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UNITED STATES DEPARTMENT OF AGRICULTURE
BULLETIN No. 1068

Contribution from the Office of Farm Management and Farm Economics
G. W. FORSTER, Acting Chief

Washington, D. C.

May 12, 1922

FARM OWNERSHIP AND TENANCY
IN THE BLACK PRAIRIE OF TEXAS

By

J. T. SANDERS

Assistant Agricultural Economist

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By J. T. SANDERS, *Assistant Agricultural Economist.*

(Division of Land Economics, L. C. Gray, Economist in Charge.)

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PURPOSE AND SCOPE OF INVESTIGATION.¹

The Black Land Prairie of Texas has long been regarded by students of American tenure problems as a region of special interest. The percentage of tenantry is high, and the development of the tenant system has been unusually rapid. Since the region was but sparsely settled at the close of the Civil War, and since there has never been a high percentage of negro farm operators in the region—in 1920 but 15.9 per cent—tenancy in the Black Land is not attributable to the historical reasons which serve to explain, in the main, the prevalence of tenancy in other sections of the South. However, the one-crop system, with cotton as the basis, prevails here as elsewhere in the South where there is also a high percentage of negro tenantry.

The region is of special interest, furthermore, because of the social and political unrest arising from its tenure problems, which at times has been a major factor in politics in the State and attracted national attention. Shortly after 1900 tenure conditions gave rise to the payment of a bonus above the customary one-third grain and one-fourth cotton share rent—the share paid since early renting days in the

¹ Acknowledgment for helpful cooperation in planning field work and collecting data is given to Mr. C. O. Brannen, of the Office of Farm Management and Farm Economics; to members of the faculties of the Texas Agricultural and Mechanical College and the Texas State University for valuable suggestions as to plans for field work; and to Miss M. I. Herb, who assisted in the tabulation of the data.

State. The bonus system aroused violent antagonism among renters, culminating in the organization of the Renters' Union of America in 1911. By 1914 the situation had become so acute that the United States Industrial Relations Commission held investigations on the land problem in the region, and the bonus problem became the main issue of the Texas gubernatorial campaign of that year, resulting in the election of the candidate advocating an antibonus law. This

law, discussed more fully later, was passed the year following the campaign. It is an interesting and unprecedented experiment in land legislation in this country.

There are four districts in Texas known locally as "black land prairies." The area covered in this study comprises 19 counties² lying wholly or in large part in the main Black Land Prairie—sometimes known as the "Black Waxy Belt." (Fig. 1.) These 19 counties, designated throughout this bulletin as *the black land*, are similar in agricultural, economic, and social conditions.³

The study is based mainly on data taken

FIG. 1.—Map of black land prairies of Texas, showing locations where data were taken for this study.

in 6 representative counties⁴ from 368 farm operators, particular pains being taken to avoid any selection of the men to be interviewed,

² These counties are Bell, Collin, Dallas, Delta, Ellis, Falls, Fannin, Grayson, Hill, Hunt, Kaufman, Lamar, Limestone, McLennan, Milam, Navarro, Rockwall, Travis, and Williamson.

³ The portion of the Black Land Prairie lying southwest of Travis County is not included in the study because its system of agriculture and economic and social conditions are different from those in the 19 counties included in the study.

⁴ Dallas, Ellis, Hill, McLennan, Bell, and Williamson; also a few schedules were taken in Johnson and Navarro Counties. (See map, Fig. 1.)

because it was desired to get a true cross-sectional view of tenure in the area.

The Black Land Prairie is high, gently rolling, and well drained, with numerous streams crossing it from west to east. Along the larger streams are wide, flat bottom lands, many of which are not yet cleared of their heavy growths of timber, and which are subject to disastrous overflows when in crops and not protected by levees. The outstanding topographical feature of the area is the "White Rock Escarpment," extending near the western edge from Sherman to Austin. This bluff is more or less pronounced, rising 300 feet above the plain at its highest point in Dallas County, and much of the untillable land of the black land is adjacent to it.⁵

An authority on the soils of this region has described them as follows:⁶

The prairies are characterized by black or dark-colored soils derived from a substructure of calcareous marl or chalky limestones, and are the most fertile of the whole Trans-Mississippi region. This fact, together with the comparative scarcity of untillable land, enables it to support the densest agricultural population of Texas.

The black land soils are very sticky when plowed wet and very hard and cloddy when plowed too dry, but the clods readily break up when rains fall upon them. During droughts the soil is apt to crack if not frequently cultivated, but when cultivated enough to keep cracks from forming, it ranks among the most drought-resistant soils in the State.

The climate of the black land is almost ideally suited to cotton growing, and, on account of the relative importance of this crop, which is highly susceptible to cold, to wet weather, and to drought, unusual weather conditions radically affect the income of the average black-land farmer.

SUMMARY OF FINDINGS.

Tenancy increased most rapidly in this area when the character of farming was changing from stock raising to crop growing.

The greatest increase in land values occurred in the past two decades, during which time there was relatively no increase in the number of operators in the black land. This rapid increase in land values was primarily the result of an increase in the productive capacity of the land, measured in terms of dollars.

No evidence was found of increasing concentration of ownership of land in the area.

⁵ See Part VII, 21st Annual Report of the U. S. Geological Survey, p. 68; also University of Texas Bulletin No. 1818, The Geology of Dallas County, pp. 9-10.

⁶ R. T. Hill, 21st Annual Report of the U. S. Geological Survey, Part VII, p. 60.

The net return to the owners of rented land was 5.9 per cent on capital invested. Aside from this return, increases in land values, for all land bought in the black land by the operators interviewed, equaled a net compound annual interest of from 8 to 9 per cent on the original investment.

On the basis of the average net accumulation of wealth in 1919, and the average value of farms operated, it would require the average share tenant interviewed approximately 28 years to pay for the farm he operated.

The different tenure stages function not only as stepping-stones in tenure progress but they function also as selective agencies, tending to keep the operators of least ability in the lower stages.

The ability of different operators to accumulate wealth varied widely. Fourteen operators (or 3.8 per cent of all interviewed) together saved annually as much as 238 other operators (or 64.8 per cent of all interviewed) who ranked among the least thrifty.

The group of operators who accumulated wealth most rapidly included those who had been most consistent in the application of their time to operating farms, had the most diversification of farm enterprises, raised the largest amounts of family food on the farm, and moved least frequently from farm to farm.

Comparative data on school records of children of owners and tenants show the record for children of owners to be much better than that of children of tenants.

THE DEVELOPMENT OF TENURE PROBLEMS IN THE BLACK LAND.

EXTENT AND GROWTH OF TENANCY IN THE AREA.

It will be noted from Table 1 that there have been two well-defined periods in the growth of tenancy in the black land since 1880, the first 20 years being a period of very rapid increase in tenancy, and the last 20 years marked by a decided falling off in the rate of increase. During the first period the percentage of all farms that were operated by tenants increased from 41.8 to 61.5, an increase of 19.7, while during the last period the increase was from 61.5 to 66.1, an increase of only 4.6 per cent.

Because of its bearing on discussions to follow, it is significant to note the fact that of the total increase in number of farms, or farm operators, from 1880 to 1920, 88.4 per cent took place during the first 20 years, the years when tenancy was increasing most rapidly.

By 1920, 66.1 per cent of all farms in the black land, or nearly two out of every three, were operated by tenants. Moreover, tenants operated 64 per cent of the total area in farms in the black land, and the value of the land and buildings of the farms which they operated was 60 per cent of the total farm value in the area.

Of the 368 farms surveyed in this study, 70.4 per cent were operated by tenants. Including the land rented by owners who rented additional land (*owners additional*), 68.5 per cent of the land operated by all of these farmers was rented land, the value of which was 63.7 per cent of the total value of all land and buildings.

In comparison with most other sections of the country the growth of tenancy in the black land has been very rapid. Since 1880 the total percentage increase in tenantry for the black land has been 24.3 per cent, for the State of Texas 15.7 per cent, and for the United States 12.5 per cent.

TABLE 1.—*Increase in number of farms operated by tenants and owners in the black land, as compared with the State and the United States, by decades, since 1880.*¹

Census year.	Total number of farms in black land operated by—		Per cent of all farms operated by tenants.		
	Owners and managers.	Tenants.	In black land.	In State of Texas.	In the United States.
1880.....	26,703	19,155	41.8	37.6	25.6
1890.....	29,005	31,805	52.3	41.9	28.4
1900.....	35,871	57,270	61.5	49.7	35.3
1910.....	33,018	60,704	64.8	52.6	37.0
1920.....	31,924	62,245	66.1	53.3	38.1

¹ Computed from U. S. Census publications.

Evidently, therefore, conditions in the black land have been more conducive to a rapid increase in tenantry than in other sections of the country, and it is the discussion of this growth, its causes, and its effects, that has aroused nation-wide interest in the land problem of this area.

UTILIZATION OF LAND IN RELATION TO TENURE.

Agricultural development had scarcely begun in the black land by 1860, as is noted from Table 2. At that time the number of farm operators in the black land was only 7.5 per cent of the number in 1920; and only 4.3 per cent of the total area in the 19 counties was then in improved farm land, as compared with 51.1 per cent in 1920.

