.8	61.9	14.3	37.0	47.0	16.0
Washington	55.7	33.3	11.0	17.9	68.0	14.1	33.2	53.1	13.7
Oregon	60.3	31.4	8.3	30.4	62.5	7.2	38.5	53.1	8.4
California	62.6	23.3	14.1	23.2	59.0	17.8	37.6	44.8	17.6
48 States	50.8	33.5	15.6	28.8	57.5	13.7	33.4	49.3	17.3

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

<sup>2</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Source, 1969 Census of Agriculture, State Summary Volumes, table 24.

Table 5. Average farm size and average market value of land and buildings per farm, economic classes I-V, by tenure, 48 States, 1969

Region and State	Average farm size						Market value of land and buildings per farm			
	Full owner	Part owner			Tenant	All farms	Full owner	Part owner	Tenant	All farms
		Owned	Rented	Total						
	-----Acres-----						-----\$1,000-----			
Northeast	172	188	106	294	176	211	58.6	118.4	111.6	82.2
New England States <sup>1</sup>	202	230	92	322	153	238	57.1	115.4	75.5	77.1
New York	203	213	104	317	194	243	48.5	91.9	27.1	66.7
New Jersey	105	128	123	251	171	155	104.0	266.2	218.9	166.4
Pennsylvania	148	152	93	245	148	177	50.4	101.5	86.9	69.2
Delaware	127	203	183	386	219	221	70.1	175.5	120.1	109.9
Maryland	154	165	156	321	217	207	95.5	203.2	145.2	131.4
Lake States	194	203	147	350	246	245	44.2	91.6	71.2	60.8
Michigan	162	165	124	289	192	207	49.0	99.3	79.7	68.0
Wisconsin	182	185	95	280	208	207	38.0	74.0	60.6	48.3
Minnesota	224	235	193	428	279	297	48.3	98.8	74.7	67.9
Corn Belt	192	171	201	372	275	264	61.4	146.5	125.8	100.6
Ohio	150	140	157	297	229	209	54.5	126.2	104.0	84.8
Indiana	152	144	192	336	263	230	54.9	141.6	117.9	93.5
Illinois	187	159	222	381	293	283	79.9	184.0	162.1	138.8
Iowa	196	178	193	371	266	263	70.0	148.7	111.9	102.8
Missouri	247	230	227	457	314	313	47.8	111.9	96.0	71.0
Northern Plains	508	603	501	1,104	587	804	64.2	133.0	88.4	101.3
North Dakota	691	702	524	1,226	745	972	65.4	118.1	78.6	94.2
South Dakota	611	830	527	1,357	613	978	59.0	113.7	67.0	87.3
Nebraska	448	598	448	1,046	512	705	68.7	148.0	96.2	107.5
Kansas	381	413	511	924	597	692	62.0	142.5	94.7	108.2
Appalachian	182	148	116	264	127	196	44.2	80.1	46.8	54.4
Virginia	228	200	138	338	162	255	59.9	104.6	58.5	73.7
West Virginia	305	284	184	468	318	347	39.7	69.7	65.6	48.6
North Carolina	140	108	90	198	81	145	39.0	67.0	36.5	48.2
Kentucky	177	147	104	251	151	190	42.3	72.7	51.2	49.8
Tennessee	185	153	144	297	196	217	43.5	86.5	62.7	57.0
Southeast	323	294	260	554	277	386	91.0	130.9	73.4	101.0
South Carolina	279	222	176	398	120	299	63.6	105.2	39.4	75.6
Georgia	293	285	195	480	204	336	64.8	112.8	47.2	76.4
Florida	454	539	687	1,226	835	633	195.4	320.2	249.8	223.8
Alabama	269	256	216	472	244	334	48.4	92.9	52.7	63.8
Delta States	297	265	308	573	395	406	68.9	159.3	137.4	110.2
Mississippi	316	337	299	636	432	436	68.5	157.7	129.7	104.9
Arkansas	267	244	313	557	413	381	60.4	158.8	141.0	104.4
Louisiana	327	209	312	521	345	408	88.1	161.7	137.5	127.3
Southern Plains	609	619	703	1,322	906	940	90.1	189.2	134.4	136.6
Oklahoma	393	428	438	866	495	616	65.2	144.7	92.3	104.2
Texas	696	718	838	1,556	1,040	1,078	100.0	212.1	148.2	150.5
Mountain	826	2,267	1,783	4,050	1,685	2,304	95.6	244.5	154.1	166.3
Montana	1,214	2,616	1,513	4,129	1,840	2,802	98.5	226.4	115.9	167.0
Idaho	357	658	499	1,157	515	650	77.1	185.2	118.4	119.0
Wyoming	1,038	4,370	2,814	7,184	2,624	4,303	82.5	277.4	122.8	184.7
Colorado	760	1,586	1,135	2,721	922	1,583	93.8	208.9	129.5	146.5
New Mexico	1,839	4,066	3,832	7,898	3,696	4,902	115.3	295.4	186.0	208.4
Arizona	539	3,172	6,219	9,391	2,596	4,032	182.5	756.5	539.9	442.8
Utah	521	1,141	894	2,035	577	1,130	66.9	153.4	77.9	102.1
Nevada	1,649	6,019	7,960	13,979	18,669	5,802	198.7	579.3	567.1	315.2

See footnote at end of table.

Continued

Table 5. Average farm size and average market value of land and buildings per farm, economic classes I-V, by tenure, 48 States, 1969—Continued

Region and State	Average farm size						Market value of land and buildings per farm			
	Full owner	Part owner			Tenant	All farms	Full owner	Part owner	Tenant	All farms
		Owned	Rented	Total						
	-----Acres-----						-----\$1,000-----			
Pacific	276	722	875	1,597	816	701	138.8	393.4	295.9	227.3
Washington	215	653	711	1,364	860	669	88.2	235.6	183.9	147.8
Oregon	487	1,123	798	1,921	837	967	85.4	226.2	136.5	133.9
California	234	591	1,003	1,594	798	630	173.2	555.4	360.6	288.7
48 States	299	473	433	906	463	528	67.9	151.9	114.5	103.3

<sup>1</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Source: 1969 Census of Agriculture, State Summary Volumes, table 24.

prises and therefore need a relatively higher quality land base. In contrast, many full-owner operations are specialized livestock units with the land base being either partially or totally replaced by purchased feed inputs.

#### Tenure Patterns and Gross Farm Income

The part-owner units were the largest in terms of average annual gross receipts from farm marketings (table 6). Full-tenant farms were second in average size in most regions.

The tendency for full-owner farms to be smaller units does not necessarily imply that full owners are failing to generate adequate income. Since a full owner receives all receipts from farm marketings, a lower volume of sales relative to those of his full-tenant neighbors can yield comparable income. Then, too, off-farm income sources can supplement farm earnings. Census data show the incidence of off-farm work to be fairly similar among all tenure groups: 44 percent of full owners, 40 percent of part owners, and 48 percent of tenants reported off-farm work (see table 7). Yet the extent of this employment varied significantly. Nearly 60 percent of the full owners who reported off-farm work were working off the farm 200 days or more annually (essentially full time), compared with less than 40 percent of the part owners and tenants who reported any off-farm employment. This relationship consistently appears in all regions. In effect, then, the full-owner tenure group does appear to be more dependent on off-farm income sources. But whether or not this greater dependency is influenced more by economic necessity than by personal choice remains unanswered.

#### Tenure by Type of Organization

With the increasing land and capital requirements of farm units has come increasing interest in more sophisticated forms of farm business organization. Partnerships and small business corporations can frequently manage larger operations more efficiently than a single proprietorship. A key issue has been the relationship of organization and land tenure. Questions concerning possible concentration of landownership and control are being raised. The 1969 Census of Agriculture gives some insight into the relationship.

The predominant form of organization is the individual or family proprietorship throughout all areas of the country. Over 70 percent of all land in class I-V farms was under this form of organization (table 8). The proportion ranged from 61 percent in the Mountain region to 84 percent in the Lake States. The partnership form controlled the next largest portion of the total land base, generally accounting for about 15 to 20 percent. Corporations accounted for only small amounts of farmland acreage throughout much of the country. Exceptions were the Southeast, Mountain, and Pacific regions where 13 percent, 21 percent, and 14 percent, respectively, of the land was incorporated units. On a State basis, the highest incidence of farming corporations was in Florida, where they controlled 33 percent of the farmland. California ran second, with corporations accounting for 15 percent of the land in farms. The greater importance of the corporate form in these areas can be attributed in part to the types of farming enterprises in which they are engaged. These

Table 6. Value per farm of agricultural products sold and distribution of total receipts, farms in economic classes I-V, by tenure, by farm production regions, 1969

Region	Average market value of all agricultural products sold				Percent of total market value <sup>1</sup>		
	Full owner	Part owner	Tenant	All farms	Full owner	Part owner	Tenant
	----- \$1,000 -----				----- Percent -----		
Northeast	24.0	38.7	27.4	29.9	49.4	42.2	8.3
Lake States	15.2	26.1	19.1	18.8	49.3	40.9	9.8
Corn Belt	16.5	31.7	25.1	22.9	35.2	42.5	22.3
Norther Plains	21.5	31.9	21.6	26.4	27.3	56.8	15.9
Appalachian	11.9	20.0	13.2	14.3	48.8	38.2	13.0
Southeast	27.2	36.6	24.3	29.7	54.4	36.6	8.9
Delta	22.2	30.3	26.1	25.6	43.9	40.5	15.7
Southern Plains	21.4	28.1	21.3	23.9	38.2	45.4	16.3
Mountain	34.3	49.4	93.7	48.3	31.9	43.4	24.7
Pacific	34.7	89.5	82.9	55.5	37.9	43.8	18.4
48 States	20.1	33.9	27.8	25.9	39.4	43.9	16.8

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

Source: 1969 Census of Agriculture, State Summary Volumes, table 24.

Table 7. Percent of farm operators reporting off-farm work, by tenure, economic classes I-V, 1969

Number of days reported worked off farm annually	Full owners	Part owners	Tenants
	----- Percent -----		
1 - 49 days	8.0	14.8	15.2
50 - 99 days	3.7	5.0	6.3
100 - 199 days	6.5	6.0	7.6
200 days or more	25.6	14.6	18.6
Total	43.8	40.4	47.7

Source: 1969 Census of Agriculture, Economic Classes I-V Farms.

enterprises typically involve large land units, as a comparison of average farm size suggests (table 9).

Are tenure patterns significantly different among the various forms of business organization? A comparative analysis of farm numbers and land in farms by tenure for each organizational form (table 10) reveals no significant difference in tenure patterns for either the distribution of farm numbers or land in farms.<sup>12</sup> On a rate-of-tendency basis (proportion of land rented), differences do appear between corporations of 10 or fewer share-

holders and those of more than 10 shareholders. Yet even with this greater classification refinement, a consistent pattern is not evident (table 11). For example, corporations of more than 10 shareholders rent a high proportion of their land in a number of Midwestern States. Frequently, these operations are involved in specialized crop enterprises and rent a large land base on long-term contract. In contrast, such corporations in neighboring States may, on the average, rent very little of their total acreage, depending on the nature of the specific enterprises involved. One must conclude then that there is no evidence to suggest a concentration of landownership among large-scale operations such

<sup>12</sup>Based on chi-square test of independence at the 5 percent level of confidence.

corporations with more than 10 shareholders. In fact, these business entities may be controlling a larger portion of their land resources via rental than the individual proprietorships. It is possible that decisions

regarding the use rights to land are more sensitive to the physical land needs of the enterprise than to the variation in financial flexibility among the organizational forms.

Table 8. Farm numbers, land in farms, and market value of land and buildings: Percent held by individuals, partnerships, and corporations, farms in economic classes I-V, by farm production regions, 1969<sup>1</sup>

Region	Percent of farm numbers held by—				Percent of land in farms held by—				Percent of total market value of land & buildings held by—			
	Individual or family	Part-nership	Corporation		Individual or family	Part-nership	Corporation		Individual or family	Part-nership	Corporation	
			10 or fewer share-holders	More than 10 share-holders			10 or fewer share-holders	More than 10 share-holders			10 or fewer share-holders	More than 10 share-holders
	----- <i>Percent</i> -----											
Northeast	87.6	10.6	1.7	0.1	82.3	13.8	3.3	0.6	78.7	14.3	6.0	1.0
Lake States	87.7	11.7	0.6	0.1	83.6	14.7	1.4	0.3	82.5	15.1	1.9	0.5
Corn Belt	84.9	14.4	0.6	0.1	80.8	17.8	1.3	0.2	80.2	18.0	1.5	0.2
Northern Plains	87.2	12.2	0.6	0.0	80.6	16.3	2.8	0.3	82.5	15.3	2.0	0.2
Appalachian	84.4	14.6	1.0	0.1	78.8	18.4	2.3	0.5	78.5	18.4	2.7	0.4
Southeast	85.6	11.8	2.5	0.2	71.8	15.4	8.8	4.0	66.5	15.7	12.7	5.1
Delta	86.5	11.8	1.5	0.2	74.6	18.4	5.5	1.6	72.9	18.9	6.6	1.6
Southern Plains	87.7	11.5	0.7	0.1	74.1	20.0	4.4	1.6	79.8	16.8	2.7	0.7
Mountain	83.7	12.7	3.3	0.2	60.7	18.4	18.1	2.8	67.2	17.4	14.0	1.4
Pacific	83.7	13.2	2.9	0.3	64.3	21.9	11.0	2.8	62.0	22.2	11.7	4.1
48 States	85.9	12.9	1.1	0.1	73.3	18.0	7.2	1.5	76.0	17.5	5.2	1.3

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

Source: 1969 Census of Agriculture, State Summary Volumes, table 24.

Table 9. Average farm size and average market value of land and buildings, per farm, by tenure, economic classes I-V, by farm production regions, 1969

Region	Average size of farm held by—				Market value of land and buildings per farm held by—			
	Individual or family	Partner-ship	Corporation		Individual or family	Partner-ship	Corporation	
			10 or fewer share-holders	More than 10 share-holders			10 or fewer share-holders	More than 10 share-holders
	----- Acres -----				----- Dollars -----			
Northeast	198	274	412	1,174	73,600	111,000	288,400	817,100
Lake States	234	307	596	1,196	57,200	78,300	197,100	450,200
Corn Belt	251	326	559	728	95,000	125,600	257,900	415,500
Northern Plains	743	1,072	3,838	5,562	95,800	127,400	344,200	356,300
Appalachian	183	248	461	1,279	50,500	68,500	148,000	312,700
Southeast	323	502	1,376	7,833	76,800	132,200	508,000	2,555,100
Delta	350	633	1,507	2,897	92,800	176,200	493,400	786,300
Southern Plains	786	1,620	5,575	16,680	123,600	199,000	498,500	1,116,900
Mountain	1,668	3,322	12,500	31,919	133,300	226,700	699,000	1,109,000
Pacific	538	1,164	2,696	6,559	167,800	381,900	933,800	3,138,400
48 States	450	739	3,337	7,756	91,100	140,200	471,100	1,273,900

Source: 1969 Census of Agriculture, State Summary Volumes, table 24.



Table 10. Percent of farm numbers and percent of land in farms by type of organization and by tenure, farms in economic classes I-V, by farm production regions, 1969<sup>1</sup>

Type of business organization and region	Percent of farm numbers held by—			Percent of land in farms held by—		
	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants
	-----Percent-----					
Individual or family farm:						
Northeast	60.8	30.8	8.4	50.6	42.4	7.0
Lake States	62.3	29.0	8.6	50.0	41.2	8.8
Corn Belt	51.3	30.3	18.3	37.8	42.9	19.3
Northern Plains	34.2	47.1	18.6	22.1	64.4	13.5
Appalachian	60.1	26.5	13.4	56.3	35.6	8.1
Southeast	60.3	29.5	10.2	48.6	43.8	7.6
Delta	52.3	33.4	14.3	38.5	47.7	13.8
Southern Plains	43.8	38.8	17.4	28.7	55.3	16.0
Mountain	46.3	41.5	12.2	18.6	72.8	8.6
Pacific	62.4	26.5	11.2	25.4	61.0	13.6
48 States	52.4	33.2	14.5	31.1	56.0	12.9
Partnership:						
Northeast	50.3	39.2	10.5	40.1	51.6	8.3
Lake States	51.2	33.1	15.7	39.4	47.0	13.6
Corn Belt	34.9	33.5	31.7	25.3	44.8	29.9
Northern Plains	28.0	47.7	24.3	17.7	65.1	17.2
Appalachian	48.8	31.9	19.3	45.7	41.5	12.9
Southeast	51.5	34.0	14.5	43.0	46.3	10.7
Delta	39.6	40.0	20.4	29.4	53.8	16.8
Southern Plains	35.6	40.6	23.8	24.6	51.0	24.4
Mountain	37.4	46.5	16.0	16.0	73.9	10.1
Pacific	52.3	30.9	16.8	20.6	60.2	19.2
48 States	40.9	36.7	22.5	24.0	58.1	17.9
Corporation:						
Northeast	55.4	32.1	12.5	35.7	55.5	8.8
Lake States	56.9	29.0	14.1	37.4	49.2	13.4
Corn Belt	52.1	27.2	20.7	40.8	42.3	16.9
Northern Plains	33.8	45.8	20.4	13.5	73.0	13.5
Appalachian	49.1	27.0	23.8	50.1	36.7	13.2
Southeast	62.8	20.6	16.7	61.5	32.7	5.8
Delta	38.3	33.4	28.4	39.1	40.8	20.1
Southern Plains	43.1	29.4	27.5	22.2	59.7	18.1
Mountain	34.5	54.3	11.2	8.5	81.0	10.5
Pacific	46.8	32.9	20.3	20.4	70.2	9.4
48 States	47.8	33.4	18.8	18.1	70.3	11.6

<sup>1</sup>Percentages may not add to 100.0 due to rounding

Source: 1969 Census of Agriculture, State Summary Volumes, table 24.