The great increase in the number of farmers has been taken care of mainly by a corresponding increase in improved land rather than by an increase in total land in farms. The number of farms in 1920 was 13.4 times as many as the number in 1860, but the total acreage in farms was only 2.2 times as much in 1920 as in 1860. The total improved acreage in farms, however, in 1920 was 14.1 times the amount of all improved land in 1860—a relative expansion

slightly larger than the relative increase in number of farm operators. Since 1880 the total area planted to all crops has increased about 3.5 times.

The decades of 1870 to 1880 and 1890 to 1900 were the two outstanding periods in the increase of the number of farm operators. If data on tenancy were available for the former decade, these two decades undoubtedly would also be shown as the outstanding periods as regards increase of tenants in the area. The increase in number of tenants in the single decade from 1890 to 1900 was 59.1 per cent of the total increase in tenants from 1880 to 1920. Therefore, a more intensified use of farm land has been the principal means whereby the great increase in farm operators has been met; and this use has taken the form of crop growing, so that in 1920, 89.6 per cent of all improved land was in some kind of crops.

TABLE 2.—*Utilization of land for farming purposes in the black land, by decades, since 1860.*¹

Census year.	Total number of farms.	Total number of acres in farms.	Per cent of area of black land in farms.	Per cent of farm land improved.	Per cent of farm land in crops.
1860.....	7,036	3,963,348	37.4	11.7	(²)
1870.....	14,403	3,251,056	30.7	20.8	(²)
1880.....	45,858	6,104,472	57.7	46.7	27.3
1890.....	60,513	6,920,337	65.4	³ 68.5	39.4
1900.....	93,141	8,552,277	80.8	64.4	54.1
1910.....	93,723	9,018,607	85.2	68.6	56.6
1920.....	94,169	8,535,123.	80.6	76.3	65.5

¹ Computed from U. S. Census data. Data for 1860 slightly incorrect on account of county boundary changes.

² Data not available for these dates.

³ This per cent is increased because of a change in the definition of improved land.

CHANGES IN SIZE AND TYPE OF FARMS AS RELATED TO TENURE GROWTH.

Practically all of the good agricultural land of the black land was granted to its original owners in holdings that were considerably larger than the average size of holding at present. The maximum amount of land ordinarily granted to a married man when Texas was an independent nation was a league and a labor (4,605 acres), and 640 acres after it became a State in the Union. The average size of holdings in the area was probably increased rather than decreased by the depression following the Civil War, which caused land values to decline and stock raising to continue as the principal farm enterprise until 1870. By 1860 practically all good available agricultural land was patented in holdings of an average size much larger than the present average size of farms.

After 1870, when great numbers of immigrants began to come into the black land, changing the system of farming to crop growing, many of the original owners of large tracts chose to retain owner-

ship, but to break up their holdings and rent them, because of the large returns from crop growing as compared with grazing.

The inflow of immigrants during the decade from 1870 to 1880 greatly influenced the agriculture of the region, reducing stock raising to a secondary place in farm enterprises, decreasing the average size of the farm to about one-fifth of the average for 1860, and developing tenancy until 41.8 per cent of all farms were operated by tenants in 1880 (see Tables 1 and 2).

The size of the farm continued to decrease during the two decades following 1880, although this decrease was much less than the decrease prior to that date. Cotton growing had reached and continued to hold a dominant place among farm enterprises, though checked in its development by the extremely low prices prevailing during the decade from 1890 to 1900.

TABLE 3.—*Changes in the average size of farms and in system of farming since 1860, for black land farms.*¹

Census year.	Acres in farms.	Im- proved acres in farms.	Acres in crops.	Per cent of crop acres in cotton.	Units of live stock on farms. ²
1860.....	563.3	65.8	(³)	(³)	121
1870.....	225.7	47.0	(³)	(³)	51
1880.....	133.1	62.1	36.4	40.9	20
1890.....	114.4	78.4	45.1	48.7	18
1900.....	91.8	59.1	49.7	47.8	12
1910.....	96.2	66.0	54.5	61.7	10
1920.....	90.6	69.2	59.3	59.7	9

¹ County changes between 1860 and 1870 affect data somewhat, though not materially.

² A live-stock unit as used here is equal to 1 grown horse, 1 grown cow, 7 hogs, or 7 sheep or goats. There is some discrepancy in these figures for some dates, since some census figures do not distinguish between young and mature stock. Number averaged by all farms.

³ Figures not available for these dates.

With better cotton prices prevailing after 1900, cotton growing rapidly encroached on all other farm enterprises, until, by 1920, 59.7 per cent of all crop land was in cotton. In fact, on many farms practically all agricultural efforts were expended directly or indirectly on cotton growing. During the decade from 1900 to 1910, the average size of the farm showed the first increase since 1860, although in the decade just past it has again shown a decrease.⁷

It is evident, therefore, that the most rapid growth of tenancy has taken place when the greatest increase of operators occurred, and that this has been closely associated with the breaking up of the stock-raising industry and the larger farms.

⁷ The limiting factor to the introduction of improved machinery in cotton growing is the picking, no practical picking machine having been developed as yet. The average farmer, without the latest improved tilling, planting, and cultivating machines, can grow more cotton than he and his family can pick. The unusually large cotton farms of the black-land farmer are operated by using improved machinery for growing the crop and by importing a picking force of negroes and Mexicans, the former coming from cities and the latter from Mexico and counties near the border.

Table 4, giving farms classified by size, shows that since 1860 there has been a rapid and uninterrupted increase in the number of farms of the size groups of 20 to 50 acres, 50 to 100 acres, and 100 to 500 acres. On the whole, there was an increase in the number of farms in the size groups above 500 acres until 1890, since which date there has been a decrease.

From the standpoint of this discussion it is unfortunate that the census tabulations for decades prior to 1900 do not show the farms of 100 to 500 acres broken into three groups, as has been done since 1900, for 96 per cent of the increase in the total number of farms of from 100 to 500 acres, between 1900 and 1920, was owing to increase in the number of farms of 100 to 175 acres in size; that is, to an increase in the number of farms in the group including sizes nearest the average for the black land.

TABLE 4.—*Number of farms in different size-groups in the black land, by decades, since 1860.*¹

Census year.	Under 20 acres.	20 to 50 acres.	50 to 100 acres.	100 to 500 acres.	500 to 1,000 acres.	1,000 acres and above.
1860.....	1,246	2,884	1,905	1,280	59	7
1870.....	3,634	5,960	3,394	1,380	27	2
1880.....	4,813	13,859	10,190	15,406	1,106	484
1890.....	3,317	20,868	16,420	18,244	1,140	524
1900.....	² 5,732	29,496	31,451	25,263	802	397
1910.....	² 5,087	23,002	34,875	29,712	710	336
1920.....	6,210	24,496	33,497	29,056	662	239

¹ Computed from U. S. Census data.

² These increases are largely the results of a change in the definition of "farm."

The possible increase in tenancy that would follow the breaking up of all farms of 500 acres or more, assuming that the ownership of these farms did not change after breaking up, is shown in Table 5. It will be noted that the greatest number of tenant farms would have resulted from the breaking up of farms of 500 acres or more during the decade 1890 to 1900, when the greatest increase in tenant farms occurred (59.1 per cent of the total increase since 1880). Furthermore, it will be noted that, as a result of the slackened rate of increase of tenants each decade since 1890, the breaking up of farms of 500 acres or more has possibly played an increasingly important rôle in the growth of tenancy (see Table 5, last column).

Some writers on the tenure of this region have held that large holdings in land were increasing in number and size in the black land and that this was partly the cause of the growth of tenancy. But data on all the land owned by persons owning 200 acres or more taken from the tax rolls of Ellis, Hill, McLennan, and Bell Counties, and summarized in Table 6, do not show that there has been a tendency toward an increase in concentration of ownership in large holdings.

There was a decided tendency toward a decrease in land held in holdings of 1,000 acres or more, the total decrease from 1899 to 1919 being 21.3 per cent of the amount held in 1899. The percentage decrease for all holdings above 500 acres was 8.8. Holdings of from 200 to 500 acres in size, however, showed a slight increase of 6.4 per cent over the amount held in 1899.

Land held by nonresidents of the counties has shown a decidedly greater tendency to decrease in the larger-sized holdings than has all land, the total decrease in land in all nonresident holdings of 200 acres or more decreasing 21.4 per cent since 1899.

TABLE 5.—*Estimated possible increase in black land tenancy resulting from the breaking up of farms of 500 acres or more.*¹

Period.	Total increase in number of tenant farms for decade.	Decrease (—) or increase (+) in number of farms of—		Possible increase in number of tenant farms resulting from change. ²	Per cent that possible increase was of total increase in tenantry. ³
		500 to 1,000 acres.	1,000 acres and above.		
1880-1890.....	12,650	+ 36	+ 40	4,675	45.3
1890-1900.....	25,465	-338	-127	4,489	13.7
1900-1910.....	3,434	- 92	- 31	1,120	32.6
1910-1920.....	1,541	- 48	- 98	1,749	113.5

¹ These data are computed from Census publications.

² This figure was arrived at as follows: Farms of from 500 to 1,000 acres each were assumed to average 750 acres in size; and farms of 1,000 acres or more, 1,250 acres in size. These acreages were multiplied by the increase or decrease in the number of their respective size farms, giving total increase or decrease of acreage in farms above 500 acres. This total acreage was divided by the average size of the farm at the end of the decade, giving the figure in the column above.

³ Preceding column divided by first column of table.

⁴ Decrease.

TABLE 6.—*Extent of concentration of ownership of land in holdings of different sizes in Ellis, Hill, McLennan, and Bell Counties, for different periods.*¹

I. ALL LAND KNOWN AND RENDERED.

Year.	Holdings of 200 acres and over.		Holdings of 500 acres and over.		Holdings of 1,000 acres and over.		Holdings of 200 to 500 acres.	
	Total acres.	Per cent of 1899 acreage.	Total acres.	Per cent of 1899 acreage.	Total acres.	Per cent of 1899 acreage.	Total acres.	Per cent of 1899 acreage.
1919.....	1,507,626	98.1	764,770	91.2	362,147	78.7	742,856	106.4
1914.....	1,541,267	100.3	760,766	90.7	364,641	79.3	780,501	111.8
1909.....	1,537,313	100.0	792,557	94.5	385,005	83.7	744,756	106.7
1904.....	1,584,606	103.1	831,809	99.2	416,287	90.5	752,797	107.9
1899.....	1,536,963	100.0	838,685	100.0	459,975	100.0	698,278	100.0

II. LAND OWNED BY NONRESIDENTS.

Year.	Total acres.	Per cent of 1899 acreage.	Total acres.	Per cent of 1899 acreage.	Total acres.	Per cent of 1899 acreage.	Total acres.	Per cent of 1899 acreage.
1919.....	154,107	78.6	92,981	65.8	47,945	51.6	61,126	111.6
1914.....	182,185	93.0	117,358	83.1	69,591	75.0	64,827	118.4
1909.....	185,914	94.9	118,283	83.8	67,802	73.0	67,631	123.5
1904.....	171,662	87.6	119,240	84.4	65,587	70.7	52,422	95.7
1899.....	195,981	100.0	141,212	100.0	92,828	100.0	54,769	100.0

¹ Data taken from county tax records.

CHANGES OF FARM VALUES IN RELATION TO TENURE.

Agriculture in the black land has passed in 60 years from the pioneering stage of 1860, when the best land was plentiful and relatively cheap, to the well-established system of crop growing of 1920, with all but the very poorest land in use. As one would expect, this change has affected land values more than it has affected equipment values on the average farm.

Land values rose from an average of \$5.57 an acre in 1860 to \$116.47 in 1920, an increase of 20.9 times \$5.57, while during the same time the value of equipment per acre rose from \$3.48 to \$12.56, an increase of only 3.6 times \$3.48 (see Table 7).

The general depression following the Civil War caused both land and equipment values to decline from 1860 to 1870. However, equipment values continued to decline until 1880, owing to the breaking up of the stock-raising industry. There was 1 animal unit for each 4.4 acres of land in farms in 1870 and 1 for each 6.7 acres in 1880.

The striking increase in farm operators between 1890 and 1900, however, did not greatly affect land values, which increased only 38.9 per cent during the decade as compared with an increase of 95.5 per cent for the previous decade and 93.8 per cent for the decade following.

TABLE 7.—Average farm values per acre in the black land, by decades, since 1860.¹

Census year.	Average value of land and buildings per acre.	Average value of equipment per acre.	Average value of machinery per acre.	Average value of live stock per acre.
1860.....	\$5.57	\$3.48	\$0.31	\$3.17
1870.....	5.45	3.13	.28	2.85
1880.....	9.07	2.44	.48	1.96
1890.....	17.73	4.06	.61	3.45
1900.....	24.63	5.10	1.09	4.01
1910.....	47.74	7.41	1.51	5.90
1920.....	116.47	12.56	4.15	8.41

¹ Computed from U. S. Census data.

The increase in land values since 1900 has been 4.8 times as great as the increase during the four decades previous to that date. This phenomenal increase in the value of land occurred in a period when the size of the farm, the system of farming, and the number of farm operators practically remained unchanged.

This great increase in value was largely the result of competition for the purchase of the land's annual use value (present and prospective) without any significant change in the number of operators. This statement is supported by the fact that the bonus system (see p. 13) grew up during the decade from 1900 to 1910, although the

number of farm operators in the 19 black-land counties increased during this decade scarcely one-half of 1 per cent. On the other hand, land in farms increased 5.4 per cent.

That the rapid increase in the value of land in this area was closely related to the trend of the value of the products that were produced on the land is indicated by Figure 2, which shows the movement of land values, and the movement of the values of the corn, small grain, and cotton produced on the land.⁸ In general, the movement of the curves are quite close together after 1890, when the present system of agriculture became fairly well established. Were data on annual land values available the curves would probably move more closely together.

FIG. 2.—Movement of the average value of land per acre and of the prices of the principal products raised on farms, for the black land of Texas.

The rapid increase in land values during the past two decades is, therefore, primarily the results of an increase in the productive power of the land (measured in terms of dollars), which has reflected itself in higher prices for land. However, war-time prices of

⁸ The index figures of the value of the principal crops raised on the land were calculated as follows: The average annual farm prices of corn, oats, wheat, and cotton, as given by Yearbooks of the United States Department of Agriculture, were expressed in price per pound. These prices were weighted by the respective acreage of these crops grown in the black land as reported by each decennial United States Census, the acreages given by each census being used to weight prices for the four years preceding the census year, for the census year, and for the five years following the census year. These weighted figures for the price of each of the four crops were added together for each year, and their sum was the figure from which the index figure, on the value of products raised in the black land for each year, was calculated. The census year 1909 was taken as the base.

cotton have, no doubt, raised land values to levels that prewar prices would not justify, and if cotton prices return permanently to prewar levels, land prices may decline as they did following the Civil War.

LEGAL PHASES OF THE LAND PROBLEM.

The landlord's lien law is designed to protect the landlord against unscrupulous tenants who might try to get out of paying their debts to the landlord. It provides that the landlord has a prior lien, whether contractual or not, on the tenant's crop for advances furnished the tenant to make the crop, for any rent due on the year's crop, and for teams, tools, and feed furnished the tenant by the landlord.

The present homestead exemption law is based on a constitutional provision⁹ and exempts from forced sale a legally designated homestead of 200 acres, regardless of the value of the land and the improvements on it. No lien of any kind on the homestead is valid, except for taxes due on it, for the original purchase price, and for work and material used in putting permanent improvements on the place. Court interpretations of this law have been very rigid, and much opposition to its provisions has developed. However, repeated efforts to repeal or amend it have met with failure.¹⁰

The amount of value exempt at present is unquestionably much larger than was ever intended by those framing the provision in 1875. Two hundred acres of some of the farms surveyed were worth \$60,000, including the improvements on them. Yet, under the present law, every cent of this is exempt from seizure for debt, except as noted, and the land can not be used directly as a basis of credit to the owner. Such conditions are bound to affect the credit situation in the State, making money for legitimate expansion of the farm business expensive and difficult to obtain. Without doubt, a limitation on the value of the exempted homestead would eliminate undesirable results of the present law, without seriously impairing the employment of the principle of homestead exemption as a means of protection from injustice and economic oppression.

There has long been a public sentiment in the State against the ownership of farm land by nonresident aliens and by nonfarming corporations. Land can be acquired by such agencies only by foreclosure, for debt on the land, or as a settlement for other debts, and for judgment granted to the alien or corporation. But this land

⁹ See Article XVI, Secs. 50 and 51 of State Constitution, and for the law see The Complete Statutes of Texas of 1920, pp. 612-614.

¹⁰ An amendment to the constitutional provision for the exemption of the homestead was submitted to the voters of the State for ratification in 1919, but failed to pass by a small majority, although it had the support of the Farmers' Union officials, the Texas Farmers' Congress, the Federal Land Bank at Houston, officers of the Extension Department of the State A. and M. College, and most of the daily papers of the State.

must be disposed of within specified periods of time after possession is secured.¹¹

The antibonus law, as has been noted, was the result of agitation against the bonus system.¹²

This law makes it illegal to contract for or collect a rent *in excess of the value of one-third of the grain and one-fourth of the cotton raised on the land* where the landlord furnishes only land and improvements, and a rent *in excess of one-half of the crops* where the landlord furnishes land, improvements, and equipment. A tenant who is charged a rent in excess of this can collect from the landlord by legal proceedings double the amount of the rent, and, furthermore, the landlord loses his right to the landlord's prior lien.

Strict enforcement of this law would, no doubt, have far-reaching social effects in areas where the specified share rent yields a very low return on the value of the land, since it would tend to keep land values much lower than they would otherwise be. A legally prescribed and unvarying rent must be justified on social and not on economic grounds, for it does not provide for adjustment to meet changes in economic conditions that affect the amount of rent that equitably may be asked for the use of the land.