Table 11. Percent of land in farms rented by type of farm organization, economic classes I-V, 48 States, 1969

Region and State	Type of farm organization				
	Individual or family	Partnership	Corporation		
			10 or fewer shareholders	More than 10 shareholders	All corporations
	----- Percent -----				
Northeast	22.5	26.7	29.4	19.3	27.9
New England					
States <sup>1</sup>	16.0	17.4	15.3	13.5	14.9
New York	19.1	22.1	28.6	14.3	27.7
New Jersey	37.3	36.7	50.6	33.3	50.0
Pennsylvania	23.4	27.2	29.1	25.0	28.3
Delaware	40.1	43.6	34.1	9.1	28.8
Maryland	35.4	45.2	42.9	30.4	40.4
Lake States	26.2	34.5	30.9	62.4	36.9
Michigan	25.3	36.5	32.6	13.3	30.7
Wisconsin	16.7	27.0	25.5	61.1	33.7
Minnesota	32.2	38.1	36.8	78.2	44.4
Corn Belt	42.5	55.5	38.9	42.2	39.2
Ohio	37.6	54.0	37.1	11.8	35.2
Indiana	42.3	58.7	33.2	35.7	33.3
Illinois	55.3	63.4	39.4	74.3	46.0
Iowa	45.0	57.1	37.5	20.7	35.0
Missouri	28.9	43.4	43.5	26.9	42.5
Northern Plains	43.9	45.5	33.1	23.1	32.0
North Dakota	37.3	42.6	42.5	60.0	43.0
South Dakota	37.8	38.0	29.8	15.0	29.4
Nebraska	45.4	45.7	29.7	14.0	27.4
Kansas	53.1	54.7	55.6	81.3	58.8
Appalachian	23.8	33.0	28.4	23.4	27.5
Virginia	23.0	29.2	27.8	39.3	29.5
West Virginia	17.2	21.0	27.5	25.0	27.3
North Carolina	31.6	36.1	28.3	10.4	24.9
Kentucky	18.3	33.2	26.0	10.0	24.1
Tennessee	24.8	34.6	33.9	32.5	33.5
Southeast	29.3	32.2	22.0	7.5	17.5
South Carolina	30.0	29.9	25.4	17.5	24.3
Georgia	23.1	26.2	16.1	6.0	15.2
Florida	37.8	43.8	22.3	7.2	16.8
Alabama	29.3	30.4	29.1	10.3	26.7
Delta	40.3	47.0	44.9	19.3	39.2
Mississippi	31.8	38.7	42.7	17.4	39.8
Arkansas	42.0	53.3	47.4	35.1	45.8
Louisiana	50.1	49.7	44.5	15.3	32.7
Southern Plains	47.3	51.2	45.3	19.9	38.5
Oklahoma	43.4	45.7	45.6	25.0	45.0
Texas	48.4	52.3	45.3	19.8	38.1
Mountain	42.2	41.4	44.6	42.0	44.2
Montana	36.0	38.4	33.3	36.8	33.5
Idaho	33.7	39.7	40.0	44.8	40.3
Wyoming	41.4	41.7	41.5	26.1	40.4
Colorado	39.0	39.0	38.0	53.6	40.2
New Mexico	49.0	41.0	44.9	39.5	44.0
Arizona	69.7	61.9	68.5	49.5	61.4
Utah	36.2	39.2	30.9	17.5	30.0
Nevada	55.1	37.4	73.7	37.8	67.5
Pacific	48.4	53.1	47.6	26.3	43.3
Washington	48.7	49.8	60.2	72.5	60.6
Oregon	33.3	37.9	30.0	15.1	28.8
California	56.0	60.2	55.1	26.6	46.5
48 States	40.8	45.7	42.2	29.9	40.1

<sup>1</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Source: 1969 Census of Agriculture, State Summary Volumes, Table 24. Calculated assuming all land that is rented by part owners and tenants is operated and not subleased.

### 3. HOW RENTAL-OWNERSHIP RELATIONS CHANGE WITH AGE

Since single proprietorship is the primary organizational form, age of operator is a useful classification in studying tenure characteristics. The dynamics of land-ownership and rental are tied closely to the life cycle of the farm operator. Labor resources, income demand, financial position—these are factors which change over time for the individual manager.

Throughout the country the average farm operator was over 50 years of age. In distributing farm numbers and land in farms into age classes, a skewed distributional pattern towards the older age groups was prevalent in all States (see appendix table A-3). Individuals 45 years of age or older operated 68 percent of class I-V farms (table 12). These farms accounted for 68 percent of all land in class I-V farms and 66 percent of the market value of real estate.

On a per farm basis, the pattern among age groups was somewhat different. Farm operators 35 to 54 years old tended to farm the largest acreage units (table 13).

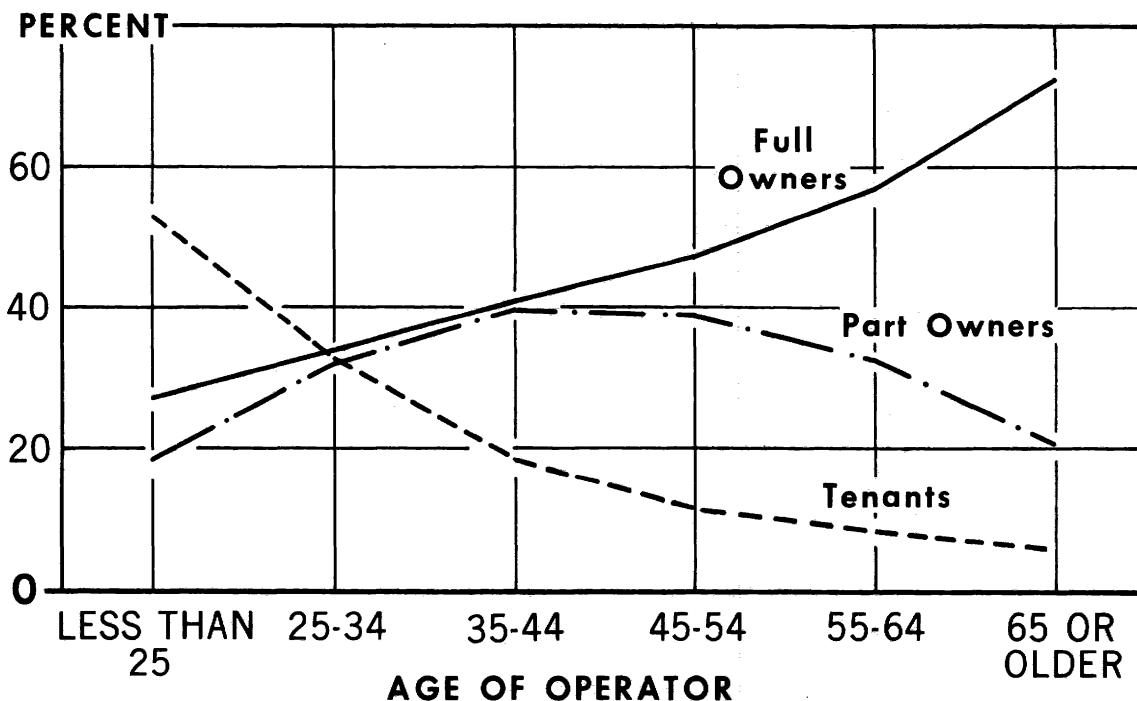
This size distribution is consistent with the labor cycle of most farm operators. Many operators attempt to increase farm size when family labor resources are maximum, and then gradually cut back as the operator prefers to reduce his own labor and as his family leaves the farm. This pattern, although other factors may frequently alter it, is particularly evident in those regions where land-intensive farm enterprises predominate.

#### Tenure Shifts Over the Operator's Lifespan

How, then, does land tenure change over the lifespan of farm operators? To fully answer this question would require monitoring and analysis over time of identified representative farms. However, some insight can be gained by observing tenure characteristics of the various age categories, bearing in mind that historical forces distort interclass comparisons.

The general pattern was one of a high proportion of full tenants in the youngest age class with a shift to a high proportion of full owners in the oldest age class of farm operators (figure 1 and table 14). The proportion

## DISTRIBUTION OF OPERATORS AMONG TENURE GROUPS BY AGE OF OPERATOR, 48 STATES



SOURCE: 1969 CENSUS OF AGRICULTURE

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Figure 1

Table 12. Percent distributions of farm numbers, land in farms, and total market value of land and buildings by age of operator, farms in economic classes I-V, by farm production regions, 1969<sup>1</sup>

Region	Farm numbers when operator's age is—						Land in farms when operator's age is—						Total market value of land and buildings when operator's age is—					
	Less than 25 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years or more	Less than 25 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years or more	Less than 25 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years or more
	-----Percent-----																	
Northeast	2.0	10.1	21.5	28.8	24.2	13.4	1.8	9.9	22.8	30.5	23.3	11.7	1.7	9.9	23.4	30.1	23.2	11.6
Lake States	2.1	11.6	22.2	29.3	24.7	10.1	1.8	12.1	24.6	30.9	22.7	7.9	1.9	12.7	25.6	30.8	21.8	7.3
Corn Belt	2.3	12.0	20.7	28.0	25.2	12.0	1.8	12.1	23.1	30.4	23.5	9.1	1.8	12.7	24.1	30.9	22.6	7.9
Northern Plains	2.2	11.4	20.9	27.5	26.1	11.9	1.3	10.3	23.5	29.9	24.8	10.3	1.4	11.1	24.0	30.0	24.4	9.0
Appalachian	1.5	9.0	19.0	28.2	27.7	14.7	1.1	8.3	19.5	29.1	27.2	14.9	1.2	9.3	20.7	29.8	25.8	13.3
Southeast	1.4	8.8	19.0	28.5	28.2	14.2	1.2	7.7	19.5	29.7	26.7	15.2	1.0	8.1	21.3	29.7	26.4	13.5
Delta	1.4	10.0	19.3	28.2	28.9	12.2	1.0	10.3	21.1	29.6	26.7	11.3	1.1	11.5	22.5	30.3	25.5	9.2
Southern Plains	1.6	8.7	17.6	26.0	29.0	17.1	0.9	8.0	18.3	29.5	25.6	17.6	1.2	9.1	20.2	29.0	26.1	14.4
Mountain	1.4	9.8	20.7	29.3	26.1	12.6	0.6	7.7	21.8	31.6	24.0	14.2	1.0	8.6	22.1	32.9	23.5	11.9
Pacific	1.0	7.8	18.9	30.1	27.2	15.1	0.7	7.8	19.1	31.8	25.1	15.4	0.7	7.6	19.3	33.3	25.4	13.8
48 States	1.9	10.4	20.2	28.2	26.4	13.0	1.1	9.2	21.5	30.4	24.7	13.1	1.4	10.4	22.4	30.8	24.2	10.8

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

Source: 1969 Census of Agriculture, State Summary Volumes, table 25.

of part owners reached a maximum in those age brackets where farm size was maximum, which supports an earlier statement that part ownership is a companion trend of farm size expansion and consolidation.

The alteration of tenure characteristics over the lifespan of the operator partially reflects the tenure ladder concept whereby a young operator begins farming

by leasing land, and over time builds up enough equity and credit to purchase an increasing share of his land. Then, too, the acquisition of ownership through inheritance, gift, or purchase from a relative (the process of intergenerational transfer) also contributes to a declining dependence on land rental in the later years. A third possible element contributing to this pattern is the

Table 13. Average acreage and average market value of land and buildings by age of operator, farms in economic classes I-V, by farm production regions, 1969

Region	Average farm size when operator's age is—						Average value of land and buildings per farm when operator's age is—					
	Less than 25 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years or more	Less than 25 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years or more
	----- Acres -----						----- \$1,000 -----					
Northeast	184	206	223	223	202	184	70.2	81.1	89.6	86.2	78.6	70.8
Lake States	211	256	271	258	224	191	54.6	66.2	69.8	64.1	53.5	43.9
Corn Belt	204	267	295	287	246	200	81.6	107.1	117.3	111.2	90.3	66.2
Northern Plains	458	729	903	871	764	695	65.4	99.3	116.1	110.5	94.6	77.2
Appalachian	139	180	202	202	192	199	43.5	56.3	59.3	57.4	50.6	49.2
Southeast	326	341	395	403	365	414	70.0	93.2	113.3	105.1	94.6	96.4
Delta	282	416	445	426	375	377	81.4	126.2	128.8	118.2	97.2	83.6
Southern Plains	521	857	981	1,066	832	968	100.1	142.5	157.3	152.0	123.2	115.3
Mountain	1,039	1,795	2,426	2,483	2,118	2,610	119.5	145.9	177.2	186.5	149.5	157.4
Pacific	505	705	711	741	646	715	152.9	221.5	232.3	251.7	211.8	208.1
48 States	312	468	562	570	495	530	75.6	103.2	115.0	112.8	94.9	86.0

Source: 1969 Census of Agriculture, State Summary Volumes, table 25.

Table 14. Tenure characteristics by age of operator, farms in economic classes I-V, by farm production region, 1969<sup>1</sup>

Region	Age of operator								
	Less than 25 years			25-34 years			35-44 years		
	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants
	----- Percent -----								
Northeast	34.1	26.7	39.3	43.9	32.8	23.4	51.5	37.4	11.1
Lake States	33.3	23.3	43.4	42.8	33.1	24.1	51.9	37.0	11.1
Corn Belt	25.2	14.1	60.7	32.5	28.9	38.6	38.5	37.5	23.9
Northern Plains	18.1	18.6	63.3	19.5	38.8	41.7	21.5	55.6	23.0
Appalachian	35.8	20.0	44.1	40.6	30.8	28.6	48.4	34.9	16.7
Southeast	36.1	24.1	39.8	42.6	33.6	23.8	51.6	35.6	12.8
Delta	27.4	25.0	47.6	31.7	36.0	32.3	42.4	40.1	17.4
Southern Plains	22.3	17.8	60.0	25.2	35.8	38.9	33.2	44.7	22.1
Mountain	32.3	19.0	48.7	33.3	36.3	30.4	37.9	46.8	15.4
Pacific	35.5	16.3	48.2	43.1	28.8	28.1	52.5	32.2	15.3
48 States	27.8	18.9	53.3	34.0	32.7	33.2	41.3	40.3	18.4

See footnote at end of table.

Continued

Table 14. Tenure characteristics by age of operator, farms in economic classes I-V, by farm production region, 1969<sup>1</sup>—Continued

Region	Age of operator								
	45-54 years			55-64 years			65 years or more		
	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants
	----- Percent -----								
Northeast	58.1	35.6	6.2	66.9	29.4	3.7	77.1	20.1	2.8
Lake States	60.1	33.4	6.5	70.8	25.0	4.1	83.9	13.5	2.6
Corn Belt	45.0	37.4	17.7	58.0	30.1	12.0	76.5	16.2	7.3
Northern Plains	29.1	56.0	14.9	42.2	47.8	10.0	59.9	32.4	7.7
Appalachian	54.3	32.8	12.9	63.8	26.0	10.2	79.1	14.2	6.8
Southeast	56.5	34.2	9.3	62.0	30.0	8.0	77.9	16.9	5.2
Delta	48.6	38.6	12.9	55.7	33.7	10.6	70.3	22.9	6.8
Southern Plains	38.7	45.9	15.4	46.4	40.9	12.7	62.1	29.6	8.3
Mountain	42.5	48.0	9.5	49.9	42.9	7.2	59.0	36.0	5.0
Pacific	57.9	31.3	10.8	65.6	26.5	7.9	76.0	18.9	5.1
48 States	47.9	39.3	12.8	57.7	32.9	9.4	72.7	21.0	6.2

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

Source: 1969 Census of Agriculture, State Summary Volumes, table 25.

contraction phase in the life of a single-generation operation. During this phase the operator of a land-based farming unit will tend first to reduce his rented acreage and later to sell or rent out land that he owns (thereby reducing labor requirements relatively more than the average level of his farm income).

In comparing age categories with percentage of land in farms rented, significant differences were found (table 15). Due not only to a decrease in acres rented but also to an increase in acres owned, the proportion of the operated land base that was rented dropped steadily from the youngest to the oldest age class (figure 2). Rented land was the major portion of land in farms for the youngest age group in all but two regions, being as high as 74 percent in the Corn Belt. For operators 65 years old or older, the rented portion accounted for a fifth or less of operated acreage throughout the Eastern half of the country and a third or less throughout most Western States.

#### Degree of Concentration Across Age Groups

Measures of concentration of land owned and land rented take on an interesting pattern. The distribution of the land base that was owned by operators was skewed somewhat toward the older age groups, while the rented portion takes a slightly skewed distribution toward the

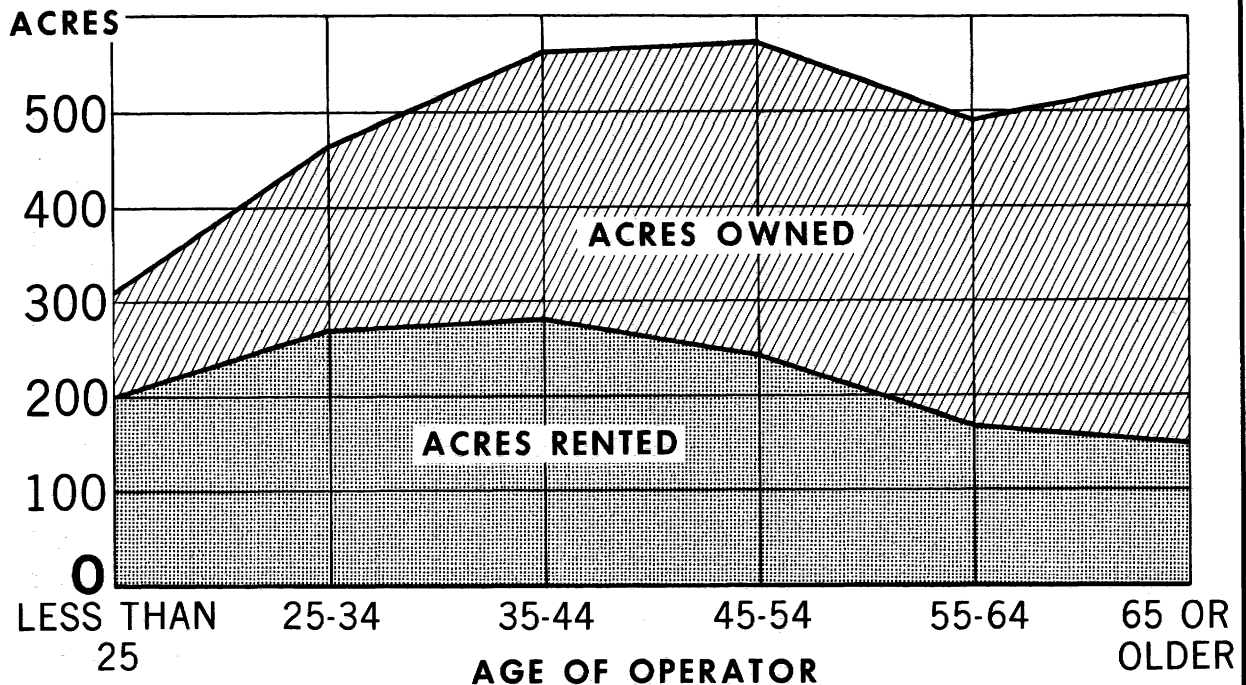
younger age classes (figure 3). The net effect was for the total farmland base to be distributed across age groups in nearly equal proportions to farm numbers. In other words, there was virtually no concentration of land holdings by age of operator.<sup>13</sup>

#### 4. THE LARGER THE FARM, THE GREATER PROPORTION OF RENTAL LAND

A wide range of farm sizes exists due to (1) variation in quality of the land resource and (2) differing land resource demands among farming enterprises. So, even within relatively small geographic areas, farms of virtually all sizes exist (appendix table A-4). However, the predominant size of farm in 1969 varied widely among regions (table 16). At the extremes were the Mountain and Pacific regions where 92 percent and 80 percent, respectively, of the total land bases were in farms of 1,000 acres or more. In contrast, about 75 percent of the land base in the Northeast and Lake States was in farms of less than 500 acres.