The factors of production have been classified as *land, equipment, and labor*—the human element of labor and management.¹³ In the black land the landlord furnishes only land, when renting his land on a one-third and one-fourth share basis, and the tenant furnishes the other two factors. The reward to land is rent, and the reward to the other factors is usually spoken of as interest on equipment and capital and labor income.

Variations in the values of the landlord's and tenant's respective contributions toward the operation of the farm would of necessity vary the share of the rewards that should go to either party. Consequently, such variations have a vital bearing on the problems of the determination of an equitable rent.

The total capital used on the average farm has varied considerably since 1860, but practically all of the increase in total farm value occurred during the past 20 years (see Table 8). The smallest average total value was reached in 1880, at the end of the decline

¹¹ See Complete Statutes of Texas, pp. 13-14 and 745. Aliens of countries which have treaties with the United States providing for the right of ownership in this country and aliens of countries which allow ownership rights to citizens of the United States are excepted from the provisions of this law.

¹² The extent to which the bonus system was practiced is not known, because the bonus provision of the rent contract was usually kept a secret and was very unpopular with renters in general (see Univ. of Tex. Bul. No. 21, 1915, Chapter VI). However, by 1910 state-wide attention was given to the subject, which culminated in the organization of the Renters' Union of America in 1911. The subject of rent and land problems in general became the main issue for the gubernatorial campaign of 1914, and the successful candidate was elected mainly because of his advocacy of an antibonus law.

¹³ See Chapters IX, X, and XI of Taylor's "Agricultural Economics."

in total farm value which was caused mainly by a reduction in the size of the farm.

TABLE 8.—*Total value of the average black land farm and distribution of this value, by decades, since 1860.*¹

Census year.	Average acres per farm.	Average total farm value.	Per cent of farm value in land and buildings.	Per cent of farm value in equipment.	Per cent of farm value in machinery.	Per cent of farm value in live stock.
1860.....	533.3	\$4,860	61.5	38.5	3.5	35.0
1870.....	225.7	1,923	63.9	36.1	2.6	33.5
1880.....	133.1	1,532	78.8	21.2	4.2	17.0
1890.....	114.3	2,493	81.4	18.6	2.8	15.8
1900.....	91.8	2,730	82.8	17.2	3.7	13.5
1910.....	96.0	5,306	86.6	13.4	2.7	10.7
1920.....	90.6	11,694	90.3	9.7	3.2	6.5

¹ Computed from United States Census data.

FIG. 3.—Movement of the value of land, equipment, and labor used on the average black land farm, by decades since 1860.

Prior to 1890 the size of the farm and the system of farming changed so radically that the actual and relative amounts of capital in land and buildings and in equipment were greatly affected. However, since 1890 farm values have been affected very little by changes in size of farm and in the system of farming, and land values have gradually and consistently increased in proportion to equipment values. This increase possibly indicates to a certain extent the relative future trend of the values of equipment and land if the present system of farming is maintained.

If equipment value were the only value contributed to the farm business by the tenant, an equitable adjustment of rents would have

necessitated a gradual increase in rents each decade since 1880—provided none of the increase in land values was speculative in nature. But the value of the labor, management, and risk contributed by the tenant to the farm business are relatively much greater than the value of his contribution in equipment. Consequently, equipment and land values alone do not constitute a basis for an equitable adjustment of rent.

Striking variations in the relative values of the factors of production on the average black-land farm have occurred since 1860. These variations are shown in Figure 3. Changes in the size and system of agriculture before 1890, as stated above, influenced the variations in both the actual and relative values of the factors of production, and for this reason 1890 was taken as the base for the index figures from which the graph was made.¹⁴ During these changes rent has not changed, except as price levels alter the value of rent in dollars, for the one-third and one-fourth share rent has been the customary rent since the early days of renting.¹⁵

Equitable rent adjustment must be based on a fairly accurate valuation of the contributions furnished respectively by landlord and tenant, and since these values vary greatly, it is not reasonable to suppose that a set share rent, such as is legalized in the antibonus law, can possibly adjust itself to these variations in the value of the factors of production. This adjustment can only be accomplished by a careful and scientific appraisal of the value of these factors as a basis for apportionment of the rewards of the farm business.¹⁶

ECONOMIC ASPECTS OF THE FORMS OF TENURE.

FARM ORGANIZATION.

For the discussion which follows, of the forms of tenure, operators are classified as (1) *share croppers*, (2) *share tenants*, (3) *owners*

¹⁴ The index numbers on which graphs are based are calculated as follows: The index numbers of land and equipment values per farm were calculated from data given by decades in Table 8, p. 14. The index figures on the amount of labor used on the average farm were calculated by finding the total country population in the 19 black-land counties by subtracting from the total population the population living within incorporated cities and towns. The ratio of the number of people engaged in agricultural pursuits to the country population in the State as a whole was then applied to the total country population of the black land, which gave the estimated number engaged in agricultural pursuits in the black land. This figure for each decade divided by the number of farms for the decade gave the following average number of people engaged in agricultural pursuits per farm: 1860, 4.16; 1870, 3.67; 1880, 3.32; 1890, 2.25; 1900, 2.18; 1910, 2.11; 1920, 2.04. The average number of persons per farm engaged in agricultural pursuits was weighted by the average wage paid farm labor, other than harvest labor (see U. S. Bureau of Statistics Bulletin 79), which gave the final figures on which the index figures for labor were based.

¹⁵ See "Texas the Home of the Immigrant from Everywhere," Texas Bureau of Immigration Bulletin of 1873.

¹⁶ Prof. William E. Leonard, formerly of the University of Texas, has suggested a county rent board with official standing and with power to adjust rents. This seems to be an excellent plan for a more scientific adjustment of rents. See Univ. of Texas Bulletin No. 21, 1915, p. 123.

additional, or (4) *owner operators*.¹⁷ The term *owner* is used to include both owners additional and owner operators; and the term *tenant* is used to include both share croppers and share tenants.

Of the 368 farmers from whom data were taken, 192, or 52.2 per cent, were share tenants; 83, or 22.6 per cent, were owner operators; 65, or 17.7 per cent, were share croppers; 26, or 7 per cent, were owners additional; and 2, or 0.5 per cent, were cash tenants.¹⁸

SIZE AND VALUE OF FARMS OF DIFFERENT TENURE CLASSES.

The average size of the farms varied considerably with each form of tenure, as will be noted from Table 9. Share croppers, who had the smallest farms, had exactly half as many acres on the average as owner operators, who operated 118.2 acres each. Share tenants had only 14 acres less on the average than owner operators, while owners additional, who had the largest farms, operated 159.2 acres each.

TABLE 9.—Average size and value of farms and the distribution of farm values for the different tenure classes.

Present tenure class.	Number of operators.	Average acres per farm.	Average value per farm.				Average value per acre of—	
			Total farm value.	Value of land and buildings.	Value of equipment.	Value of buildings.	Farm land without buildings.	Equipment.
Share croppers.....	65	59.1	\$10,945	\$9,841	\$1,104	\$703	\$155	\$19.00
Share tenants.....	194	104.2	19,162	16,489	2,675	1,141	148	26.00
Owners additional.....	26	159.2	26,747	22,995	3,752	2,061	132	24.00
Owner operators.....	83	118.2	23,408	19,078	3,330	2,215	143	28.00
All operators.....	368	103.3	18,981	16,359	2,622	1,374	145	25.40

¹ Includes two cash tenants.

As a class, owner operators are better able than any other tenure class to increase the size of their operated farms, for their average net worth is more than twice that of owners additional and more than eight times the average wealth of share tenants. The fact is

¹⁷ *Owner operators* own all the land they operate. *Owners additional* own part and rent part of the land they operate. *Share tenants* rent all the land they operate and furnish all labor and equipment used on their farms, and as a rule receive two-thirds of the grain and three-fourths of the cotton raised. *Share croppers* rent all their land and furnish only the labor used in operating their farms, the equipment, feed, repairs, etc., being furnished by the landlord and the crops being shared equally. There are two distinct classes of croppers in the black land, these classes being known locally as *half renters* and as *half hands*. The half renter usually gets all the land he can operate and does little work for his landlord. The half hand is allowed only enough land to "hold" him during the year, the aim of the landlord being to use the half hand most of the time working on his (the landlord's) farm. The cropper farm, therefore, is frequently a part of a larger unit of farm organization and is discussed throughout this bulletin from the tenure and operator viewpoint rather than from the organization viewpoint.

¹⁸ These two cash tenants were included with the data on share tenants throughout the bulletin.

that owing to advanced age, many owner operators are gradually decreasing the size of their farms as they approach retirement time. This class of farmers has been called "retreating farmers."¹⁹

The average size of share croppers' farms is small as a result of the fact that probably half of them had less land than they needed in order to utilize their entire time.²⁰ Owners additional as a class are successful farmers who are striving to expand their farm business, and do so by renting additional land.

The average total value of the farm and its equipment for all tenure classes was \$18,981; and the relative values of farms for different forms of tenure have the same order as the order of the sizes of farms for the different tenure classes (see Table 9). However, it will be noted that owner-operator farms have relatively a much higher value in proportion to size than do the farms of owners additional.

That the average value of farms of owner operators is relatively large is due in part to the fact that they have more than twice the wealth of owners additional (see Table 22) and can have and do have better houses and farm equipment. Furthermore, many of the owner operators are decreasing the size of their farms as they approach retirement age without reducing proportionately their building and equipment value.

An interesting fact brought out in connection with equipment value per acre is that share tenants are almost as well supplied with equipment as are owner operators. One of the serious drawbacks of the one-crop system practiced in the region is that the tenant can not profitably invest all his surplus savings in his farm business, and the resultant tendency for some tenants to overinvest in equipment probably explains the relatively high average equipment value for them as a class.

The data on value of buildings show strikingly one of the evils of tenancy in this area. The average value of buildings on share-tenant farms is about one-half, and on share-cropper farms less than one-third of the average value of buildings on the farms of owner operators. Most of this difference is accounted for in the difference in value of dwellings (see Table 29).

However, there is a lack of buildings for housing machinery on the farms of all tenure classes. Investigation on this question revealed the facts that (of those reporting) 120 tenants had no buildings for the protection of machinery from the weather, 10 had part of their machinery under shed, and 16 had all machinery under shed. Forty-five owners had no machinery under shed, 9 had part of it

¹⁹ See Wisconsin Agricultural Experiment Station Research Bulletin No. 44, p. 6.

²⁰ Eighteen of the 65 croppers had 30 acres or less.

under shed, while 21 had all of their machinery protected from the weather.

Of the various tenure classes, share croppers farm the most valuable land (after deducting building values). Furthermore, the land farmed by share tenants is higher in price than the land farmed by either of the owner classes. This situation, common throughout the cotton belt, is not the result of competition between operators, the most efficient getting the best land, but it is rather the result of competition between systems of farming, with the operators who will grow the most cotton getting the best land. This is largely due to the fact that the owner believes cotton yields him the highest net returns, and to the fact that when cotton is raised the owner can easily ascertain what his share of the crop is and can easily market it.

OTHER FARMS OWNED BY OPERATORS.

Owners who have farms they do not operate usually have acquired the additional farms as investments, or in order to have land for children who are growing up (Table 10). A larger proportion of owner operators than of any tenure class own farms they do not operate; over one-third of all in this class own additional farms, as compared with about one-fifth of owners additional and one-eighth of share tenants. Furthermore, the average owner operator's equity in farms owned but not operated is nearly twice as large as the average equity of owners' additional, and more than four times as much as the average equity of tenants in the farms they own but do not operate.

Black-land tenants usually say that the land in the region is priced higher than its productive capacity warrants, and that if they buy they will buy where land is cheaper. Evidently, this belief has influenced the purchase of farms owned by share tenants, for the average value per acre of the land owned by share tenants was \$74, while the average value of the land they operated was \$175 per acre.

TABLE 10.—*Operators who own farms they do not operate, and the size, value, and equity in these farms, for the different classes of tenure.*

Present tenure status.	Number of operators who owned other farms.	Per cent of all operators in tenure class.	Number of other farms.	Average acres per operator.	Average value per operator.	Average equity per operator.	Per cent of value in equity.	Average age of operator.
Share croppers.....	2	3.1	2	29.0	\$1,350	\$1,200	88.8	48
Share tenants.....	25	12.8	27	115.2	8,559	5,882	68.7	43
Owners, additional..	5	19.2	8	207.6	20,726	13,274	64.4	44
Owner operators.....	29	34.9	53	209.5	26,589	25,515	95.9	49

THE CROPS GROWN.

The average black-land farmer, regardless of his tenure, is a one-crop farmer; for owners had about six-tenths, share tenants over two-thirds, and share croppers almost four-fifths of all their crop land in cotton. Moreover, approximately two-thirds of the total area of the 368 farms was in cotton in 1919 (Table 11).

TABLE 11.—*Proportion of all farm land in crops, proportion of all crop land in various crops, and operators classified by the per cent of all crop land planted to cotton, by tenure classes for 368 operators.*

Present tenure status.	Per cent of all farm land in crops.	Per cent of all crop land in—				Per cent of all operators in each tenure group whose per cent of cotton acreage to all crop acreage is—			
		Cotton.	Corn.	Small grain.	Other crops.	90 per cent and above.	75 to 90 per cent.	50 to 75 per cent.	Below 50 per cent.
Share croppers.....	92.2	78.7	13.4	5.5	2.4	52.3	24.6	20.0	3.1
Share tenants.....	91.3	67.1	12.9	15.9	4.1	1.6	29.0	59.6	9.8
Owners additional.....	85.7	56.1	12.1	27.4	4.4	-----	11.6	57.8	30.8
Owner operators.....	85.9	62.5	16.0	16.2	5.3	-----	13.4	64.6	22.0
All operators.....	87.6	66.0	13.6	16.1	4.3	10.1	23.5	53.6	12.8

The extent of the dependence that the black-land farmer places in cotton is not adequately shown by these data. Corn is grown primarily to feed live stock used in producing cotton, and in this sense it practically becomes a cost in the production of cotton. Because this policy so largely governs the growing of corn, the percentage of corn to all crops varies but little with the different tenure classes.

Over half of all croppers have 90 per cent or more of their crop area in cotton. And, while practically none of the operators in the other tenure classes go to this extreme, only 15 per cent of them have less than 50 per cent of their crops in cotton.

In this connection it is well to note that the conservation of soil fertility is rarely considered by operators in any of the tenure classes. However, it will be seen that owners probably do more to conserve soil fertility than do tenants, for owners alternate grain crops with cotton to a greater extent than do tenants.

RENT CONTRACTS AND RELATION BETWEEN LANDLORD AND TENANT.

Customary renting practice forms the basis for practically all renting contracts. In fact, nearly all rent contracts are nothing more than an agreement between the landlord and tenant that "customary renting practices" shall be followed. Such a contract, no doubt, seems indefinite and broad in its interpretation, but customary

practices are quite well known and there is less friction due to misunderstanding between landlords and tenants than one would expect.

The principal objection to this method of renting is that it does not induce changes in the rent contract as the tenant develops and as he and his landlord learn to appreciate each other better through experience.²¹ Written contracts would probably induce a greater care in working out the details to fit changed conditions.

Data on the details of the rent contracts of 259 tenants are given in Table 12. Of those reporting on the question, only 13.5 per cent had written contracts. Only 1 share cropper out of 61 reporting had a written contract. Only 4 contracts out of a total of 239 ran for more than a year.

TABLE 12.—*Provision of rent contracts on 259 rented farms.*¹

Tenure class.	Nature of contract.				Duration of contract.				Subrenting privileges.		
	Verbal.		Written.		One year.		More than one year.		Number who were allowed to subrent.	Number who were not allowed to subrent.	Number not reporting.
	Number.	Per cent of those reporting.	Number.	Per cent of those reporting.	Number.	Per cent of those reporting.	Number.	Per cent of those reporting.			
Share croppers.....	60	96.8	1	1.6	59	98.3	1	1.7	10	19	36
Share tenants.....	155	82.4	25	13.3	168	98.8	2	1.2	67	41	85
Owners additional.....	2	20.0	8	80.0	8	88.9	1	11.1	5	2	13

¹ Frequently no dependable information on certain points could be obtained, hence the number of operators on which the data in this table are based varies considerably.

The privilege of subrenting is not usually allowed, and frequently is not mentioned in contracts, since a provision in the landlord's lien law makes it illegal to subrent land without the landlord's consent. It will be seen, however, that a greater proportion of share tenants than of share croppers are allowed to subrent.

Thirty-six farms were found where the landlord had agreed to pay the tenant for improvements put on the place, provided the landlord gave his permission to have the improvements put on the farm. Usually it was agreed that when the tenant left the farm the landlord would buy the improvements himself or require the tenant following to buy them. This provision would unquestionably be desirable for most rent contracts. Landlords frequently complain that they can not repair old improvements or put new ones on the

²¹ Many cases were found where absolutely nothing as to details of rent contracts was said for years, the tenant simply asking his landlord, some time in the fall, if it were agreeable to remain on the farm another year.

farm, because their returns from the farm do not justify such expenditures, or because tenants will not take care of these improvements.

If legal provision were made for the compensation of tenants for improvements put on with the landlord's consent, the present problem of tenant housing would be less acute, landlords would not so often be accused of lack of interest in this problem, and the mutual interest in the farm arising from a joint ownership of improvements would make for a more stable and reliable tenantry. Moreover, with such a provision, tenants would be able to invest their savings in the farm business, which is possible only to a limited extent with the prevailing crop and renting system. This lack of opportunity to accumulate by gradually increasing their investment in the farm constitutes one of the most serious drawbacks to the tenure and financial progress of the tenant in this area.

The amount of supervision given the tenant by the landlord is largely dependent on the location of the landlord's residence with reference to the rented land. Data on the residence of the landlords, given in Table 13, show that very few of the landlords of share croppers live outside of the county, and that 42.2 per cent live near the farm of the cropper. On the other hand, only one out of eight landlords of share tenants live near the tenant's farm, and over one-fifth of them live in another county.