<sup>13</sup>One form of measurement of concentration is the Gini ratio. The range of this ratio is zero (perfect equality) to one (perfect inequality). Gini coefficient estimates of regional distributions of land in farms across age classes were consistently less than 0.06, or near perfect equality.

# AVERAGE ACREAGE OF OWNED AND RENTED LAND IN FARMS BY AGE OF OPERATOR, 48 STATES



SOURCE: 1969 CENSUS OF AGRICULTURE

U. S. DEPARTMENT OF AGRICULTURE

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Figure 2

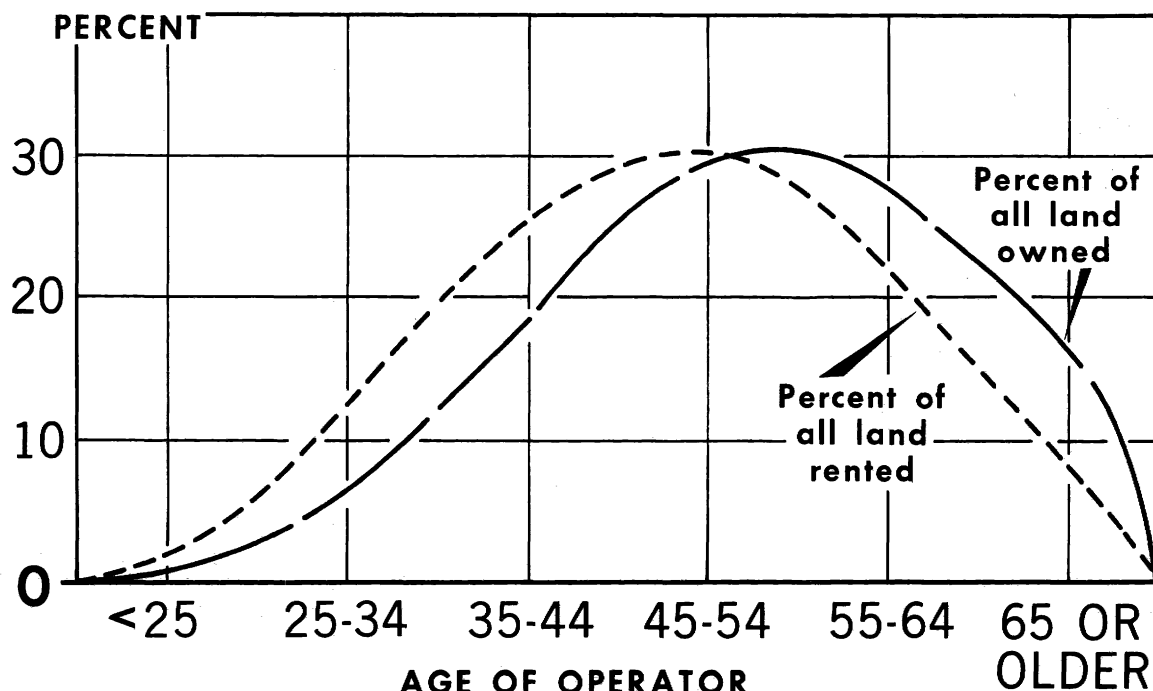
The distribution of market value of farm real estate across farm size groups was considerably less concentrated than acreage. Throughout all regions values per acre tended to fall with size of farming operation (tables 16 and 17). This pattern was most evident in the Western regions.

Values of real estate assets per farm are presented in table 18. Here, too, the variability both among and within regions is clear. Note, however, that total asset value per farm may not vary so greatly over farm acreage sizes. Even though real estate averaged about 75 percent of total asset value, the composition of production resources, including livestock and machinery as well as real estate, can vary considerably by type and size of farm.

Earlier it was proposed that land tenure patterns and

acreage per farm are closely related. That is, factors such as capital limitations and the availability of farmland to buy or rent can become more critical as farm size increases. One measure that supports this statement is the variation across size classes of the proportion of operators who rent either some or all of their land. In the aggregate, less than a third of the operators who farmed units of less than 100 acres reported renting some land, while over 75 percent of all operators of the largest units (2,000 acres or more) reported renting some or all of their land (appendix table A-5). In contrast, the proportion of operators who reported owning farmland did not vary significantly across size classes (appendix table A-6). Approximately 85 to 90 percent of the operators in all size groups owned or were buying at least some of the land they were operating. Tenure

# DISTRIBUTION OF ALL LAND OWNED AND RENTED BY AGE OF OPERATOR, 48 STATES



SOURCE: 1969 CENSUS OF AGRICULTURE

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 343-73 (10)

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Figure 3

patterns therefore shifted from dominance of full owners in the smaller size categories to dominance of part owners in the larger operations (figure 4).<sup>14</sup>

<sup>14</sup>The percentages in appendix tables A-5 and A-6 allow computation of the proportion of full owners, part owners, and tenants. For example, 90 percent of all operators of units 2,000 acres or more in size reported owning some land. Assuming at least some of the land is operated and not leased out, then this implies that 10 percent of the operators are full tenants (1.00-0.90). This proportion of full tenants can then be subtracted from the percentage of operators reporting renting some land to derive the proportion of part owners. In this example, the percentage of part owners would be 0.78-0.10, or 68 percent. Finally, the part-owner percentage can be subtracted from the total percentage of operators owning land to get the full-owner percentage, which is 22 percent (0.90-0.68). Because of the small percentage of full tenants who own some land which is in turn leased out, computation of tenure breakdowns in this manner will have a slight upward bias on percentage of part owners and a corresponding downward bias on percentage of full tenants. The difference, however, is considered insignificant.

Proportions of land rented are the clearest evidence of the relationship of land tenancy to size of farm (table 19). In all regions, the percentage of land rented increased steadily from the smallest farm units through the 500-to-999-acre class. Beyond this size, the proportion dropped off somewhat in a number of areas, particularly in those regions where such operations represented capital investments of \$1 million or more. But, in general, it appears that large-scale operations are not synonymous with large holdings of land under the ownership of a single individual or business entity. Rather these units tend to rely heavily on rental, and therefore constitute landownership holdings of at least two or more individuals.

## Degree of Concentration Across Size Classes

Estimated coefficients of concentration (Gini ratios) show that rented farmland was more concentrated in



Table 15. Percent of land in farms rented by age of operator, economic classes I-V, 48 States, 1969

Region and State	Percent of land in farms rented when operator's age is—					
	Less than 25	25-34	35-44	45-54	55-64	65 or more
	----- Percent -----					
Northeast	45.2	37.8	28.0	22.5	17.4	12.3
New England						
States <sup>1</sup>	39.3	28.3	17.9	16.0	13.2	8.9
New York	38.7	30.2	23.3	18.9	15.4	10.9
New Jersey	76.9	62.2	46.8	36.8	28.6	27.0
Pennsylvania	48.0	39.8	28.7	23.2	16.5	11.3
Delaware	45.5	56.4	54.5	36.1	28.8	27.1
Maryland	63.9	62.8	48.4	36.5	27.2	16.9
Lake States	57.1	46.7	33.0	25.3	18.3	11.8
Michigan	54.9	45.3	32.0	24.6	20.9	11.7
Wisconsin	48.8	35.2	22.2	16.2	11.0	7.0
Minnesota	64.6	53.6	39.7	31.1	21.5	15.1
Corn Belt	74.2	64.7	54.3	44.9	33.3	18.7
Ohio	71.2	59.6	50.2	40.4	30.4	17.5
Indiana	76.4	63.4	53.0	45.5	34.9	20.3
Illinois	80.6	73.6	66.4	57.5	45.6	29.0
Iowa	78.7	68.5	56.1	45.2	32.0	17.8
Missouri	61.3	52.2	40.2	32.1	23.7	12.2
Northern Plains	71.7	63.9	53.1	43.6	33.2	24.8
North Dakota	66.8	61.5	46.1	35.3	27.3	18.7
South Dakota	68.7	57.5	45.6	36.1	27.6	21.7
Nebraska	71.7	65.1	56.3	45.1	31.4	21.6
Kansas	79.3	70.9	63.8	55.9	43.8	33.2
Appalachian	46.5	44.0	34.5	27.0	19.9	10.0
Virginia	42.9	42.1	33.4	26.9	19.1	11.4
West Virginia	30.0	34.5	25.8	18.8	14.5	9.4
North Carolina	53.6	53.1	42.5	33.6	24.2	11.9
Kentucky	46.5	39.1	29.0	21.7	16.2	7.3
Tennessee	46.2	45.2	35.5	28.0	22.1	10.1
Southeast	59.1	45.6	36.2	28.6	22.9	15.0
South Carolina	36.8	45.1	39.2	31.9	23.4	12.1
Georgia	47.7	41.8	32.9	22.8	17.7	9.1
Florida	74.4	49.8	38.7	30.4	25.9	21.0
Alabama	51.5	45.5	35.3	31.9	26.0	14.0
Delta States	63.8	61.2	51.0	41.0	34.5	20.7
Mississippi	49.5	50.9	42.5	34.6	28.2	17.0
Arkansas	66.9	64.8	53.0	43.1	36.0	21.1
Louisiana	75.0	67.2	59.5	46.9	41.8	26.2
Southern Plains	72.2	64.2	58.4	47.7	43.7	31.4
Oklahoma	72.6	62.1	53.8	45.3	37.4	25.9
Texas	72.0	64.7	59.7	48.3	45.4	32.5
Mountain	48.1	52.5	49.1	42.7	38.6	32.5
Montana	47.9	48.5	43.1	36.7	29.8	23.2
Idaho	72.5	51.5	39.8	35.0	31.0	31.1
Wyoming	21.9	52.8	48.6	43.5	36.3	29.8
Colorado	46.5	50.3	47.6	40.3	34.3	25.7
New Mexico	57.9	54.6	50.2	48.0	47.8	35.0
Arizona	34.8	71.4	64.1	68.4	62.6	64.9
Utah	20.7	58.8	34.6	34.5	34.1	27.7
Nevada	42.9	36.8	75.7	44.2	57.4	37.9
Pacific	68.0	60.2	56.5	50.0	43.2	38.4
Washington	69.6	69.2	55.5	52.7	41.9	31.8
Oregon	50.6	42.4	40.9	34.2	28.3	24.7
California	72.2	66.4	65.0	57.0	50.5	45.4
48 States	64.6	58.1	49.8	41.7	34.8	26.8

<sup>1</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Source: 1969 Census of Agriculture, State Summary Volumes, table 25. Calculated assuming all land that is rented by part owners and tenants is operated and not subleased.

Table 16. Percent distribution of land in farms by acreage size class, farms in economic classes I-V, by farm production region, 1969<sup>1</sup>

Region	Size of farm											
	1-9 acres	10-49 acres	50-69 acres	70-99 acres	100- 139 acres	140- 179 acres	180- 219 acres	220- 259 acres	260- 499 acres	500- 999 acres	1,000- 1,999 acres	2,000 acres or more
	----- <i>Percent</i> -----											
Northeast	0.1	1.3	1.5	3.6	7.9	9.1	9.3	8.7	32.6	17.4	5.7	2.8
Lake States	0.1	0.5	0.6	3.1	6.2	11.1	9.1	9.8	34.4	17.2	5.5	2.6
Corn Belt	(2)	0.5	0.6	2.8	5.0	8.3	7.3	8.5	36.4	22.8	5.9	1.9
Northern Plains	(2)	(2)	(2)	0.2	0.3	1.5	0.8	1.6	12.9	23.3	25.2	33.9
Appalachian	0.1	2.2	2.6	5.4	8.8	8.5	7.8	6.7	24.5	18.3	9.1	6.0
Southeast	(2)	1.1	1.0	2.1	3.3	3.4	3.5	3.2	14.9	17.4	14.7	35.4
Delta	(2)	0.6	0.7	2.0	3.1	3.8	3.7	3.7	17.6	22.0	19.8	23.1
Southern Plains	(2)	0.1	0.1	0.4	0.7	1.5	1.2	1.4	9.7	15.4	14.7	54.7
Mountain	(2)	0.1	0.1	0.2	0.3	0.5	0.3	0.4	2.2	4.4	8.8	82.9
Pacific	(2)	1.1	0.6	0.9	1.1	1.2	1.0	0.9	4.9	7.8	11.4	69.0
48 States	(2)	0.4	0.4	1.2	2.2	3.3	2.8	3.1	14.9	15.4	13.1	42.9

<sup>1</sup>Percentages may not add to 100.0 due to rounding.<sup>2</sup>Less than 0.1 percent

Source: 1969 Census of Agriculture, State Summary Volumes, table 26.

Table 17. Percent distribution of total market value of farmland and buildings by acreage size class, farms in economic classes I-V, by farm production region, 1969<sup>1</sup>

Region	Size of farm											
	1-9 acres	10-49 acres	50-69 acres	70-99 acres	100- 139 acres	140- 179 acres	180- 219 acres	220- 259 acres	260- 499 acres	500- 999 acres	1,000- 1,999 acres	2,000 acres or more
	----- <i>Percent</i> -----											
Northeast	1.9	5.3	3.3	6.2	10.0	9.7	9.1	7.3	26.1	13.8	5.0	2.5
Lake States	0.4	1.5	1.1	4.4	7.5	11.8	9.4	9.7	32.6	15.2	4.5	1.9
Corn Belt	0.3	1.1	0.8	3.2	5.0	8.6	7.2	8.5	36.6	21.9	5.2	1.5
Northern Plains	0.2	0.2	0.1	0.6	0.7	2.9	1.6	3.0	20.1	27.5	22.8	20.2
Appalachian	1.2	5.3	4.0	7.1	9.6	8.3	7.4	6.1	21.9	16.3	8.0	4.6
Southeast	0.8	4.3	2.1	3.3	4.4	4.0	3.7	3.3	14.9	16.1	13.9	29.1
Delta	0.3	1.6	1.1	2.7	3.7	3.9	3.6	3.6	16.7	21.2	19.9	21.8
Southern Plains	0.2	0.7	0.4	1.0	1.7	3.0	2.2	2.5	15.9	22.8	18.8	30.7
Mountain	0.5	1.5	0.8	1.7	1.9	2.8	1.8	1.9	8.6	10.9	14.0	53.5
Pacific	1.5	9.3	3.3	4.3	4.2	3.9	2.9	2.6	10.7	12.4	11.8	33.0
48 states	0.6	2.7	1.4	3.1	4.3	5.9	4.8	5.1	22.4	19.0	12.0	18.6

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

Source: 1969 Census of Agriculture, State Summary Volumes table 25.

Table 18. Market value of farmland and buildings per farm by acreage size class, farms in economic classes I-V, by farm production Region, 1969

Region	Size of farm											
	1-9 acres	10-49 acres	50-69 acres	70-99 acres	100- 139 acres	140- 179 acres	180- 219 acres	220- 259 acres	260- 499 acres	500- 999 acres	1,000- 1,999 acres	2,000 acres or more
	----- \$1,000 -----											
Northeast	30.5	44.8	48.7	56.3	57.3	65.4	75.4	77.8	108.2	197.9	439.0	1,152.8
Lake States	18.1	26.1	28.5	28.6	34.9	42.0	50.4	58.3	81.7	142.6	263.2	591.2
Corn Belt	16.1	26.8	29.3	36.3	45.3	62.1	74.7	91.1	135.3	237.9	425.8	939.9
Northern Plains	11.6	19.0	21.5	25.7	32.2	38.4	49.8	56.0	73.6	106.1	155.3	311.8
Appalachian	13.6	20.5	25.1	30.9	35.1	42.6	52.0	60.4	86.2	162.8	321.0	719.9
Southeast	18.4	28.4	31.3	35.1	40.4	48.1	55.1	64.5	92.8	165.3	332.9	1,196.4
Delta	16.2	21.5	25.0	30.5	37.6	43.8	52.5	64.0	92.4	180.1	365.4	968.3
Southern Plains	14.6	27.6	30.2	32.7	38.4	46.1	53.3	61.3	87.1	150.8	252.4	619.5
Mountain	22.3	40.4	51.2	52.4	63.2	71.0	84.4	89.4	104.9	130.3	166.1	407.5
Pacific	42.8	73.1	110.7	123.8	145.7	160.2	187.7	214.6	256.7	363.2	463.1	1,126.3
48 States	21.3	36.9	38.2	39.9	45.5	54.6	65.5	75.9	105.8	166.1	243.6	571.6

Source: 1969 Census of Agriculture, State Summary Volumes, table 26.

Table 19. Percent of farmland rented by acreage size class, farms in economic classes I-V, by farm production region, 1969

Region	Size of farm								
	Less than 100 acres <sup>1</sup>	100- 139 acres	140- 179 acres	180- 219 acres	220- 259 acres	260- 499 acres	500- 999 acres	1,000- 1,999 acres	2,000 acres or more
	----- Percent -----								
Northeast	18.2	18.2	19.6	21.6	22.3	24.1	27.0	29.4	25.2
Lake States	11.9	15.2	16.8	19.5	23.8	30.4	37.4	40.3	45.6
Corn Belt	19.4	22.8	31.0	35.2	41.8	50.4	54.2	48.5	36.9
Northern Plains	31.0	34.4	33.6	39.9	41.3	45.5	46.2	46.1	40.5
Appalachian	23.9	19.8	20.5	21.9	23.9	26.3	29.8	32.3	24.8
Southeast	23.4	23.7	22.7	24.6	25.6	26.9	28.7	29.6	29.8
Delta	26.6	27.2	28.1	31.4	33.4	40.0	47.2	48.7	39.5
Southern Plains	30.4	29.5	31.9	34.3	39.1	42.7	48.8	49.6	48.3
Mountain	10.0	28.9	30.9	34.9	33.4	34.0	35.5	37.0	43.4
Pacific	19.1	26.3	27.7	32.1	31.8	38.4	45.3	49.2	52.0
48 States	20.8	22.2	25.9	28.8	33.6	40.5	44.7	44.3	44.3

<sup>1</sup>Lower size classes were grouped together due to (1) the small percentage of land represented by these farms (2 percent in the aggregate) and (2) the ambiguity of land leasing among these size classes; i.e., many small units are leasing land and, in turn, subleasing.

Source: 1969 Census of Agriculture, State Summary Volumes, Table 26. Calculated assuming all land that is rented by part owners and tenants is operated and not subleased.

larger farms than the farmland owned by operators. In the aggregate, the Gini ratio for rented land was 0.72 compared with 0.60 for land owned (table 20). When

plotted, the accumulated percentage distributions indicate that approximately 70 percent of all land in farms was in the largest 20 percent of farms (figure 5). More

Table 20. Coefficients of concentration of land in farms, economic classes I-V, 48 States, 1969<sup>1</sup>

State and Region	All land owned <sup>2</sup>	All land rented <sup>3</sup>	All land in farms	Total real estate value in farms
Northeast	.42	.51	.43	.28
New England States <sup>4</sup>	.44	.49	.45	.23
New York	.36	.48	.39	.21
New Jersey	.50	.66	.57	.45
Pennsylvania	.36	.48	.41	.25
Delaware	.51	.66	.59	.52
Maryland	.43	.61	.51	.44
Lake States	.30	.54	.38	.30
Michigan	.32	.53	.40	.31
Wisconsin	.29	.49	.35	.27
Minnesota	.29	.51	.38	.30
Corn Belt	.28	.50	.39	.36
Ohio	.27	.55	.41	.36
Indiana	.26	.57	.42	.41
Illinois	.24	.46	.37	.37
Iowa	.23	.43	.34	.32
Missouri	.34	.55	.42	.39
Northern Plains	.48	.50	.50	.33
North Dakota	.32	.39	.36	.29
South Dakota	.55	.51	.54	.34
Nebraska	.56	.54	.55	.32
Kansas	.39	.53	.48	.39
Appalachian	.49	.56	.52	.41
Virginia	.49	.55	.52	.45
West Virginia	.43	.55	.46	.31
North Carolina	.57	.55	.57	.41
Kentucky	.40	.58	.47	.39
Tennessee	.43	.61	.49	.40
Southeast	.66	.70	.68	.56
South Carolina	.62	.60	.62	.49
Georgia	.60	.58	.59	.48
Florida	.77	.86	.81	.65
Alabama	.60	.64	.62	.48
Delta States	.54	.63	.58	.54
Mississippi	.54	.66	.58	.57
Arkansas	.50	.62	.55	.52
Louisiana	.60	.63	.62	.55
Southern Plains	.61	.69	.66	.47
Oklahoma	.46	.56	.52	.41
Texas	.65	.71	.69	.48
Mountain	.65	.70	.68	.41
Montana	.49	.51	.50	.36
Idaho	.65	.73	.70	.44
Wyoming	.55	.58	.57	.41
Colorado	.62	.64	.64	.36
New Mexico	.61	.64	.63	.40
Arizona	.73	.79	.77	.52
Utah	.76	.83	.79	.38
Nevada	.74	.75	.75	.51

See footnotes at end of table.

*Continued*

Table 20. Coefficients of concentration of land in farms, economic classes I-V, 48 States, 1969<sup>1</sup>—Continued

State and Region	All land owned <sup>2</sup>	All land rented <sup>3</sup>	All land in farms	Total real estate value in farms
Pacific	.76	.85	.81	.50
Washington	.68	.80	.74	.41
Oregon	.75	.81	.78	.42
California	.78	.88	.85	.57
48 States	.60	.72	.67	.41

<sup>1</sup>Derived from data in the 1969 Census of Agriculture, State Summary Volumes, Table 26. The data is tabulated into a 12-element classification by acreage size of farm. Coefficients of concentration (Gini ratios) are bounded by ratios of 0 (percent equality) and 1 (perfect inequality or monopoly).

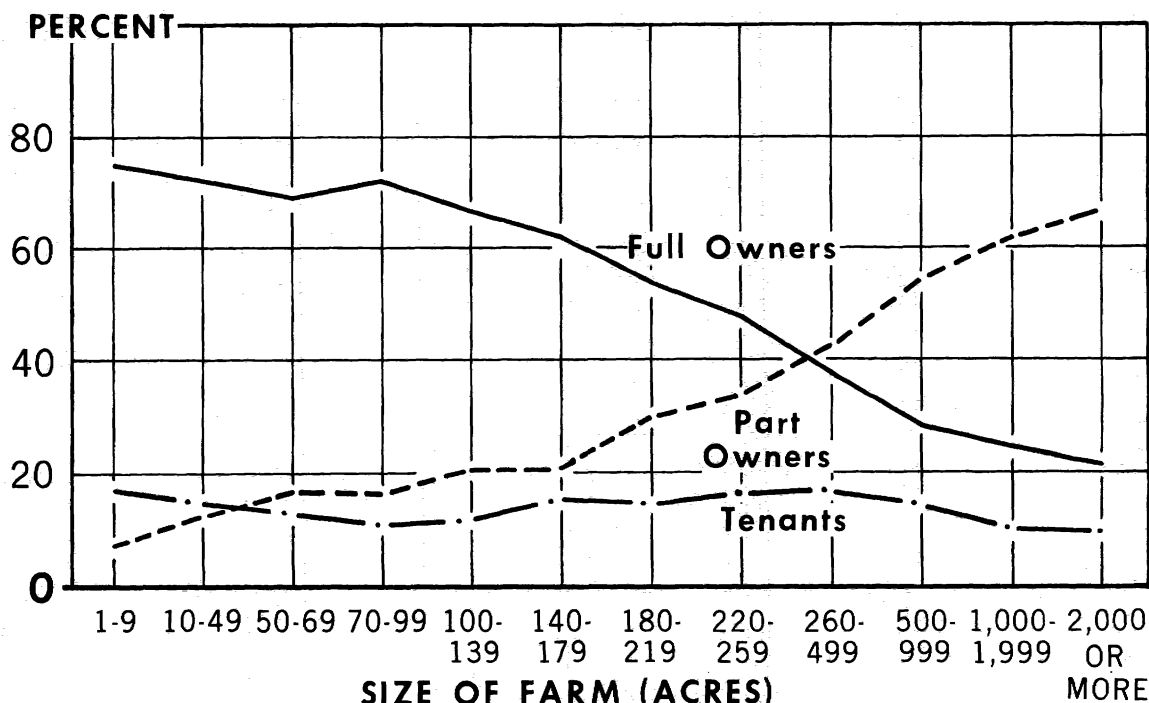
<sup>2</sup>All land owned by farm operators. This is the sum of land in full-owner farms, the owned portion of part-owner farms, and a small amount of land owned and rented out by full tenants.

<sup>3</sup>All land rented by farm operators is the sum of land in full-tenant farms and the rented portion of part-owner operations.

<sup>4</sup>New England States include: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

## TENURE CHARACTERISTICS BY SIZE OF FARM

### 48 STATES



SOURCE: 1969 CENSUS OF AGRICULTURE

U. S. DEPARTMENT OF AGRICULTURE

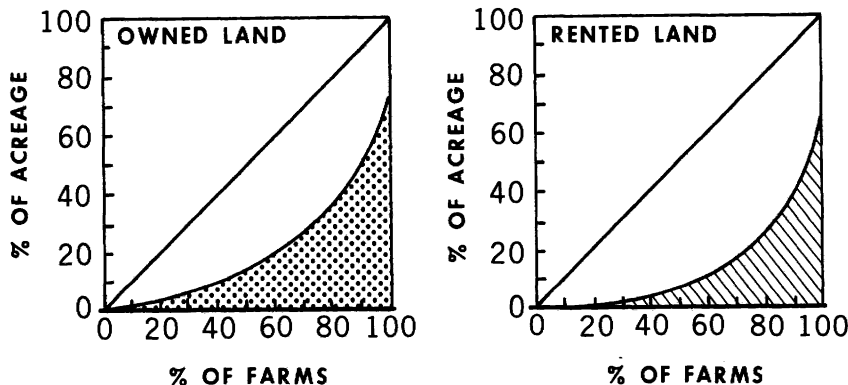
NEG. ERS 344-73 (10)

ECONOMIC RESEARCH SERVICE

Figure 4

# CONCENTRATION OF FARMLAND OWNERSHIP AND RENTAL

BY FARM OPERATORS,  
48 STATES, 1969



BASED ON 1969 CENSUS OF AGRICULTURE

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 345-73 (10)

ECONOMIC RESEARCH SERVICE

Figure 5

specifically, about 75 percent of the rented land and 66 percent of the land owned by operators was in the largest 20 percent of farms. In contrast, the smallest 50 percent of farms accounted for less than 8 percent of the rented land and less than 15 percent of the owned acreage.

State and regional estimates of concentration generally revealed a similar pattern of relatively greater concentration of rented land than owned land. However, the *levels* of concentration varied considerably. Lowest concentrations of both land owned and land rented were in the Lake States and Corn Belt regions. Highest concentration levels were mostly in the Mountain and Pacific regions. On a State basis, California and Florida had the highest degree of concentration of farmland acreage. For all land in farms, the Gini ratios in these States were 0.85 and 0.81, respectively. In another perspective, the largest 20 percent of the farms in these States accounted for about 9 out of every 10 acres of farmland.

## 5. FULL OWNERS OPERATE LESS THAN A THIRD OF FARMS GROSSING THE MOST MONEY, OVER TWO-THIRDS OF FARMS EARNING THE LEAST

Volume of annual gross receipts from farm marketings is a common measure of farm size. When this classification is used, size variables can be analyzed in relation to a measure of income potential.<sup>15</sup> The Census of Agriculture uses this system with the five economic classes previously described.

<sup>15</sup>The ratio of realized net income to gross receipts varies greatly among types of farming enterprises as well as across size classifications. For example, the ratios for class I-V farms based on aggregate estimates for 1970 in the Farm Income Situation, FIS-218, July 1971, were as follows: Class I, 21 percent; class II, 33 percent; class III, 39 percent; class IV, 42 percent; and class V, 48 percent. Thus, gross receipts can be considered only a crude measure at best.

The distribution of farmland among class I-V farms varied widely both among and within regions (table 21). Less than a third of farmland was concentrated in class I farms throughout the East, Midwest, and Northern Plains, while such farms accounted for over half of all farmland in most Western States. Part of this variation can be explained by the difference in average farm size (table 22). Class I farms were typically two to three times as large as class II farms throughout the West, while the size difference was much more moderate elsewhere.

Since average farm size and real estate value increased with volume of cash receipts of farm marketings, tenancy patterns followed those found in the acreage size classifications. In the aggregate, nearly 7 out of 10 class V farms were operated by full owners while less than a third of class I farms were operated by full owners (figure 6 and table 23).

It is evident from the above that rental is an important means of attaining the land resource base for large units. The predominance of part ownership among

class I farms suggests the tendency for operators to own a headquarters or base unit and then expand by leasing additional land. This gives the operator some of the added security of full ownership while at the same time providing the advantages of availability and flexibility of leasing.

The proportion of farmland rented also bears out this conclusion. In the aggregate, 46 percent of land in class I farms was rented compared with 28 percent in class V farms (table 24). While there was variation in degree, this general pattern was evident in all but a few States.

#### Degree of Concentration Across Economic Classes

Two-thirds of the total rented land base of farms with sales of \$2,500 or more was operated by class I and II farms, the range being from 49 percent in the Appalachian region to 80 percent in the Pacific region (table 25). The Gini ratio for the aggregate was 0.44 for rented land. The owned portion was less concentrated, with a Gini ratio of 0.33.

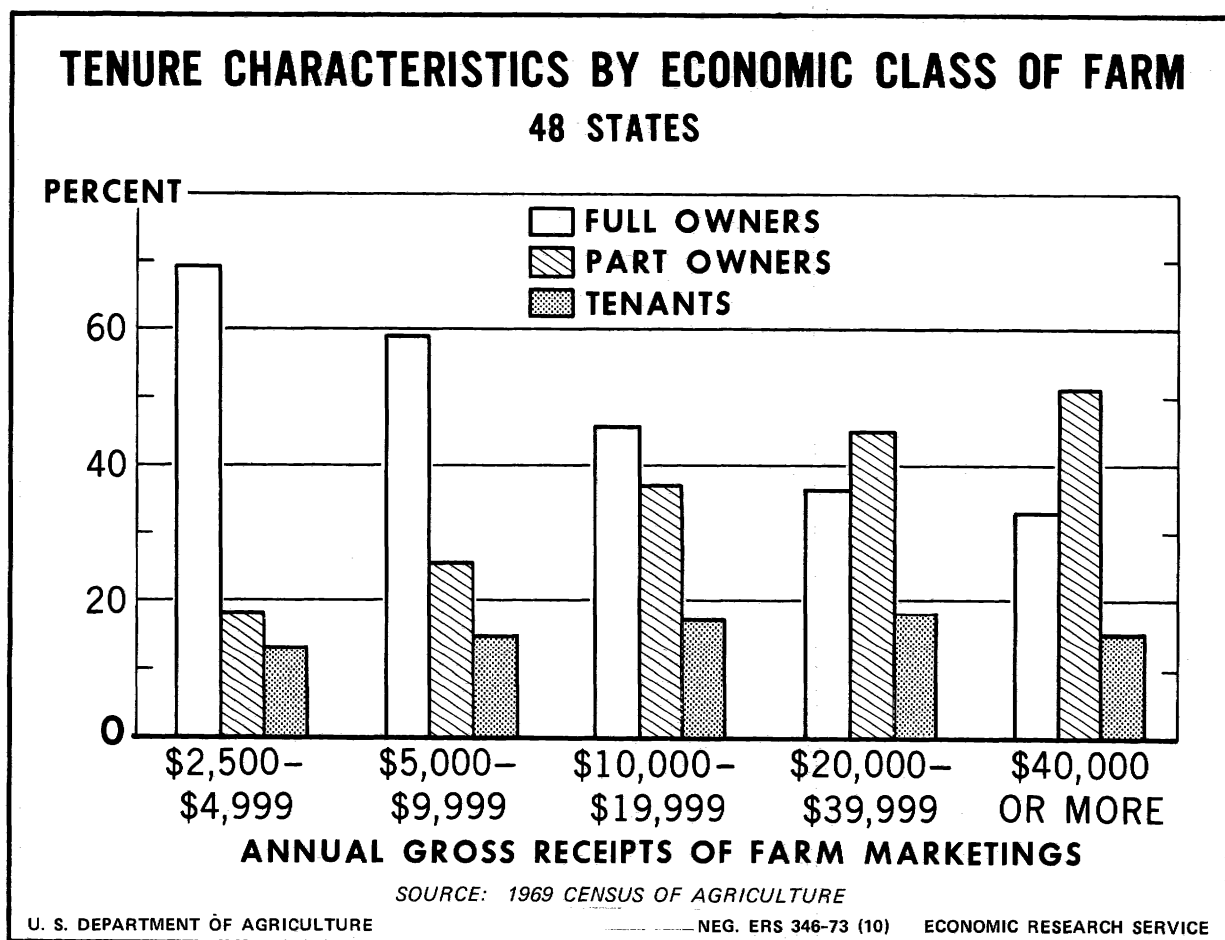


Figure 6

Table 21. Land in farms by economic class and distribution of land among economic classes, 48 States, 1969