TABLE 13.—*Residence of landlords of share croppers and share tenants.*

Class of tenants.	Landlords who live near tenant farm.		Landlords who live in same county.		Landlords who not live in same county.	
	Number.	Per cent of all reporting.	Number.	Per cent of all reporting.	Number.	Per cent of all reporting.
Share croppers.....	27	42.2	31	48.4	6	9.4
Share tenants.....	23	12.2	127	67.6	38	20.2

The recapitulations for the tax rolls of Bell, Hill, and McLennan Counties for 1919 show that only 8.4 per cent of all the land outside of incorporated cities and towns was owned by nonresidents of the county in which the land was located. Only 17 of the nonresidential landowners in Bell County in 1919 lived outside of Texas, and none lived outside of the United States.

It will be noted from Table 14 that about half of all share croppers were subject to supervision by landlords. The extent of this supervision is in a way indicated by the average number of visits the landlord makes to the farm during the year, namely, 85 for each of the

17 share croppers who reported on this question.²² Share tenants receive very little close supervision. Nine out of each ten said they were given no supervision by their landlords, and the average number of visits by landlords was only 5 during the year.

TABLE 14.—*Supervision of tenants by landlords.*

Tenure class.	Operators whose landlords give no supervision.		Operators whose landlords give "little" supervision.		Operators whose landlords give close supervision. ¹		Visits of landlord per year.	
	Number.	Per cent of those reporting.	Number.	Per cent of those reporting.	Number.	Per cent of those reporting.	Number operators reporting.	Average number of visits per operator.
Croppers.....	30	51.7	5	8.6	23	39.7	17	85
Tenants.....	161	91.6	8	4.5	7	3.9	100	5
Owners additional...	9	100.0					3	1.7

¹ "Close supervision" as here used means close attention and direction as to how and when the details of farm work should be done; also "no supervision" does not imply that the landlord does not keep in touch with the farm work, but, rather, that he leaves the tenant to work out the execution of the details of farm operations.

This great difference between the amounts of supervision given by landlords of the two renting classes accounts in part for the social stigma popularly placed on the cropper stage. It is unfortunate that conditions foster this dislike for the cropper stage, for cropper farming can be made to exercise a useful and desirable function in the tenure system of the black land. It offers the young, inexperienced man, who has little capital, an opportunity to assume part of the risks involved in operating a farm, with a good chance of receiving in return an increased reward over farm wages as payment for assuming part of the responsibilities and risks of an operator. If landlords were more careful about the nature of their supervision and granted more privileges as regards raising a garden, and keeping poultry, and a cow, they would do much to obviate the popular dislike for the cropper stage.

Operators were asked if they noted any changes taking place in renting practices. Of 168 operators answering the question, 126 noticed no changes, which probably means a lack of observatation on the part of most of the operators. Many, however, believe that the bonus system was on the decline and that it was getting easier to obtain desirable share-tenant contracts from the viewpoint of the tenants.

²² It should be borne in mind that the average man does not like to answer questions of this nature, and for this reason answers were not secured from all operators. Furthermore, some of the answers secured were possibly misleading, and where there was doubt concerning the answer given and no verification could be had it was discarded.

INCOMES FOR THE DIFFERENT TENURE CLASSES.

COMPARATIVE ECONOMIC CONDITION OF AREA IN 1919.

Before discussing the incomes earned in 1919 on the farms surveyed it is well to consider comparative data on the general economic conditions prevailing in the black land during that year. The year was characterized by unusually high prices of products, especially cotton, by a yield of cotton that was much below the average for the black land, and by unusually high costs of production. Furthermore, the fall of the year was unusually wet and the picking of cotton was thus delayed to a considerable extent, resulting in an inferior grade of cotton in most cases.

The total production of cotton for the 19 black-land counties in 1919 was 89.1 per cent of the average production for the 20 years, 1900 to 1919, inclusive.²³

The production of cotton for the 6 counties in which most of the survey data were taken was 74.4 per cent of the 20-year average production for these counties. Without doubt the acreage of cotton had not been reduced after 1916 (Census data show an increase of 11.8 per cent from 1910 to 1920), for the high prices prevailing from then until 1920 did much to stimulate the farmer to plant more cotton, although the low yields during these years tended to prevent the realization of profits that otherwise might have resulted from high prices. The average of monthly prices of cotton received by producers for 1919 was 29.6 cents per pound, the highest price received during the 9 years from 1911 to 1919, inclusive.²⁴

The economic situation of the black-land farmer in 1919 is further shown in Figure 4. While the trend of prices of articles which the farmer bought and the trend of farm wages were steadily and sharply upward after 1916, the upward trend of gross receipts from cotton (represented by the total value of cotton produced in Ellis and Williamson Counties) was relatively much less abrupt.

It is doubtful, therefore, if the average income of farmers for whom survey data were taken was larger than usual in 1919, since the cotton crop on which they so largely depend was less than three-fourths of an average crop, and at the same time all costs were unusually high and weather conditions unfavorable.

²³ Figures on total cotton produced are computed from Census publications which report the total number of bales ginned annually for each county. The figures on production are on the basis of 500-pound bale equivalents.

²⁴ The average prices received by producers for their cotton during these years were as follows: 1911, 12.7 cents; 1912, 10.6 cents; 1913, 12 cents; 1914, 10.6 cents; 1915, 8.9 cents; 1916, 13.5 cents; 1917, 21.5 cents; 1918, 29.5 cents; 1919, 29.6 cents. (From December, 1920, Crop Reporter, U. S. Bureau of Crop Estimates, p. 144.)

FARM INCOMES AND NET RETURNS ON CAPITAL.

The *farm income* is the difference between receipts and expenses.²⁵ If from this farm income we deduct the value of the operator's labor and add to the remainder the value of the family living furnished by the farm, we get a figure that represents the net return to the farm and its equipment for their services in production, regardless of what portion of this return goes to the landlord or to the tenant. In other words, this figure represents the net increase of wealth attributable to the farm, irrespective of tenure.²⁶ The income for share tenants' farms, when figured in this way, compares favorably

FIG. 4.—Movement of the prices of articles farmers buy, of farm wages, and of the value of cotton raised in Ellis and Williamson Counties, Tex. (5-year average 1909–13 equals 100).

with the income of the farms of the two owner classes, while the income from cropper farms is only about two-thirds as large as the income from farms of the other tenure classes.

²⁵ Incomes were not calculated by the usual receipts and expense method, but by taking inventories of the farm business at the beginning and the end of the year. To the difference between inventories was added any sum taken out of the farm business and put in outside enterprises, and the sum of all family living expenses. From this sum was taken receipts from sources outside of the farm business. This gave a basic figure from which the various income figures were calculated.

²⁶ It will be seen by comparing items 1 and 2 of Table 15 that the value of the operator's labor is not as great as the value of family living furnished by the farm, hence item 2, which includes the family living furnished by the farm but does not include the value of the operator's labor on the farm, represents the net return of the farm more nearly than item 1. Items 1 and 2, however, include the value of the operator's management and the value of uninsured risk; that is, nothing is deducted for these. The value of family labor on farm is considered a farm expense.

TABLE 15.—*Analysis of incomes of 343 black-land farms and farm operators, by tenure classes.*

Item of income.	For 62 share croppers.	For 179 share tenants.	For 26 owners addi- tional.	For 76 owner- operators.	For 343 operators of all tenure classes.
1. Farm income ¹	\$1,217	\$1,678	\$1,609	\$1,757	\$1,607
2. Farm income plus value of family living furnished by farm and minus value of operator's labor ¹	1,255	1,812	1,866	1,911	1,734
3. Ratio of net return to the total farm capital ²	13.4	11.4	8.2	10.3	11.3
4. Operator's labor income (interest charged on all farm capital at 7½ per cent).....	528	702	—61	317	498
5. Operator's labor income, plus family living from farm (interest at 7½ per cent deducted).....	775	1,120	480	656	906
6. Operator's labor income plus family living from farm (interest on capital in equipment at 7½ per cent and on capital in land at 4½ per cent deducted).....	³ 775	³ 1,128	731	1,293	1,081
7. Operator's rate of net return on his share of farm capital.....	(⁴)	45.7	11.2	10.7	33.7
8. Landlord's rate of net return on his share of farm capital.....	6.6	5.6	7.2	.....	5.9
9. Actual disposable net income from labor of operator and family and from farm investment (interest and rent when paid out not included ⁵).....	1,094	1,513	1,646	2,429	1,649
10. The family's net accumulation of wealth for the year.....	149	291	213	613	327

¹ No interest on farm capital, whether borrowed or not, is deducted in these figures, and the data are based on the operated farm as a whole, regardless of the tenure of the operator. Each tenant or cropper farm is here considered a farm as defined by the Census. The value of family labor on farm is considered a farm expense.

² Calculated on the basis of item 2.

³ Since rent instead of interest is deducted in calculating the income of tenants, these figures are the same as item 5 above, except for share tenants, 36 of whom had \$31,824 invested in improvements on the farms they operated which caused their labor income to be increased \$8 on an average in item 6.

⁴ Croppers own no farm capital, hence no calculation was made for them.

⁵ In this figure no allowance is made for rent and interest on farm capital unless these are actually paid out. Therefore, the figure for an owner-operator whose farm is not mortgaged has no rent or interest on farm capital deducted, but for operators who actually paid either rent or interest, or both, these items were not included in the figure.

On the other hand, the ratio of net return to the capital invested in the cropper farm (item 3) was more than the ratio of net return to capital for any of the other tenure classes, and in this regard share tenant farms also exceeded the farms of owners. It would seem, therefore, that net social wealth is increased proportionally most when land is operated in the black land by tenants.²⁷ However, it should be remembered that material wealth is sometimes created at a loss to the intellectual, social, and political life of people; and, judging from the effects of tenancy on the education of tenants' children (see pp. 56-60), such losses would far outweigh any possible increase in social wealth that might result from an extension of tenancy in the black land.

The rate of net return on the capital invested in the farm can not well be used as an indication of the relative efficiency of the operators

²⁷ Tenant farms, as has been shown, have a higher percentage of their acreage in crops, a smaller proportion of farm capital in buildings, and no doubt less land is used in yards, dwelling sites, and other nonproductive purposes than is the case with farms operated by owners, tending to give a higher ratio of net return on the capital invested in the tenant farm. With this exception, however, it is doubtful if the less diversified farming of the tenant yields a greater net social gain on the capital invested over a long period of time than the more diversified farming of owners.

of the different tenure classes in this area. Considerations that are not of an economic nature influence operators differently. For example, some of the most efficient operators may not wish to grow large acreages in cotton, thus running the risk of being compelled to keep their children out of school to get it picked: and prefer to grow small grain on much of their land, even though their net return on capital is thereby made smaller.

The *operator's labor income*, as used in most farm-management surveys, is the net surplus left to the operator, for his labor and management, after deducting all farm expenses (including interest on the farm capital) from receipts, not including the family living furnished by the farm as a receipt. The labor income given under item 4, Table 15, conforms to the above definition, deducting interest at $7\frac{1}{2}$ per cent—the average interest paid for first mortgage loans on the farms surveyed.²⁸ In all cases where land was rented, the actual rent paid was deducted and not an assumed rate of interest on the estimated value of the land.

Item 5 is similar to item 4, except that the value of the family living is included as a receipt. And item 6 is the same as 5, except that on farms operated by owners the interest on land value deducted was $4\frac{1}{2}$ per cent, which was the average return on the capital invested in cash-rented farms, in 7 black-land counties in 1919.²⁹

Item 6 represents more correctly the net value that the farmer receives for his farm labor and management than do either of the other two items on labor income.³⁰ It will be noted that when a flat rate of $7\frac{1}{2}$ per cent is deducted to arrive at labor income, both tenant classes make a better showing than either of the owner classes. The 26 owners additional have the lowest average labor income—averaging a loss of \$61 each for their labor and management. Yet in this calculation the interest deducted on the value of the land was not in excess

²⁸ This is the average weighted interest rate on first mortgages, weighted by the total amount of loans under the different interest rates.

²⁹ This rate of return on cash-rented farms is based on compilations made from schedules of the 1919 census on 331 cash-rented farms in Collin, Falls, Lamar, Limestone, Milam, Navarro, and Travis Counties. This ratio does not represent the net return to the landlord, as taxes, upkeep, and other expenses are not deducted.

³⁰ The present price of land is the sum of a number of different values. It represents use values in production, the value of anticipated increases in future income-yielding power, and the value of the social, community, and home uses which go with the ownership of the farm. The man who buys a farm gets all values attaching to the ownership of the land, but the renter gets only its present use values (including in some cases part or all of the home, social, and community values), and should pay for these only. For this reason the cost of land, in calculating labor income, should be the cost of its present uses. Since a current rate of interest on the capital invested in land and buildings covers all values that go to make up the price of land, it may be too much to charge for the use of the land for the year's operation. Share rent, besides paying for the use of the land for the year, covers part of the risk in the business that the landlord assumes, but the landlord assumes comparatively little risk when he rents for cash. On account of these conditions it is believed that cash rent offers the *best available figure* as a basis for calculating the cost of land as a factor of production.

of the interest paid in the region for loans under reasonably favorable conditions.

In practice the operator does not calculate his labor income in this manner. He knows that what he receives from the farm for family living materially reduces his family expenses, correspondingly increasing his reward for labor and management. Furthermore, if he is an owner, knowing that land values have steadily risen in the past, he assumes that this rise in the future will supplement the low return that his land yields from its present use. Moreover, he frequently is influenced to pay more for his farm than he otherwise would pay, because he desires to own his home. Consequently, part of the land cost is considered part of his family expenses. In short, he does not charge all of the present cost of land to its present operating use. Hence, the landowner realizes that he has not in any sense lowered his power to earn wealth by becoming an owner; he knows that he has bought new personal satisfactions and future incomes which he thinks are worth the price paid for them.

Thus, when these values are not deducted from the net surplus which is the reward of the operator for his work and management (see item 6) the result is quite different from that shown in item 4. The average labor income of owner operators increased from \$317 to \$1,293, and the increase for the labor income of owners' additional income is from minus \$61 to plus \$731.

The average rate of net return on the investment of the share tenant in the farm business is more than four times as large as the rate of return to owners on their investment (see item 7). This situation is quite generally realized, and is a strong stimulus to the development of tenancy in the area.

The pecuniary considerations responsible for this tendency may be further shown by presenting the things that would confront a share tenant who contemplated buying the average farm operated by the share tenants interviewed. The average value of the farms operated by share tenants was \$16,489 (see Table 9), and the average net rent paid to the landlord in 1919 was \$924.³¹ Assuming that the tenant could pay one-third of the price of the farm in cash,³² the interest at $7\frac{1}{2}$ per cent on the remainder would amount to \$825 for the year, leaving a remainder over rent of \$99 to apply as payment for the interest on the cash payment and upkeep. Interest on the cash payment would amount to \$412, and after taking the remainder of \$99 from this, the tenant would be short \$313 as an owner of the place he rented in 1919. For this \$313 he would have to get

³¹ Net rent as used here is the gross rent from the land less taxes and upkeep.

³² The approximate per cent paid in cash by owners who have bought since 1900. (See Table 20.)

his reward from the privileges of owning the farm, including the right to all increases in land value and to any intangible values the tenant may place on ownership.

Share tenancy, therefore, yields the tenant a greater immediate cash return than he could earn with an equivalent expenditure of cash and labor as an owner operator, and this condition tends to increase the period of tenancy of operators, and thus the per cent of tenancy. A rigid enforcement of the antibonus law, if the legally specified share is less than the net return attributable to land after all expenses are deducted (not including rent to be paid as an expense), would tend to make land values lower than they would be were there no such law, and the enforcement of the law under the conditions outlined would, without doubt, tend to lessen the stimulus to tenancy mentioned above.

Land owners in the black land have frequently said their rents were too small to yield them a return on the capital invested in the land equivalent to the return yielded on the same capital if it were put in equally safe alternate investments. In 1919, a year favorable to landlords, the landlord's net return on his farm capital was less for both tenant classes than the average first mortgage loan rate. The average rate of net return to the landlords on share-tenant farms was 5.6 per cent and on cropper farms 6.6 per cent (see item 8, Table 15).

However, if the returns of the landlord from rent in the past were supplemented by his net returns from increases in land values it would be found that his total net gain as a land owner has been very attractive. By reference to data in Table 7, it will be noted that land values in the black land as a whole, including improvements placed on the land, have increased each decade since 1870, and by increases varying from 39 to 144 per cent.

In order to give the proper emphasis to this important phase of the tenure problem, data on each land purchase were taken from all operators interviewed who had bought land in the black land. These data are summarized in Table 16. In each individual case the increase or decrease in land values was calculated by deducting the value of improvements (buildings, fences, drainage, clearing, etc.) from the gross increase or decrease. All increases are calculated in terms of their equivalent in interest compounded annually on the original investment, which is, in reality, counting the original investment and the accumulated increase as reinvested capital for each year.

It will be noted that only 3.7 per cent of all purchases were made at a loss, and that these places were usually kept for a very short time. Practically no losses were recorded on purchases where the

land was kept an average of over three years. Therefore, land investment has been exceptionally safe to these people.

TABLE 16.—*Changes in the value of land bought in the black land by the operators interviewed, expressed in equivalents of interest compounded annually on the original investment.*

Changes in land values equivalent to an annual compound interest of—	Land bought and sold.						Land bought and still owned.					
	At a gain.			At a loss.			At a gain.			At a loss.		
	Number of cases.	Aggregate years held.	Average compound interest.	Number of cases.	Aggregate years held.	Average compound interest.	Number of cases.	Aggregate years held.	Average compound interest.	Number of cases.	Aggregate years held.	Average compound interest.
0 per cent.....	11	28	.....	.....	.....	.....	4	6	.....	.....	.....	.....
Above 0 and to 4 per cent..	5	25	3.5	1	5	2.0	23	266	2.6	3	32	0.7
Above 4 and to 8 per cent..	19	118	6.4	3	7	6.0	72	1,148	6.5	.....	.....	.....
Above 8 and to 12 per cent..	19	132	10.5	.....	.....	.....	48	643	9.9	.....	.....	.....
Above 12 and to 16 per cent..	8	32	14.9	1	1	15.0	11	77	14.2	.....	.....	.....
Above 16 and to 20 per cent..	6	19	17.8	1	3	17.0	4	28	17.0	.....	.....	.....
Above 20 and to 25 per cent..	7	21	23.3	1	1	22.0	8	54	22.5	.....	.....	.....
Above 25 per cent.....	7	12	39.6	.....	.....	.....	5	11	36.6	.....	.....	.....
Total number of cases.....	82	.....	.....	7	.....	.....	175	.....	.....	3	.....	.....