Region and State	Land in farms					Percent distribution of land among classes <sup>1</sup>				
	Class I	Class II	Class III	Class IV	Class V	Class I	Class II	Class III	Class IV	Class V
	----- 1,000 acres -----					----- Percent -----				
Northeast	6,862	7,101	4,471	2,668	2,338	29.3	30.3	19.1	11.4	10.0
New England										
States <sup>2</sup>	1,484	1,376	764	416	397	33.4	31.0	17.2	9.4	8.9
New York	2,337	2,878	1,678	808	671	27.9	34.4	20.0	9.7	8.0
New Jersey	413	193	102	82	86	47.1	22.0	11.6	9.4	9.8
Pennsylvania	1,445	1,974	1,466	965	879	21.5	29.3	21.8	14.3	13.1
Delaware	316	110	80	67	49	50.8	17.7	12.9	10.8	7.9
Maryland	867	570	381	330	256	36.1	23.7	15.8	13.7	10.6
Lake States	8,713	14,201	14,260	8,856	5,473	16.9	27.6	27.7	17.2	10.6
Michigan	1,719	2,096	1,968	1,774	1,587	18.8	22.9	21.5	19.4	17.4
Wisconsin	2,393	4,737	4,774	2,588	1,447	15.0	29.7	30.0	16.2	9.1
Minnesota	4,601	7,368	7,518	4,494	2,439	17.4	27.9	28.5	17.0	9.2
Corn Belt	30,836	32,979	25,980	16,573	10,974	26.3	28.1	22.1	14.1	9.4
Ohio	2,642	3,449	3,151	2,542	2,041	19.1	24.9	22.8	18.4	14.8
Indiana	3,989	4,193	3,320	2,304	1,690	25.7	27.1	21.4	14.9	10.9
Illinois	8,981	8,821	6,013	3,033	1,615	31.6	31.0	21.1	10.7	5.7
Iowa	10,316	10,505	7,076	3,203	1,368	31.8	32.4	21.8	9.9	4.2
Missouri	4,908	6,011	6,420	5,491	4,260	18.1	22.2	23.7	20.3	15.7
Northern Plains	50,205	49,532	44,016	20,177	7,984	29.2	28.8	25.6	11.7	4.6
North Dakota	6,085	12,441	14,065	5,932	1,852	15.1	30.8	34.8	14.7	4.6
South Dakota	12,104	12,608	9,647	3,769	1,457	30.6	31.9	24.4	9.5	3.7
Nebraska	17,762	12,115	9,069	4,045	1,668	39.8	27.1	20.3	9.1	3.7
Kansas	14,254	12,368	11,235	6,431	3,007	30.1	26.2	23.8	13.6	6.4
Appalachian	7,683	7,127	8,153	9,444	8,960	18.6	17.2	19.7	22.8	21.7
Virginia	1,884	1,417	1,470	1,649	1,506	23.8	17.9	18.5	20.8	19.0
West Virginia	255	335	413	610	701	11.0	14.5	17.8	26.4	30.3
North Carolina	2,407	1,940	1,912	1,764	1,514	25.2	20.3	20.0	18.5	15.9
Kentucky	1,575	1,832	2,500	2,990	2,636	13.7	15.9	21.7	25.9	22.9
Tennessee	1,562	1,603	1,858	2,431	2,603	15.5	15.9	18.5	24.2	25.9
Southeast	16,760	7,116	5,907	5,399	5,302	41.4	17.6	14.6	13.3	13.1
South Carolina	1,732	996	872	798	810	33.3	19.1	16.7	15.3	15.6
Georgia	4,615	2,557	1,995	1,837	1,641	36.5	20.2	15.8	14.5	13.0
Florida	7,556	1,658	1,296	1,090	1,118	59.4	13.0	10.2	8.6	8.8
Alabama	2,857	1,905	1,744	1,674	1,733	28.8	19.2	17.6	16.9	17.5
Delta States	13,777	5,566	4,596	4,295	4,612	41.9	16.9	14.0	13.1	14.0
Mississippi	4,770	1,879	1,657	1,641	1,873	40.4	15.9	14.1	13.9	15.8
Arkansas	5,240	2,190	1,813	1,772	1,823	40.8	17.1	14.1	13.8	14.2
Louisiana	3,767	1,497	1,126	882	916	46.0	18.3	13.8	10.8	11.2
Southern Plains	68,123	29,569	26,688	20,933	16,788	42.0	18.2	16.5	12.9	10.4
Oklahoma	8,179	6,557	7,131	5,822	4,163	25.7	20.6	22.4	18.3	13.1
Texas	59,944	23,012	19,557	15,111	12,625	46.0	17.7	15.0	11.6	9.7
Mountain	113,676	42,234	29,367	14,163	9,276	54.5	20.2	14.1	6.8	4.4
Montana	27,337	15,835	9,624	3,413	1,525	47.3	27.4	16.7	5.9	2.6
Idaho	6,153	2,871	2,085	1,017	546	48.6	22.7	16.5	8.0	4.3
Wyoming	19,945	5,453	3,312	1,494	682	64.6	17.7	10.7	4.8	2.2
Colorado	15,188	7,288	5,940	3,269	2,094	45.0	21.6	17.6	9.7	6.2
New Mexico	22,723	6,145	4,370	2,585	1,971	60.1	16.3	11.6	6.8	5.2
Arizona	11,435	2,108	1,537	1,134	932	66.7	12.3	9.0	6.6	5.4
Utah	4,986	1,690	1,370	860	604	52.4	17.8	14.4	9.0	6.4
Nevada	5,909	844	1,129	391	922	64.3	9.2	12.3	4.3	10.0

See footnotes at end of table.

Continued



Table 21. Land in farms by economic class and distribution of land among economic classes, 48 States, 1969—Continued

Region and State	Land in farms					Percent distribution of land among classes <sup>1</sup>				
	Class I	Class II	Class III	Class IV	Class V	Class I	Class II	Class III	Class IV	Class V
	-----1,000 acres-----					-----Percent-----				
Pacific	38,316	11,554	7,594	4,159	3,434	58.9	17.8	11.7	6.4	5.3
Washington	6,751	3,599	2,349	1,134	735	46.3	24.7	16.1	7.8	5.0
Oregon	8,933	3,413	2,179	1,117	792	54.4	20.8	13.3	6.8	4.8
California	22,632	4,542	3,066	1,908	1,907	66.5	13.3	9.0	5.6	5.6
48 States	354,951	206,979	171,032	106,667	75,141	38.8	22.6	18.7	11.7	8.2

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

<sup>2</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Source: 1969 Census of Agriculture, State Summary Volumes, table 27.

Levels of concentration by economic class are considerably lower than those for the acreage classification since income-generating potential is not necessarily correlated with acreage. Class I embraces all types of farming operations—including those types in which the land base is a relatively insignificant part of the total asset investment.

There is some evidence to suggest that the larger operations tend to be the more productive and efficient units. A special study prepared for Congress by USDA estimated parity returns by economic class of farm in 1966.<sup>16</sup> The study found that, on average, farmers in that year earned 81 percent as much as the potential returns to their labor and capital employed elsewhere in the economy. However, class I and II farms received average returns that were 129 percent of parity (or the off-farm opportunity cost). Certainly, one cannot infer that all large farms are operating efficiently and drawing these levels of returns. Research by Duvick in Michigan found much variation in returns within these large sales classes as well.<sup>17</sup> Nevertheless, the general direct relationship of size and efficiency appears significant.

This holds some implications about economic returns to land owned by off-farm landlords. Assuming present leasing arrangements do not distort resource efficiency, then landlord returns in share arrangements will prob-

ably be above the all-farm average. Likewise, returns to landlords under cash leasing would also tend to be above average as the larger, more efficient operators would set the level of cash rates.

The amount of land rented by the larger units also implies the predominance of multiple-unit leasing. For example, average acres rented by class I operators who rented land in the Lake States and Corn Belt were 312 acres and 376 acres, respectively. In both these regions the modal size of ownership unit was considerably smaller, with tracts of 40, 80, and 160 acres and odd-sized units in between comprising the bulk of the landownership units. This implies that class I operators were renting from two, three, or perhaps more landlords at any one time. This holds true for class II and III farms as well, although not to the same degree.

## 6. CASH GRAIN FARMS, WHERE RENTAL IS MORE CONCENTRATED

Statistics of farms by economic class include all types of farming operations. Some farming operations require a lengthy planning horizon and so discourage land leasing, which traditionally has been short term. In other farming enterprises, such as cattle feeding, the land base is relatively unimportant and represents a small part of total investment (see tenure patterns by type of farm in figure 7). The inclusion of these operations, therefore, lowers the relative importance of farmland leasing to land-based agriculture. Because of this, analysis was made of one specific type of farm—cash grain agriculture.

Appendix tables A-7 and A-8 present farm numbers, acreages, and percentage distributions of cash grain

<sup>16</sup>Parity Returns Position of Farmers. Report to the Congress of the United States by the Department of Agriculture, Senate Document No. 44, 1967.

<sup>17</sup>Duvick, Richard D. and Uhl, Joseph N. Comparisons of Actual Farm Incomes with Parity Incomes for Michigan Farmers, 1965 and 1966. Agricultural Economics Report No. 113, Michigan State University, October 1968.

Table 22. Average acreage and average market value of land and buildings, by economic class, 48 States, 1969

Region and State	Average farm size in—					Average market value of land and buildings per farm in—				
	Class I	Class II	Class III	Class IV	Class V	Class I	Class II	Class III	Class IV	Class V
	-----Acres-----					-----\$1,000-----				
Northeast	353	240	182	142	123	173.1	81.2	59.0	53.6	49.0
New England										
States <sup>1</sup>	351	266	192	158	152	138.4	75.3	51.4	48.8	49.3
New York	412	274	205	153	139	155.4	61.9	44.8	38.4	40.5
New Jersey	294	150	105	89	79	290.4	168.4	119.8	107.1	94.9
Pennsylvania	300	202	163	135	118	160.5	77.4	54.0	45.4	40.3
Delaware	337	202	186	154	103	166.0	104.0	80.3	93.0	47.9
Maryland	367	243	186	143	100	236.3	143.1	119.3	90.4	70.1
Lake States	524	311	233	181	144	165.9	82.3	52.5	38.1	31.3
Michigan	432	281	212	162	126	170.0	94.7	66.8	48.0	38.1
Wisconsin	450	255	192	151	128	148.8	64.6	38.3	28.2	26.3
Minnesota	628	377	277	214	172	175.9	94.5	60.7	41.0	29.3
Corn Belt	509	336	245	174	129	229.9	134.3	86.9	54.6	38.1
Ohio	446	296	215	154	115	218.7	125.4	84.3	55.9	40.3
Indiana	516	330	222	146	104	234.7	136.6	86.7	53.7	37.2
Illinois	540	341	239	161	113	296.4	170.8	108.5	66.4	44.9
Iowa	432	301	221	155	111	187.4	117.1	80.6	53.6	37.8
Missouri	768	461	330	235	175	219.2	113.6	71.5	45.8	33.2
Northern Plains	1,956	1,028	693	430	270	243.0	129.9	85.0	56.1	38.7
North Dakota	2,340	1,401	932	593	371	266.6	136.8	84.2	55.3	36.2
South Dakota	2,630	1,225	746	464	320	206.8	109.6	71.5	46.6	35.3
Nebraska	1,680	761	512	333	234	227.9	125.0	83.1	55.5	38.6
Kansas	1,807	943	631	385	233	276.7	147.1	97.3	61.6	40.9
Appalachian	567	315	216	153	118	190.7	93.9	54.5	38.0	29.4
Virginia	669	401	276	188	141	239.1	118.2	71.6	46.2	39.0
West Virginia	605	513	413	346	247	136.5	79.2	55.5	41.1	30.6
North Carolina	404	220	140	94	81	135.4	75.2	47.2	30.7	26.0
Kentucky	699	333	231	156	113	249.5	99.2	58.7	36.6	25.4
Tennessee	744	389	271	182	129	230.2	108.3	70.8	44.5	31.9
Southeast	1,031	432	317	226	179	309.3	98.4	73.6	51.6	45.0
South Carolina	911	467	269	174	145	236.7	112.9	68.3	45.1	35.9
Georgia	702	362	282	227	185	163.3	83.3	64.1	48.3	41.7
Florida	1,865	636	388	240	200	717.4	169.1	114.5	74.3	77.8
Alabama	764	407	350	251	180	160.6	75.0	63.0	44.6	34.3
Delta States	1,010	451	366	256	180	314.1	123.2	90.5	57.9	39.5
Mississippi	1,195	567	436	276	186	343.3	130.3	88.0	55.1	37.7
Arkansas	808	384	341	266	191	268.0	106.3	85.4	55.8	36.5
Louisiana	1,193	451	326	211	152	371.7	145.1	101.2	65.0	47.1
Southern Plains	3,945	1,295	819	485	295	451.1	201.3	133.7	84.0	56.6
Oklahoma	2,195	970	662	408	257	334.9	174.7	112.4	70.3	46.0
Texas	4,427	1,432	896	523	311	483.1	212.6	144.3	90.8	60.8
Mountain	7,014	2,240	1,360	782	585	446.3	168.0	111.6	73.2	58.6
Montana	8,835	2,986	1,670	898	576	438.8	186.3	118.5	72.1	52.2
Idaho	1,952	675	428	252	170	317.2	134.4	81.7	54.6	41.3
Wyoming	13,359	3,511	1,923	1,125	629	497.1	169.6	100.8	70.4	49.4
Colorado	3,834	1,711	1,224	750	534	320.1	163.6	116.4	78.8	64.9
New Mexico	16,406	4,823	2,727	1,556	1,102	610.2	210.9	138.1	90.8	67.7
Arizona	7,178	3,427	2,640	1,747	1,146	900.2	261.6	202.0	128.1	106.9
Utah	4,404	1,258	733	434	288	281.8	121.5	86.9	58.7	47.1
Nevada	14,921	3,284	3,473	1,303	3,003	673.9	217.2	270.8	146.5	146.6

See footnote at end of table.

Continued

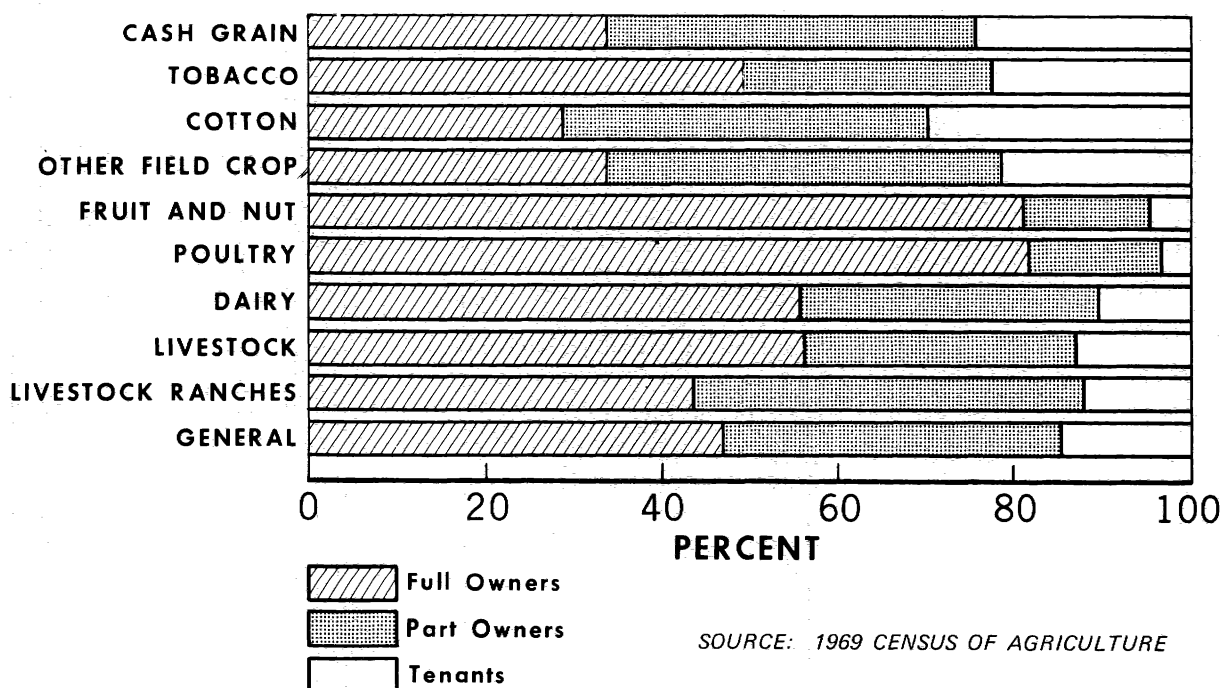
Table 22. Average acreage and average market value of land and buildings, by economic class, 48 States, 1969—Continued

Region and State	Average farm size in—					Average market value of land and buildings per farm in—				
	Class I	Class II	Class III	Class IV	Class V	Class I	Class II	Class III	Class IV	Class V
	-----Acres-----					-----\$1,000-----				
Pacific	1,717	707	447	243	170	561.5	190.6	128.0	94.7	82.7
Washington	1,552	744	525	291	173	333.3	158.7	105.5	70.6	60.6
Oregon	2,921	1,102	669	317	194	332.4	152.2	97.9	67.6	57.0
California	1,518	541	331	196	161	675.1	223.0	149.5	114.2	99.6
48 States	1,603	625	432	273	190	296.8	126.1	83.3	55.9	42.7

<sup>1</sup>New England States include: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Source: 1969 Census of Agriculture, State Summary Volumes, table 27.

## TENURE CHARACTERISTICS BY TYPE OF FARM 48 STATES



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 347-73 (10)

ECONOMIC RESEARCH SERVICE

Figure 7

Table 23. Tenure characteristics by economic class, farms in economic classes I-V, by farm production regions, 1969<sup>1</sup>

Region	Class I			Class II			Class III			Class IV			Class V		
	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants	Full owners	Part owners	Tenants
	----- Percent -----														
Northeast	44.5	47.8	7.7	49.1	40.8	10.1	61.1	29.7	9.2	72.0	19.7	8.4	77.4	15.1	7.6
Lake States	37.5	53.4	9.1	45.9	42.6	11.4	58.7	30.8	10.4	71.2	19.9	8.9	79.4	13.3	7.3
Corn Belt	25.9	50.1	24.1	31.2	41.4	27.4	45.6	31.7	22.7	62.7	21.0	16.2	74.5	13.9	11.6
Northern Plains	17.5	68.1	14.1	20.2	61.4	18.4	29.8	50.1	20.0	45.1	33.8	21.1	58.5	20.1	21.4
Appalachian	42.8	47.8	9.4	42.0	42.7	15.3	47.5	34.3	18.2	60.1	24.4	15.5	70.5	17.9	11.6
Southeast	54.6	38.4	7.0	54.6	37.2	8.3	52.8	34.9	12.3	59.8	27.0	13.2	68.4	19.7	11.9
Delta	42.8	42.3	14.9	41.4	41.3	17.3	39.9	41.4	18.7	51.8	33.2	14.9	63.3	23.3	13.4
Southern Plains	26.2	57.6	16.2	27.6	53.1	19.3	33.0	47.2	19.8	45.2	36.2	18.6	58.0	24.5	17.5
Mountain	28.8	59.2	12.0	33.2	53.4	13.4	42.3	44.7	13.1	55.9	31.6	12.5	65.7	21.7	12.6
Pacific	39.8	43.4	16.8	51.7	34.8	13.5	62.3	25.8	11.8	73.3	16.9	9.9	78.4	12.8	8.8
48 States	33.2	51.3	15.4	36.4	45.5	18.1	45.9	36.8	17.3	59.3	25.8	15.0	69.4	18.0	12.6

<sup>1</sup> Percentages may not add to 100.0 due to rounding.

Source: 1969 Census of Agriculture, State Summary Volumes, table 27.

Table 24. Percent of land in farms rented by economic class, by farm production regions, 1969

Region and State	Percent of land in farms rented				
	Class I	Class II	Class III	Class IV	Class V
	----- Percent -----				
Northeast	29.7	25.0	20.6	16.0	12.7
New England					
States <sup>1</sup>	18.3	18.6	14.9	9.4	8.6
New York	25.2	20.4	16.9	14.0	12.2
New Jersey	41.9	45.6	35.3	26.8	20.9
Pennsylvania	31.7	28.1	22.5	16.1	12.9
Delaware	43.4	41.8	41.2	28.4	22.4
Maryland	47.2	42.8	32.3	23.6	15.6
Lake States	37.2	32.9	26.3	20.3	14.7
Michigan	33.4	32.5	27.5	23.6	17.1
Wisconsin	29.8	22.7	16.4	11.2	8.6
Minnesota	42.6	39.6	32.2	24.3	16.7
Corn Belt	54.7	53.3	42.6	30.0	20.0
Ohio	51.3	51.2	41.9	31.4	20.2
Indiana	56.6	55.9	43.6	29.9	18.7
Illinois	63.8	62.6	52.8	41.2	29.5
Iowa	52.5	52.2	43.0	31.2	23.2
Missouri	43.0	40.7	32.4	22.6	15.8
Northern Plains	44.2	46.7	43.4	39.7	35.8
North Dakota	43.4	42.1	36.0	33.0	30.5
South Dakota	36.1	38.7	38.9	36.3	31.8
Nebraska	40.4	49.7	46.6	41.1	37.8
Kansas	56.0	56.5	54.0	46.9	39.9
Appalachian	36.2	34.3	28.4	19.6	13.6
Virginia	32.7	29.8	25.0	19.6	13.3
West Virginia	25.9	23.3	18.4	16.1	13.7
North Carolina	36.1	41.0	35.6	25.7	17.4
Kentucky	33.9	31.4	24.9	16.5	10.6
Tennessee	44.5	36.1	30.5	19.8	14.4
Southeast	29.6	31.5	30.9	23.9	20.2
South Carolina	37.1	33.3	29.1	22.7	16.0
Georgia	26.3	26.8	24.6	18.3	13.0
Florida	28.7	33.6	41.4	33.2	33.7
Alabama	32.7	35.1	31.3	24.6	20.3
Delta States	47.7	48.4	41.5	30.1	24.3
Mississippi	41.6	38.0	31.0	23.3	19.9
Arkansas	53.5	50.2	45.6	30.5	22.3
Louisiana	47.5	58.9	50.4	42.2	37.2
Southern Plains	50.3	51.2	47.3	42.0	34.8
Oklahoma	46.1	49.7	45.4	39.8	32.4
Texas	50.9	51.7	48.0	42.9	35.5
Mountain	44.2	42.5	44.0	42.7	48.8
Montana	35.8	36.9	36.3	34.2	32.5
Idaho	39.8	36.1	32.3	26.4	20.9
Wyoming	42.2	38.7	39.6	39.3	41.3
Colorado	39.5	39.9	39.8	37.4	34.6
New Mexico	46.1	47.8	47.9	45.8	45.9
Arizona	62.9	70.5	74.0	62.7	76.1
Utah	67.3	62.7	69.0	70.6	77.6
Nevada	43.6	65.9	80.4	76.5	89.6

See footnote at end of table.

Continued

Table 24. Percent of land in farms rented by economic class, by farm production regions, 1969—Continued

Region and State	Percent of land in farms rented				
	Class I	Class II	Class III	Class IV	Class V
	-----Percent-----				
Pacific	53.1	44.1	45.2	37.7	35.9
Washington	54.8	50.5	46.8	36.6	32.5
Oregon	35.2	35.4	31.7	25.4	22.1
California	59.6	45.6	53.7	45.6	42.9
48 States	46.1	44.8	40.9	33.8	28.2

<sup>1</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Source: 1969 Census of Agriculture, State Summary Volumes, table 27. Calculated assuming all land rented by part owner and tenants is operated and not subleased.

Table 25. Percent of all land owned and all land rented, by economic class and by farm production regions, 1969<sup>1</sup>

Region	Percent of all land owned by farms in—					Percent of all land rented by farms in—				
	Class I	Class II	Class III	Class IV	Class V	Class I	Class II	Class III	Class IV	Class V
	-----Percent-----									
Northeast	26.6	29.6	19.6	12.6	11.6	37.3	32.6	16.9	7.8	5.5
Lake States	14.4	25.1	27.9	19.3	13.2	22.7	32.7	26.3	12.6	5.6
Corn Belt	21.4	23.3	22.8	18.3	14.1	32.0	33.3	21.0	9.5	4.2
Northern Plains	28.3	26.6	25.6	13.2	6.3	29.5	30.7	25.4	10.6	3.8
Appalachian	15.8	15.1	18.9	24.7	25.4	26.2	23.1	21.8	17.4	11.5
Southeast	40.1	17.4	13.8	14.1	14.6	43.6	19.7	16.0	11.3	9.4
Delta	38.2	14.8	13.8	15.3	18.0	48.4	19.8	14.0	9.5	8.2
Southern Plains	39.3	17.0	16.3	14.2	13.2	44.7	19.7	16.5	11.5	7.6
Mountain	53.3	20.5	14.2	7.3	4.7	54.8	19.6	14.1	6.6	4.9
Pacific	53.7	18.6	12.4	7.9	7.3	65.0	14.9	10.7	5.1	4.3
48 States	35.7	21.2	18.9	13.6	10.7	42.4	24.2	18.3	9.5	5.6

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

Source: 1969 Census of Agriculture, State Summary Volumes, table 27.

farms for selected States and farm production regions.<sup>18</sup> About two-thirds of these farms were in the Corn Belt and Northern Plains States. Sizable numbers of cash grain operators were also present in the Lake States and Delta region. Highest concentration of such farms was in

Illinois, where 53 percent of all farms were classified as cash grain units and accounted for 60 percent of the land base.

Asset value of the real estate in cash grain farms generally run much higher than the all-farm average, due to land quality as well as land quantity factors (table 26). Values per farm were found to be consistently above \$300,000 for class I farms grossing \$40,000 or more in sales annually. Even class II farms were found to be approaching \$200,000 per farm in many States. Such investment levels usually preclude full ownership of the

<sup>18</sup>The 1969 Census of Agriculture has detailed data on cash grain farms in 29 States. While other cash grain farms exist in other States, the relative importance of this enterprise was not sufficient to merit detailed statistics in these States.

Table 26. Acreage and market value of land and buildings per farm, cash grain farms in economic classes I-V, by selected States and farm production regions, 1969

Region and State	Average farm size						Average market value of land and buildings per farm					
	Class I	Class II	Class III	Class IV	Class V	All	Class I	Class II	Class III	Class IV	Class V	All
	Acres						\$1,000					
Northeast	1,041	474	271	178	117	308	295.8	181.2	115.0	86.1	56.0	102.4
Lake States	1,096	538	343	221	156	309	313.6	150.6	94.6	59.8	40.8	73.1
Michigan	795	424	276	180	128	210	336.9	177.9	105.4	64.1	45.6	61.3
Wisconsin	848	423	267	196	144	223	382.8	165.1	97.9	61.4	38.4	58.0
Minnesota	1,182	570	370	246	184	366	302.2	143.6	90.9	57.5	37.2	80.6
Corn Belt	711	415	275	181	125	289	368.4	194.2	118.7	72.2	46.9	120.7
Ohio	779	446	283	172	115	232	381.4	207.4	123.8	73.0	48.8	86.5
Indiana	705	421	273	168	110	262	340.0	183.2	115.5	67.6	43.1	101.3
Illinois	665	389	261	174	122	309	394.3	207.8	128.1	79.5	51.5	155.0
Iowa	666	390	254	170	123	278	310.5	174.5	108.4	68.0	46.8	114.0
Missouri	1,083	593	378	253	172	369	391.0	184.0	106.9	67.5	42.7	98.2
Northern Plains	1,790	1,053	710	450	293	709	313.6	163.8	101.1	66.3	43.4	101.1
North Dakota	2,358	1,354	890	576	376	924	290.0	147.9	90.5	59.9	38.5	94.4
South Dakota	2,614	1,152	694	417	322	708	285.3	140.2	85.7	52.9	37.5	77.3
Nebraska	998	646	455	314	221	475	287.7	164.3	102.8	66.6	42.7	108.4
Kansas	1,977	1,108	714	448	279	694	361.7	188.0	116.2	74.9	47.8	107.7
Appalachian	1,163	540	307	195	138	310	392.2	160.9	88.2	53.0	36.3	79.6
Southeast	1,644	879	497	282	193	435	412.0	195.9	104.2	62.7	43.4	81.0
Delta	1,373	567	364	219	141	558	447.1	171.3	104.8	63.0	37.9	165.5
Mississippi	1,823	755	466	260	164	635	571.2	197.3	112.5	62.9	37.3	169.0
Arkansas	1,280	540	359	218	131	547	437.0	164.1	102.9	63.0	34.8	168.2
Louisiana	1,308	532	322	191	138	528	398.1	171.6	104.1	63.1	45.0	158.5
Southern Plains	1,675	870	614	399	252	656	480.7	228.9	148.0	91.9	56.2	156.1
Oklahoma	1,943	1,084	685	429	264	593	416.6	233.2	144.7	89.0	54.7	110.9
Texas	1,645	786	564	373	242	692	487.8	227.3	150.2	94.6	57.3	182.4
Mountain	3,986	2,006	1,260	778	525	1,507	429.9	207.5	125.1	83.0	54.8	149.0
Pacific	3,169	1,627	1,098	597	368	1,516	546.0	260.6	156.6	98.1	66.9	240.2
48 States	1,350	735	491	296	185	503	389.2	187.0	113.3	70.5	45.6	118.1

Source: 1969 Census of Agriculture, State Summary Volumes, table 29.

land base by the operator and promote greater reliance on leasing.

For the largest cash grain farms, rented real estate represented the major share of land in farms in nearly every State (table 27). Roughly 60 percent of the land was leased. Assuming this land was approximately equal in per acre value to the owned share of land, then about \$180,000 of the \$300,000 (current market value) of real estate assets was leased from others. In the average Corn Belt class I farm, over \$255,000 of the real estate assets were controlled by lease.

While the proportion of rented land was lower in the smaller sales classes, the average for all the classes of cash grain farms was still over 50 percent. Farmland rental must therefore be regarded as an integral part of the financial structure and growth strategy of cash grain farms.

Tenure patterns of cash grain operators follow those of the all-farm economic class grouping—only to a greater degree. A relatively larger proportion of class I operators are part owners (table 28 and figure 8). In fact, only 10 percent of the class I farms are operated by full owners.

## 7. IMPLICATIONS

As a point-in-time analysis, this study does not make projections from identified trends. But several implications from the findings can be drawn concerning future farmland ownership and rental and the linkage with structural change in U.S. agriculture.

First, findings of this study point to a strong direct relationship between farm size and amount of land

Table 27. Percent of farmland rented, cash grain farms in economic classes I-V, by selected States and farm production regions, 1969

Region and State	Class I	Class II	Class III	Class IV	Class V	All
-----Percent-----						
Northeast	60.1	51.5	42.7	31.9	22.5	46.6
Lake States	52.4	50.0	42.8	32.3	24.6	41.0
Michigan	58.3	53.0	42.7	30.0	28.3	38.8
Wisconsin	50.0	41.0	32.4	19.3	13.4	27.2
Minnesota	51.7	49.8	43.3	34.4	24.5	42.6
Corn Belt	69.4	66.2	55.2	42.1	29.8	57.3
Ohio	66.5	64.8	54.8	41.0	27.1	50.9
Indiana	69.1	65.3	53.0	37.8	25.8	54.3
Illinois	72.8	69.9	59.3	48.8	36.0	64.0
Iowa	66.3	63.7	53.2	38.5	30.8	55.5
Missouri	62.7	59.5	50.8	40.4	29.0	50.7
Northern Plains	56.0	54.6	49.8	46.0	41.4	51.0
North Dakota	51.0	48.3	41.3	37.0	32.3	43.7
South Dakota	44.6	48.1	49.0	45.9	35.5	46.2
Nebraska	59.1	60.6	55.4	49.4	44.4	56.0
Kansas	62.0	61.7	59.4	54.1	48.4	58.6
Appalachian	60.8	54.1	50.8	34.6	25.1	47.6
Southeast	47.9	35.5	38.9	30.7	22.6	36.2
Delta	57.7	66.0	58.7	51.5	38.6	58.1
Mississippi	50.1	53.8	44.4	41.3	28.2	47.7
Arkansas	59.1	65.7	62.5	53.8	40.7	59.5
Louisiana	60.9	73.2	61.9	57.1	48.4	63.2
Southern Plains	63.9	61.6	58.7	53.7	46.5	59.2
Oklahoma	58.1	59.2	56.5	52.0	45.2	55.0
Texas	64.6	62.8	60.9	55.4	47.6	61.3
Mountain	40.4	45.5	44.5	41.0	38.4	43.1
Pacific	57.4	56.4	52.1	47.0	39.0	55.1
48 States	58.3	57.1	51.0	43.8	35.2	52.3

Source: 1969 Census of Agriculture, State Summary Volumes, table 29. Calculated assuming all land that is rented by part owners and tenants is operated and not subleased.

leased per farm. Farming units have grown continuously larger in average size over time as smaller units ceased operation and larger units expanded. All indications point to continuing farm enlargement in the commercial farming sector. It follows, therefore, that more of the rented land will be found in the larger farming units, especially in areas where the major agricultural enterprises require a sizable land base.

Second, the increasing size and specialization of farm units will probably further the interest in more complex forms of business organization. Greater capital and managerial flexibility offered by partnerships or corporations over the single proprietorship will encourage this trend. It is commonly believed that such forms, having greater capital and credit resources, will encourage land investment, as will special tax provisions. However, this study found no significant evidence that corporations and partnerships tend to own a larger share of their farmland than single proprietors. Land tenure patterns

of partnerships and corporations were found to be quite similar to that of single proprietorships. Obviously, further study is necessary. But at this point, any trend toward more sophisticated business entities cannot be assumed to alter land tenure patterns significantly.

Third, the question of tenure patterns over the life cycle of the business enterprise needs reconsideration in terms of present and emerging structure. Today, many older farmers are accruing large capital gains on land they acquired 20 or 30 years earlier. The growth in their wealth via appreciated land values has greatly improved their credit positions, and thus has facilitated farm size expansion. This is in sharp contrast with today's younger operator who faces a more difficult and costly task in purchasing farmland, particularly in the quantity necessary for an economically viable unit. Thus, it is reasonable to foresee greater emphasis on land leasing by today's younger farmers than by earlier generations. If such is the case, then the relative importance of



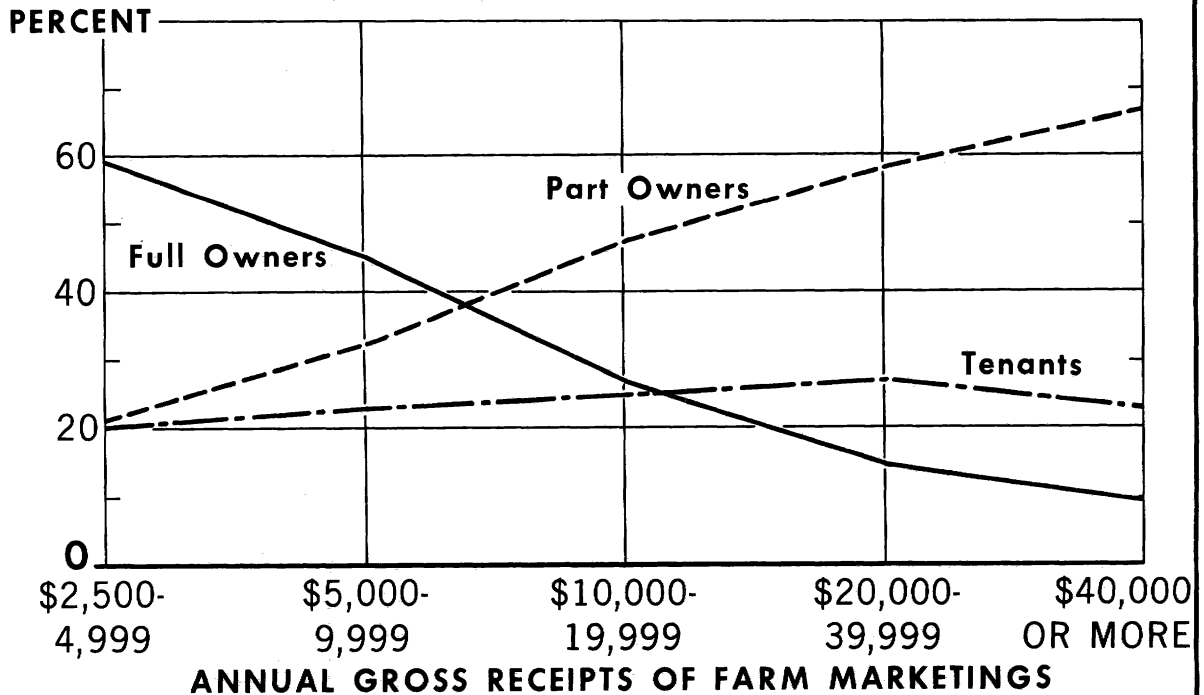
Table 28. Distribution of cash grain farms by tenure characteristics, economic classes I-V, by selected States and farm production regions, 1969

Region and State	Class I			Class II			Class III			Class IV			Class V			All		
	Full owner	Part owner	Tenant	Full owner	Part owner	Tenant	Full owner	Part owner	Tenant	Full owner	Part owner	Tenant	Full owner	Part owner	Tenant	Full owner	Part owner	Tenant
	----- Percent -----																	
Northeast	13.9	60.2	25.9	25.7	51.1	23.2	36.8	36.3	26.9	53.8	26.0	20.2	64.6	17.2	18.2	45.2	32.8	22.0
Lake States	12.6	78.1	9.3	20.7	63.3	16.0	35.9	46.3	17.8	54.4	27.2	16.4	70.3	16.7	13.0	48.8	35.7	15.5
Michigan	6.4	89.5	4.1	15.7	76.0	8.3	31.3	57.3	11.4	53.9	36.4	9.7	69.0	21.7	9.3	51.5	38.9	9.6
Wisconsin	17.2	74.7	8.1	36.7	43.4	19.9	49.8	33.1	17.1	68.8	19.0	12.2	77.5	11.9	10.6	65.7	21.2	12.6
Minnesota	13.5	76.0	10.5	21.1	61.3	17.6	36.5	43.7	19.8	56.3	23.3	20.4	69.6	13.4	17.0	45.6	35.9	18.5
Corn Belt	7.6	68.1	29.1	14.6	50.9	34.5	30.1	39.7	30.2	50.0	26.5	23.5	64.6	17.5	17.9	36.8	36.4	26.8
Ohio	9.2	71.2	19.6	12.5	64.1	23.4	26.5	52.2	21.3	47.4	32.5	20.1	66.6	17.8	15.6	43.9	36.9	19.2
Indiana	7.6	70.2	22.2	13.6	59.9	26.5	30.3	47.5	22.2	51.9	30.3	17.8	68.0	18.9	13.1	41.3	39.4	19.3
Illinois	6.6	59.8	33.6	13.1	47.3	39.6	27.9	37.2	34.9	46.6	26.6	26.8	58.3	20.3	21.4	29.3	38.2	32.5
Iowa	9.2	60.8	30.0	17.8	45.2	37.0	35.7	30.1	34.2	56.6	16.1	27.3	66.9	9.8	23.3	39.2	29.6	31.2
Missouri	11.5	68.1	20.4	17.6	57.0	25.4	29.1	45.2	25.7	46.9	30.6	22.5	63.2	18.1	18.7	40.1	37.4	22.5
Northern Plains	8.3	77.2	14.5	12.8	68.5	18.7	22.4	56.3	21.3	36.4	38.9	24.7	48.4	24.9	26.7	27.5	50.4	22.1
North Dakota	8.4	83.6	8.0	15.5	72.7	11.8	27.4	58.1	14.5	43.9	38.8	17.3	56.1	22.8	21.1	31.5	53.4	15.1
South Dakota	10.6	79.1	10.3	14.2	69.3	16.5	21.8	54.4	23.8	38.0	34.6	27.4	53.1	20.4	26.5	31.1	45.4	23.5
Nebraska	9.3	70.2	20.5	12.7	59.0	28.3	23.9	46.0	30.1	39.2	29.4	31.4	50.3	18.4	31.3	27.6	43.0	29.4
Kansas	6.8	78.8	14.4	9.3	73.7	17.0	15.5	63.1	21.4	27.9	46.6	25.5	42.0	30.6	27.4	22.9	54.5	22.6
Appalachian	12.7	71.2	16.1	19.2	60.9	19.9	25.6	53.4	21.0	47.2	34.2	18.6	55.9	25.9	18.2	40.2	40.9	18.9
Southeast	11.9	80.6	7.5	19.4	68.9	11.7	22.7	61.1	16.2	36.0	50.5	13.5	46.1	37.8	16.1	34.7	50.8	14.5
Delta	15.4	59.6	25.0	14.7	54.0	31.3	19.8	51.7	28.5	31.1	43.0	25.9	49.8	28.2	22.0	26.0	47.5	26.5
Mississippi	8.8	73.3	7.9	16.7	63.4	19.9	26.1	54.5	19.4	35.8	46.0	18.2	57.6	27.8	14.6	34.5	47.9	17.6
Arkansas	15.8	56.6	27.6	16.2	50.4	33.4	18.4	49.0	32.6	29.2	42.1	28.7	47.9	25.7	26.4	25.0	45.4	29.6
Louisiana	12.8	63.3	23.9	11.7	55.5	32.8	18.9	54.9	26.2	31.0	42.5	26.5	45.2	34.0	20.8	22.3	51.2	26.5
Southern Plains	9.6	66.3	24.1	15.1	58.5	26.4	20.1	52.9	27.0	29.6	41.1	29.3	46.1	23.3	30.6	26.1	46.0	27.9
Oklahoma	7.2	84.4	8.4	9.2	75.7	15.1	16.4	65.9	17.7	28.2	46.8	25.0	46.6	25.6	27.8	26.6	51.5	21.9
Texas	9.9	64.3	25.8	17.3	51.9	30.8	22.7	43.9	33.4	30.9	36.0	33.1	45.7	21.7	32.6	25.7	43.0	31.3
Mountain	12.6	79.0	8.4	17.6	70.1	12.3	26.6	58.0	15.4	40.9	41.0	18.1	52.3	26.6	21.1	29.5	55.2	15.3
Pacific	10.7	71.4	17.9	18.3	60.3	21.4	27.9	50.0	22.1	45.0	33.2	21.8	60.2	24.2	15.6	27.2	52.4	20.4
48 States	9.8	67.2	23.0	15.1	58.1	26.8	27.2	47.6	25.2	44.7	32.3	23.0	59.1	20.8	20.1	34.2	42.1	23.7

Source: 1969 Census of Agriculture, State Summary Volumes, table 29.

# TENURE CHARACTERISTICS OF CASH GRAIN FARMS

## BY ECONOMIC CLASS, 48 STATES



SOURCE: 1969 CENSUS OF AGRICULTURE

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 348-73 (10)

ECONOMIC RESEARCH SERVICE

Figure 8

inheritance and intergenerational family transfers of farmland may decline. Then, too, any decline in the relative importance of land investment as a long-term income source places greater demands on annual income-generating potential—thus encouraging further expansion of farm size. In short, structural adjustments now taking place may, over time, alter existing land tenure patterns—particularly farmland ownership.

Finally, the land tenure institution itself must be appraised in terms of desirable adjustments to meet present and future needs. The issue of resource efficiency has typically been emphasized. The observed tendency for land to be concentrated in larger (and by

implication more efficient) units suggests the present pattern is facilitating this objective. There may be other objectives, however, to be considered: access to land by prospective farmers, security of tenancy, allocation of the decisionmaking function, and ease of intergenerational transfer. Moreover, future alterations in one phase of this complex relationship of men and land may well create a “rippling effect” throughout the entire system. Such events are likely to be met with opposition, for forces of custom and tradition are deeply imbedded in any man-land relationship which by nature implies stability. In this environment, a comprehensive understanding of the total tenure picture will become increasingly important in decisionmaking.

# APPENDIX

Table A-1. Farm numbers, land in farms, and market value of land, economic classes I-V, by tenure, 48 States, 1969

Region and State	Farm numbers				Land in farms				Market value of land and buildings <sup>1</sup>			
	Full owners	Part owners	Tenants	Total	Full owners	Part owners	Tenants	Total	Full owners	Part owners	Tenants	Total
	No.				1,000 acres				Million dollars			
Northeast	66,225	35,164	9,739	111,128	11,395	10,332	1,711	23,438	3,881.7	4,164.3	1,087.1	9,133.1
New England States <sup>2</sup>	11,520	6,097	990	18,607	2,322	1,963	151	4,436	523.3	703.4	74.7	1,301.4
New York	20,203	12,364	1,837	34,404	4,096	3,920	357	8,373	979.8	1,135.7	178.4	2,293.9
New Jersey	3,234	1,600	807	5,641	338	401	138	877	336.3	425.9	176.7	938.8
Pennsylvania	23,040	11,261	3,770	38,071	3,413	2,758	558	6,729	1,162.2	1,143.3	327.7	2,633.2
Delaware	1,552	884	379	2,815	197	341	83	621	108.8	155.1	45.5	309.4
Maryland	6,676	2,958	1,956	11,590	1,029	949	424	2,402	637.7	600.9	284.1	1,522.7
Lake States	128,039	61,907	20,189	210,135	24,843	21,690	4,969	51,502	5,656.2	5,671.5	1,438.5	12,766.2
Michigan	26,408	15,031	2,736	44,175	4,280	4,337	526	9,143	1,292.7	1,492.3	218.1	3,003.1
Wisconsin	52,736	18,269	5,930	76,935	9,595	5,112	1,232	15,939	2,003.2	1,351.6	359.4	3,714.2
Minnesota	48,895	28,607	11,523	89,025	10,968	12,241	3,211	26,420	2,360.3	2,827.6	861.0	6,048.9
Corn Belt	217,168	136,177	90,672	444,017	41,764	50,617	24,961	117,342	13,337.9	19,944.7	11,407.0	44,689.6
Ohio	35,160	20,970	10,139	66,269	5,271	6,235	2,319	13,825	1,914.7	2,647.1	1,054.5	5,616.4
Indiana	34,505	22,439	10,320	67,264	5,248	7,531	2,717	15,496	1,893.2	3,177.8	1,216.5	6,289.4
Illinois	37,641	34,325	28,520	100,486	7,021	13,081	8,361	28,463	3,009.1	6,317.2	4,623.3	13,949.6
Iowa	57,102	34,347	32,046	123,495	11,183	12,749	8,536	32,468	3,998.9	5,106.4	3,586.8	12,692.1
Missouri	52,760	24,096	9,647	86,503	13,041	11,021	3,028	27,090	2,522.1	2,696.1	925.9	6,144.1
Northern Plains	71,634	100,649	41,494	213,777	36,409	111,150	24,356	171,915	4,597.6	13,388.6	3,668.5	21,654.6
North Dakota	14,582	21,239	5,707	41,528	10,083	26,042	4,250	40,375	954.0	2,508.1	448.4	3,910.4
South Dakota	13,608	19,910	6,952	40,470	8,310	27,016	4,259	39,585	802.2	2,264.2	465.9	3,532.3
Nebraska	21,872	25,472	16,041	63,385	9,806	26,646	8,207	44,659	1,502.0	3,768.8	1,543.2	6,814.0
Kansas	21,572	34,028	12,794	68,394	8,210	31,446	7,640	47,296	1,339.3	4,847.5	1,211.1	7,397.9
Appalachian	123,285	57,571	29,837	210,693	22,409	15,164	3,793	41,366	5,450.6	4,609.5	1,396.4	11,456.5
Virginia	17,907	9,691	3,493	31,091	4,080	3,280	565	7,925	1,072.7	1,013.9	204.3	2,290.8
West Virginia	4,644	1,706	314	6,664	1,415	798	100	2,313	184.2	118.8	20.6	323.7
North Carolina	30,751	20,633	14,330	65,714	4,290	4,080	1,167	9,537	1,199.8	1,444.3	523.7	3,167.8
Kentucky	40,553	12,818	7,476	60,847	7,177	3,224	1,132	11,533	1,715.2	931.6	382.7	3,029.5
Tennessee	29,430	12,723	4,224	46,377	5,447	3,782	829	10,058	1,278.7	1,100.9	265.0	2,644.7
Southeast	62,194	31,136	11,434	104,764	20,069	17,248	3,163	40,480	5,661.8	4,076.8	839.7	10,578.2
South Carolina	7,866	6,696	2,851	17,413	2,195	2,669	343	5,207	500.3	704.6	112.3	1,317.2
Georgia	22,885	10,589	4,142	37,616	6,713	5,086	846	12,645	1,482.5	1,194.8	195.4	2,872.8
Florida	14,668	3,917	1,511	20,096	6,653	4,804	1,261	12,718	2,866.5	1,254.3	377.5	4,498.3
Alabama	16,775	9,934	2,930	29,639	4,508	4,689	716	9,913	812.4	923.1	154.5	1,890.0

Delta States	40,842	27,567	12,435	80,844	12,143	15,789	4,913	32,845	2,813.2	4,391.0	1,708.4	8,912.6
Mississippi	15,188	9,189	2,723	27,100	4,801	5,842	1,177	11,820	1,040.4	1,448.9	353.2	2,842.5
Arkansas	17,590	10,396	5,683	33,669	4,705	5,786	2,346	12,837	1,062.6	1,651.3	801.1	3,515.0
Louisiana	8,064	7,982	4,029	20,075	2,637	4,161	1,390	8,188	710.2	1,290.7	554.2	2,555.1
Southern Plains	73,981	66,882	31,610	172,473	45,055	88,416	28,629	162,100	6,662.5	12,656.2	4,249.7	23,568.4
Oklahoma	21,208	22,686	7,781	51,675	8,345	19,655	3,851	31,851	1,382.7	3,282.3	718.0	5,383.0
Texas	52,773	44,196	23,829	120,798	36,710	68,761	24,778	130,249	5,279.8	9,373.9	3,531.7	18,185.4
Mountain	40,591	38,465	11,531	90,587	33,511	155,767	19,435	208,713	3,879.8	9,405.3	1,776.9	15,061.9
Montana	7,493	10,708	2,402	20,603	9,099	44,215	4,419	57,733	737.8	2,424.2	278.5	3,440.5
Idaho	10,512	6,690	2,303	19,505	3,749	7,737	1,185	12,671	810.0	1,238.7	272.6	2,321.3
Wyoming	2,627	3,557	993	7,177	2,726	25,554	2,606	30,886	216.8	986.7	121.9	1,325.5
Colorado	9,095	8,657	3,590	21,342	6,914	23,554	3,311	33,779	853.2	1,808.5	464.8	3,126.5
New Mexico	3,103	3,584	1,023	7,710	5,707	28,305	3,781	37,793	357.8	1,058.7	190.3	1,606.8
Arizona	2,082	1,529	641	4,252	1,122	14,359	1,664	17,145	379.9	1,156.6	346.1	1,882.6
Utah	4,583	3,369	461	8,413	2,387	6,857	266	9,510	306.4	516.8	35.9	859.1
Nevada	1,096	371	118	1,585	1,807	5,186	2,203	9,196	217.8	214.9	66.9	499.6
Pacific	56,215	25,202	11,414	92,831	15,498	40,252	9,310	65,060	7,804.4	9,915.0	3,377.9	21,097.3
Washington	12,131	7,262	2,395	21,788	2,604	9,906	2,059	14,569	1,069.5	1,711.2	440.3	3,221.1
Oregon	10,252	5,346	1,405	17,003	4,990	10,270	1,176	16,436	875.6	1,209.4	191.7	2,276.7
California	33,832	12,594	7,614	54,040	7,904	20,076	6,075	34,055	5,859.2	6,994.4	2,745.8	15,599.4
48 States	880,174	580,720	270,355	1,731,249	263,096	526,425	125,240	914,761	59,745.5	88,222.7	30,950.1	178,918.3

<sup>1</sup>May not add to totals due to rounding.

<sup>2</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Source: 1969 Census of Agriculture, State Summary Volumes, table 24.

Table A-2. Acres of cropland per farm and cropland as a percent of land in farms, economic classes I-V, by tenure, by farm production regions, 1969

Region	Acres of cropland per farm held by—				Cropland as a percent of land in farms held by—			
	Full owner	Part owner	Tenant	All farms	Full owner	Part owner	Tenant	All farms
	----- Acres -----				----- Percent -----			
Northeast	97	191	133	130	56.3	64.9	75.7	61.5
Lake States	135	275	204	183	69.5	78.4	83.0	74.6
Corn Belt	138	301	235	208	71.6	80.9	85.5	78.5
Northern Plains	298	627	386	470	58.7	56.8	65.7	58.4
Appalachian	91	154	86	108	50.3	58.4	67.7	54.9
Southeast	109	254	131	155	33.8	45.9	47.3	40.0
Delta	145	378	321	251	48.8	65.9	81.2	61.3
Southern Plains	169	397	300	282	27.8	30.0	33.1	30.0
Mountain	252	668	386	446	30.6	16.5	22.9	19.3
Pacific	109	530	345	252	39.6	33.2	42.3	36.0
48 States	145	380	254	241	48.6	41.9	54.8	45.6

Source: 1969 Census of Agriculture, State Summary Volumes, table 24.

Table A-3. Farm numbers and land in farms by age of operator, economic classes I-V, 48 States, 1969

Region and State	Farm numbers						Land in farms					
	25	25-34	35-44	45-54	55-64	65 or more	25	25-34	35-44	45-54	55-64	65 or more
	-----No.-----						-----1,000 acres-----					
Northeast	2,258	11,185	23,903	31,958	26,903	14,921	416	2,312	5,351	7,157	5,454	2,749
New England States <sup>1</sup>	282	1,605	3,846	5,322	4,857	2,695	61	361	969	1,345	1,104	595
New York	700	3,419	7,262	9,864	8,422	4,737	168	870	1,944	2,546	1,917	929
New Jersey	71	444	1,065	1,675	1,510	876	13	74	186	285	203	115
Pennsylvania	916	4,365	8,834	10,988	8,522	4,446	127	726	1,591	2,060	1,492	733
Delaware	57	291	596	793	658	420	11	55	145	194	146	70
Maryland	232	1,061	2,300	3,316	2,934	1,747	36	226	516	727	592	307
Lake States	4,340	24,406	46,710	61,470	51,995	21,214	920	6,257	12,671	15,911	11,678	4,070
Michigan	954	4,896	9,237	12,834	11,287	4,967	175	1,046	2,088	2,820	2,217	801
Wisconsin	1,693	8,696	17,547	22,802	18,352	7,845	332	1,891	3,950	4,940	3,500	1,326
Minnesota	1,693	10,814	19,926	25,834	22,356	8,402	413	3,320	6,633	8,151	5,961	1,943
Corn Belt	10,098	53,072	91,751	124,197	111,832	53,067	2,062	14,200	27,113	35,731	27,602	10,636
Ohio	1,621	7,844	13,450	18,772	16,280	8,302	274	1,655	3,062	4,247	3,233	1,355
Indiana	1,625	8,572	13,862	18,530	16,227	8,448	322	1,988	3,571	4,744	3,466	1,407
Illinois	2,218	11,665	20,761	28,713	25,534	11,595	468	3,363	6,668	8,956	6,687	2,318
Iowa	2,882	16,152	27,996	35,370	30,063	11,032	572	4,356	8,306	10,008	7,096	2,132
Missouri	1,752	8,839	15,682	22,812	23,728	13,690	426	2,838	5,506	7,776	7,120	3,424
Northern Plains	4,796	24,282	44,714	58,864	55,750	25,371	2,197	17,716	40,401	51,324	42,619	17,657
North Dakota	902	4,888	9,141	11,796	11,183	3,618	578	4,575	10,177	12,211	10,022	2,811
South Dakota	851	4,781	8,949	11,643	9,963	4,283	508	4,004	9,627	12,067	9,103	4,276
Nebraska	1,535	7,677	13,873	17,165	16,078	7,057	541	4,815	10,453	12,803	11,015	5,032
Kansas	1,508	6,936	12,751	18,260	18,526	10,413	570	4,322	10,144	14,243	12,479	5,538
Appalachian	3,168	18,949	39,935	59,331	58,405	30,905	441	3,414	8,084	12,028	11,244	6,157
Virginia	367	2,297	5,555	8,549	8,814	5,509	63	534	1,489	2,227	2,179	1,433
West Virginia	69	460	1,098	1,753	1,982	1,302	20	148	403	612	643	488
North Dakota	935	5,970	13,411	19,628	18,019	7,751	84	779	1,985	3,024	2,492	1,173
Kentucky	1,138	6,445	11,519	16,497	16,204	9,044	155	1,154	2,267	3,250	3,085	1,622
Tennessee	659	3,777	8,352	12,904	13,386	7,299	119	799	1,940	2,915	2,845	1,441
Southeast	1,440	9,176	19,933	29,852	29,529	14,834	470	3,134	7,881	12,043	10,804	6,149
South Carolina	224	1,536	3,424	5,191	4,818	2,220	38	415	1,064	1,620	1,374	694
Georgia	590	3,519	7,172	10,668	10,594	5,073	132	1,053	2,371	3,809	3,548	1,731
Florida	225	1,650	3,578	5,500	5,533	3,610	203	981	2,509	3,695	3,081	2,249
Alabama	401	2,471	5,759	8,493	8,584	3,931	97	685	1,937	2,919	2,801	1,475

See footnote at end of table.

Continued

Table A-3. Farm numbers and land in farms by age of operator, economic classes I-V, 48 States, 1969—Continued

Region and State	Farm numbers						Land in farms					
	25	25-34	35-44	45-54	55-64	65 or more	25	25-34	35-44	45-54	55-64	65 or more
	-----No.-----						-----1,000 acres-----					
Delta States	1,155	8,092	15,577	22,816	23,377	9,827	326	3,372	6,944	9,723	8,773	3,709
Mississippi	329	2,262	4,781	7,525	8,181	4,022	99	1,048	2,356	3,430	3,283	1,606
Arkansas	498	3,550	6,740	9,741	9,539	3,601	139	1,375	2,925	4,022	3,255	1,122
Louisiana	328	2,280	4,056	5,550	5,657	2,204	88	949	1,663	2,271	2,235	981
Southern Plains	2,746	15,070	30,305	44,882	49,950	29,520	1,433	12,924	29,741	47,859	41,572	28,576
Oklahoma	881	4,680	9,106	13,735	15,256	8,015	350	2,725	6,210	9,117	8,985	4,467
Texas	1,865	10,388	21,199	31,147	34,694	21,505	1,083	10,199	23,531	38,742	32,587	24,109
Mountain	1,303	8,915	18,793	26,544	23,640	11,394	1,354	16,010	45,600	65,934	50,079	29,739
Montana	321	2,143	4,279	6,211	5,235	2,414	522	4,642	12,925	19,207	13,936	6,500
Idaho	283	1,800	3,979	5,850	5,446	2,147	102	899	2,453	4,236	3,542	1,438
Wyoming	98	647	1,494	2,133	1,807	1,000	105	1,986	6,206	10,483	6,880	5,227
Colorado	322	2,281	4,396	6,112	5,514	2,717	269	2,852	6,618	10,908	8,734	4,399
New Mexico	131	783	1,489	2,094	1,980	1,233	254	2,654	7,669	12,406	7,867	6,944
Arizona	52	432	959	1,344	964	501	66	1,567	4,537	4,439	3,747	2,792
Utah	84	680	1,853	2,315	2,321	1,160	29	549	2,490	2,393	2,558	1,491
Nevada	12	149	344	485	373	222	7	861	2,702	1,862	2,815	948
Pacific	910	7,207	17,504	27,905	25,272	14,033	460	5,083	12,449	20,689	16,338	10,041
Washington	191	1,948	4,399	6,537	5,937	2,776	102	1,265	3,180	4,801	3,618	1,603
Oregon	194	1,385	3,115	4,956	4,754	2,599	77	1,461	3,134	5,423	4,003	2,337
California	525	3,874	9,990	16,412	14,581	8,658	281	2,357	6,135	10,465	8,717	6,101
48 States	32,214	180,354	349,125	487,819	456,653	225,086	10,079	84,422	196,235	278,399	226,163	119,483

<sup>1</sup>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

Source: 1969 Census of Agriculture, State Summary Volumes, table 25.

Table A-4. Distribution of farm numbers by acreage size class, economic classes I-V, by farm production region, 1969<sup>1</sup>

Region	Size of farm											
	1-9 acres	10-49 acres	50-69 acres	70-99 acres	100-139 acres	140-179 acres	180-219 acres	220-259 acres	260-499 acres	500-999 acres	1,000- 1,999 acres	2,000 acres or more
	-----Percent-----											
Northeast	5.0	9.8	5.5	9.1	14.3	12.1	9.9	7.7	19.8	5.7	0.9	0.2
Lake States	1.5	3.5	2.4	9.4	13.0	17.0	11.3	10.1	24.3	6.5	1.0	0.2
Corn Belt	2.1	4.1	2.7	8.9	11.2	13.9	9.7	9.4	27.2	9.3	1.2	0.2
Northern Plains	1.8	1.3	0.6	2.2	2.3	7.7	3.3	5.5	27.7	26.2	14.9	6.6
Appalachian	5.0	14.1	8.7	12.5	14.8	10.6	7.8	5.5	13.8	5.4	1.4	0.4
Southeast	4.2	15.2	6.9	9.6	11.0	8.4	6.7	5.2	16.2	9.8	4.2	2.5
Delta	1.7	8.0	4.9	9.6	10.8	9.7	7.6	6.3	19.9	13.0	6.0	2.5
Southern Plains	2.0	3.3	1.9	4.1	6.0	8.8	5.7	5.6	25.0	20.7	10.2	6.8
Mountain	3.6	6.3	2.5	5.3	5.0	6.5	3.6	3.6	13.6	13.9	14.0	21.8
Pacific	8.2	29.1	6.7	8.0	6.6	5.5	3.6	2.7	9.5	7.7	5.8	6.7
48 States	3.0	7.5	3.8	7.9	9.8	11.1	7.6	7.0	21.9	11.8	5.1	3.4

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

Source: 1969 Census of Agriculture, State Summary Volumes, table 26.

Table A-5. Percent of operators renting farmland by acreage size class, economic classes I-V, by farm production region, 1969

Region	Size of farm											
	1-9 acres	10-49 acres	50-69 acres	70-99 acres	100-139 acres	140-179 acres	180-219 acres	220-259 acres	260-499 acres	500-999 acres	1,000- 1,999 acres	2,000 acres or more
	-----Percent-----											
Northeast	14.3	23.6	27.6	30.3	33.9	39.9	45.4	49.1	56.0	62.8	63.6	58.4
Lake States	15.7	17.6	20.8	17.2	24.5	28.6	38.4	44.9	56.8	71.2	78.1	75.5
Corn Belt	16.0	20.0	24.4	23.3	31.5	40.5	50.4	58.7	71.0	79.7	76.4	64.7
Northern Plains	19.6	28.1	35.7	29.1	40.2	38.9	54.6	57.7	66.9	75.9	82.6	85.3
Appalachian	55.4	47.0	36.8	35.6	34.7	37.2	39.3	43.2	47.6	54.2	59.1	53.2
Southeast	22.0	27.1	33.8	34.5	38.5	39.9	43.5	46.4	51.2	55.2	57.6	52.2
Delta	18.9	25.4	30.7	28.8	31.4	33.7	37.9	39.5	47.1	55.0	55.7	51.3
Southern Plains	18.8	27.6	35.6	32.6	36.7	39.7	46.5	52.2	61.2	71.7	76.0	74.0
Mountain	14.7	25.6	32.6	28.5	42.1	41.3	52.0	49.0	51.0	57.9	67.8	82.5
Pacific	17.1	18.5	31.3	33.9	41.7	41.3	50.1	51.7	57.1	65.8	72.0	78.1
48 States	24.8	27.9	31.0	27.9	32.8	37.4	45.4	51.7	61.8	70.4	74.3	77.9

Source 1969 Census of Agriculture, State Summary Volumes, table 26.



Table A-6. Percent of operators owning farmland by acreage size class, of economic classes I-V, by farm production region, 1969

Region	Size of farm											
	1-9 acres	10-49 acres	50-69 acres	70-99 acres	100-139 acres	140-179 acres	180-219 acres	220-259 acres	260-499 acres	500-999 acres	1,000-1,999 acres	2,000 or more acres
	-----Percent-----											
Northeast	90.4	89.9	88.9	89.6	90.2	90.7	91.3	92.6	93.6	94.5	94.2	93.9
Lake States	92.3	91.6	92.4	93.2	92.7	89.9	90.7	89.0	88.9	91.6	94.3	93.7
Corn Belt	90.7	88.6	83.7	87.1	85.3	78.6	79.1	75.2	75.4	80.9	87.1	92.5
Northern Plains	88.5	80.6	79.3	80.9	77.6	74.6	75.9	74.6	76.9	83.8	88.7	91.0
Appalachian	57.0	74.3	86.3	88.9	89.9	90.1	90.3	90.6	91.5	92.5	93.3	94.5
Southeast	83.0	84.2	85.0	88.2	88.4	91.0	90.5	91.2	92.5	93.5	93.9	93.4
Delta	91.5	80.7	83.4	86.3	86.6	87.3	86.2	86.2	85.1	83.3	84.9	87.0
Southern Plains	91.3	84.1	80.7	83.1	82.7	79.3	83.0	82.2	80.9	82.4	86.4	86.0
Mountain	90.2	87.9	89.0	87.6	86.2	82.2	82.6	84.0	84.4	87.0	89.8	92.3
Pacific	87.4	91.4	90.6	89.6	88.7	87.9	87.1	88.3	85.7	83.0	83.6	86.5
48 States	82.8	84.9	86.3	88.3	87.8	83.9	85.0	82.5	82.1	85.0	88.4	90.0

Source: 1969 Census of Agriculture, State Summary Volumes, table 26.

Table A-7. Number of farms and land in farms, cash grain farms in economic classes I-V, by selected States and farm production regions, 1969

Region and State	Farm numbers						Land in cash grain farms					
	Class I	Class II	Class III	Class IV	Class V	Total	Class I	Class II	Class III	Class IV	Class V	Total
	-----Number-----						-----1,000 acres-----					
Northeast	294	479	631	808	875	3,086	306	227	171	144	102	950
Lake States	1,372	5,028	8,888	10,590	10,516	36,394	1,504	2,706	3,052	2,345	1,642	11,249
Michigan	220	908	2,048	3,317	4,350	10,843	175	385	565	596	558	2,279
Wisconsin	99	196	404	765	1,240	2,704	84	83	108	150	179	604
Minnesota	1,053	3,924	6,436	6,508	4,926	22,847	1,245	2,238	2,379	1,599	905	8,366
Corn Belt	13,705	32,221	39,674	36,835	32,316	154,751	9,750	13,374	10,916	6,656	4,029	44,725
Ohio	828	2,663	4,615	6,433	7,537	22,076	645	1,188	1,304	1,108	868	5,113
Indiana	2,274	4,980	6,397	7,124	7,897	28,672	1,604	2,097	1,745	1,196	871	7,513
Illinois	6,940	14,400	15,141	11,083	7,593	55,157	4,614	5,595	3,948	1,933	927	17,017
Iowa	2,592	7,579	9,630	7,973	4,801	32,575	1,727	2,954	2,448	1,352	591	9,072
Missouri	1,071	2,599	3,891	4,222	4,488	16,271	1,160	1,540	1,471	1,067	772	6,010
Northern Plains	5,013	16,357	25,479	21,002	13,447	81,298	8,974	17,218	18,081	9,453	3,939	57,665
North Dakota	1,279	5,464	9,154	6,276	3,083	25,256	3,016	7,400	8,150	3,612	1,158	23,336
South Dakota	339	1,240	2,073	1,980	1,524	7,156	886	1,429	1,438	826	490	5,069
Nebraska	1,674	4,986	6,487	5,178	3,004	21,329	1,670	3,220	2,952	1,624	664	10,130
Kansas	1,721	4,667	7,765	7,568	5,836	27,557	3,402	5,169	5,541	3,391	1,627	19,130
Appalachian	765	1,247	1,905	2,718	3,568	10,203	890	673	585	529	491	3,168
Southeast	160	247	388	577	986	2,358	263	217	193	163	190	1,026
Delta	4,152	3,646	3,654	3,369	3,770	18,591	5,699	2,066	1,329	738	533	10,365
Mississippi	649	502	571	709	993	3,424	1,183	379	266	184	163	2,175
Arkansas	2,338	1,859	1,898	1,706	1,889	9,690	2,992	1,003	682	372	248	5,297
Louisiana	1,165	1,285	1,185	954	888	5,477	1,524	684	381	182	122	2,893
Southern Plains	3,326	4,799	6,515	6,461	6,156	27,257	5,570	4,173	3,997	2,580	1,550	17,870
Oklahoma	333	1,344	2,667	3,054	2,613	10,011	647	1,457	1,828	1,309	691	5,932
Texas	2,993	3,455	3,848	3,407	3,543	17,246	4,923	2,716	2,169	1,271	859	11,938
Mountain	1,419	3,667	4,545	3,052	2,038	14,721	5,656	7,357	5,725	2,374	1,070	22,182
Pacific	1,191	1,939	1,585	945	571	6,231	3,774	3,155	1,741	564	210	9,444
48 States	31,397	69,630	93,264	86,357	74,242	354,890	42,386	51,166	45,790	25,546	13,756	178,644

Source: 1969 Census of Agriculture, State Summary Volumes, table 29.

Table A-8. Percent of farms and percent of land in farms, economic classes I-V, cash grain farms by selected States and farm production regions, 1969<sup>1</sup>

Region and State	Percent of farm numbers in—					Percent of land in farms in—				
	Class I	Class II	Class III	Class IV	Class V	Class I	Class II	Class III	Class IV	Class V
	-----Percent-----					-----Percent-----				
Northeast	9.5	15.5	20.4	26.2	28.3	32.2	23.9	18.0	15.2	10.7
Lake States	3.8	13.8	24.4	29.1	28.9	13.4	24.1	27.1	20.8	14.6
Michigan	2.0	8.4	18.9	30.6	40.1	7.7	16.9	24.8	26.2	24.5
Wisconsin	3.7	7.2	14.9	28.3	45.9	13.9	13.7	17.9	24.8	29.6
Minnesota	4.6	17.2	28.2	28.5	21.6	14.9	26.8	28.4	19.1	10.8
Corn Belt	8.9	20.8	25.6	23.8	20.9	21.8	29.9	24.4	14.9	9.0
Ohio	3.8	12.1	20.9	29.1	34.1	12.6	23.2	25.5	21.7	17.0
Indiana	7.9	17.4	22.3	24.8	27.5	21.3	27.9	23.2	15.9	11.6
Illinois	12.6	26.1	27.5	20.1	13.8	27.1	32.9	23.2	11.4	5.4
Iowa	8.0	23.3	29.6	24.5	14.7	19.0	32.6	27.0	14.9	6.5
Missouri	6.6	16.0	23.9	25.9	27.6	19.3	25.6	24.5	17.8	12.8
Northern Plains	6.2	20.1	31.3	25.8	16.5	15.6	29.9	31.4	16.4	6.8
North Dakota	5.1	21.6	36.2	24.8	12.2	12.9	31.7	34.9	15.5	5.0
South Dakota	4.7	17.3	29.0	27.7	21.3	17.5	28.2	28.4	16.3	9.7
Nebraska	7.8	23.4	30.4	24.3	14.1	16.5	31.8	29.1	16.0	6.6
Kansas	6.2	16.9	28.2	27.5	21.2	17.8	27.0	29.0	17.7	8.5
Appalachian	7.5	12.2	18.7	26.6	35.0	28.1	21.2	18.5	16.7	15.5
Southeast	6.8	10.5	16.5	24.5	41.8	25.6	21.2	18.8	15.9	18.5
Delta	22.3	19.6	19.7	18.1	20.3	55.0	19.9	12.8	7.1	5.1
Mississippi	19.0	14.7	16.7	20.7	29.0	54.4	17.4	12.2	8.5	7.5
Arkansas	24.1	19.2	19.6	17.6	19.5	56.5	18.9	12.9	7.0	4.7
Louisiana	21.3	23.5	21.6	17.4	16.2	52.7	23.6	13.2	6.3	4.2
Southern Plains	12.2	17.6	23.9	23.7	22.6	31.2	23.4	22.4	14.4	8.7
Oklahoma	3.3	13.4	26.6	30.5	26.1	10.9	24.6	30.8	22.1	11.6
Texas	17.4	20.0	22.3	19.8	20.5	41.2	22.8	18.2	10.6	7.2
Mountain	9.6	24.9	30.9	20.7	13.8	25.5	33.2	25.8	10.7	4.8
Pacific	19.1	31.1	25.4	15.2	9.2	40.0	33.4	18.4	6.0	2.2
48 States	8.8	19.6	26.3	24.3	20.9	23.7	28.6	25.6	14.3	7.7

<sup>1</sup>Percentages may not add to 100.0 due to rounding.

Source: 1969 Census of Agriculture, State Summary Volumes, table 29.