The average weighted per cent of annual net increase in land values³³ calculated annually, for *land bought and then sold*, was 9 per cent, and for the land that was bought and held, 7.9 per cent. In other words, the increase in land values was the equivalent of an annually compounded interest on the original investments of 9 and 7.9 per cent. The net return from these 267 purchases of land from increases in its value alone, therefore, has been enough to make the land an attractive and safe investment, to say nothing of the return in rents.

General realization of these facts has, without doubt, been a most potent influence in the rapid increase in land value during the last 20 years. Whether or not it has resulted in speculative inflation of land values is impossible to say from available data. However, unless present price levels in general are maintained, there is the possibility of much loss and social unrest in the present situation.

The farmer's net surplus wealth accumulated during the year depends on the amounts of his capital that he owns, the labor that he himself can furnish, and the amounts of these he must hire. The actual *disposable incomes* of operators, in which interest and wages are deducted only when actually paid, are shown in item 9, Table 15. These figures include all value received by the farmer from the labor of himself or family on and off the farm, and values of family living furnished by the farm.

³³ The rates of increase were weighted by the aggregate years the land was owned as given for each group in Table 16.

The disposable income varies from \$1,094 for croppers to \$2,429 for owner operators—a difference of \$1,335. This difference exceeds the difference in the labor incomes of the two classes by \$817 (compare with item 6), which is largely the results of the earning power of the greater amount of wealth of the latter class. The cropper pays for all his capital and has a little less than half as much in use as has the owner operator (see Table 9). Owners additional had only a slightly larger disposable income than share tenants, although the former had 4.1 times as much net wealth as share tenants had, which is largely explained by the conditions already discussed that make the share-tenancy stage relatively more profitable to the average tenant than are the owner stages (see p. 27).

Out of this disposable income the operator had to pay all family expenses, and the remainder (item 10) represents the net accumulation of wealth for the year from the farming efforts of the operator and his family.³⁴ The cropper saved 13.6 per cent of his disposable income; the share tenant, 19.2 per cent; the owner additional, 12.9 per cent; and the owner-operator, 25.2 per cent. It will be noted that the larger the disposable income the greater the amount that was spent for family living, but that the per cent spent for family living decreases with the increase of disposable incomes, except with owners additional.

The actual net accumulation of wealth of the average family in 1919 was \$149 for croppers, \$291 for tenants, \$213 for owners additional, and \$613 for owner-operators. For all except the latter class these figures may seem somewhat small. In fact, it is probable that they are smaller than usual for reasons stated at the beginning of the discussions of incomes.

If the average share tenant should buy the farm he operated in 1919 on the assurance of his 1919 net accumulation of wealth, how long would it require to pay for the farm and its equipment? Assuming interest on farm indebtedness to be $5\frac{1}{2}$ per cent and that the rent paid as a renter equals interest on the total farm value, and assuming further that, as farm indebtedness is lessened, the resultant saving in interest is applied to the payment of principal, it would require the tenant nearly 28 years to pay completely for his farm and equipment from his \$291 annual accumulation of wealth. If the tenant were required to pay in cash at least one-third of the price of the farm and equipment before he could buy he would have to farm more than 13 years in order to complete payment.

³⁴ No wealth received from sources outside of the farm business, except for the labor done off the farm by the operator and his family, is included in these figures.

AGRICULTURAL HISTORY OF FARM OPERATORS.

TENURE HISTORY.

TENURE STAGES OF ALL OPERATORS.

Table 17 shows the percentage of all operators who passed through each of the several tenure stages or were engaged in other occupations, and the aggregate time spent in these stages since the operators began for themselves. These data show the relative importance of the different stages in the tenure history of the operators.

One-third of all the farm operators, as will be seen from Table 17, had been in other occupations than farming; but the per cent of aggregate years spent in other occupations was comparatively small, being 7.9 per cent of the aggregate time that all operators had been working for themselves.

Those entering other occupations generally fall into two classes: (1) Operators who had been fairly successful in other occupations and had followed them for a considerable number of years, and (2) operators who were not very successful as farmers and who voluntarily entered other occupations after having been farm operators or who were compelled to do so because of tenure reversals. Most of the men who have tried other occupations fall within the last class, and it is the influence of this class that makes the average age of entry to other occupations higher than the age of beginning as a farm hand and as a share tenant.

TABLE 17.—How the 368 operators have been employed since they began to work for themselves.

	In other occupations.	Farm hands.	Share croppers.	Share tenants.	Cash tenants.	Owners additional.	Owner operators.
Per cent of all operators who have been	32.5	51.8	41.0	85.8	7.4	10.6	35.1
Per cent of aggregate years spent in each stage	7.9	14.2	10.6	43.8	.9	2.4	20.3
Average age of operators at time of first entering each stage....	26	21	27	25	34	35	32
Average years spent in each stage	6	5	5	10	2	4	11

The farm-hand stage is used largely as a beginning stage for young unmarried men. The average age of entry into this stage was 21—less than the age of entry into any other stage, and 72 per cent of the total time spent in this stage was spent while the operators were single. However, share croppers, to a greater extent than any other tenure group, have been reversed to the hired-man stage, and have, consequently, spent more time after marriage in the farm-hand stage than have the members of the other tenure groups.

The share-cropper stage is third in importance, considered from the standpoint of the number who have been in the stage, and fourth, considered from the standpoint of the per cent of time spent in it. The average age of entry into the stage is materially increased by the fact that 46 out of the 151 men who had at some time been croppers were croppers for the first time by reversal from a higher stage, entering the cropper stage at an average age of 32. The remaining 105 operators who had been croppers entered at an average age of 25, the same average age at which operators entered the share-tenant stage.

In point of number of operators involved and time spent in the stage the share-tenant stage has been by far the most important in the tenure history of the operators, nearly 86 per cent of them having been share tenants, spending thus 44 per cent of the aggregate time worked by all operators since they began farming for themselves. Operators who had been share tenants spent on an average 10 years each as share tenants, which was twice the time operators had farmed as croppers.

The data on the cash-tenant stage show how unimportant this stage has been in the tenure history of the individuals, since not quite 1 per cent of the aggregate time that operators had been working for themselves had been spent as cash tenants.

The owner-additional stage, also, had been used by but few operators, yet this stage is becoming increasingly important, and is already of much greater importance than the data would indicate. Of the 40 operators who have been owners additional, 32 have used the stage in the past 5 years, 3 used it from 5 to 10 years ago, and only 5 used it 10 years or more ago.

The important function of this stage is that of enabling the man who owns land to expand his business to fit his developing capacity as an operator when he can not find adjoining land for sale or does not have funds to buy it. Thirteen of the 26 operators who are now owners additional, and operate on an average 131 acres each, were formerly owner operators, farming an average of 85 acres, indicating that these men used the owner-additional stage to make a considerable expansion in the size of their operating unit.

The owner-operator stage is the tenure goal of practically all operators, and it is to be supposed that some have entered it and failed to maintain the status. Over one-third of all operators have been owner operators, but only about one-fifth of them are now in the stage. Thirty-two, or 24.8 per cent of the 129 operators who have been owner operators are now in some status below the owner additional status.

From the standpoint of total time spent in the stage by all operators, the owner-operator stage is second only to that of the share tenant.

Even at that, more than twice as much time was spent in the share-tenant stage as in the owner-operator stage. Operators had been in the owner-operator stage on an average longer than they had been in any other stage.

TENURE STAGES OF PRESENT TENURE GROUPS.

From the data presented in Table 18, showing the use of the different tenure stages by operators in each of the present tenure groups, it will be noted that owners and share tenants alike have made greater use of the farm-hand stage than they have of the cropper stage. This aversion to the cropper stage seems to be general in the black land; it is probably due to class discrimination against croppers, and to the close and sometimes disagreeable supervision given to them by the landlords.³⁵

It is to be hoped that these conditions can be remedied, for the cropper stage offers the inexperienced young man who has little capital a chance to get experience as an operator under the supervision of a successful farmer. It offers the further advantage of yielding a return over wages which is usually more than enough to cover the risk assumed by the new operator in the business.

It will be noted that 43.1 per cent of all croppers, as compared with only 12.8 per cent of all owners, have tried other occupations. This is evidence of the fact, noted elsewhere, that the unsuccessful operators have not stuck to farming as closely as have the more successful (see p. 46).

TABLE 18.—*Relative importance of different tenure and occupational stages in tenure history of operators, classified by present tenure of operators.*

Number of operators by present tenure.	Percentage distribution of operators by stages passed through, with average years in each stage.											
	Other occupations.		Farm hand.		Cropper.		Tenant.		Owner additional.		Owner operator.	
	P. ct.	Yrs.	P. ct.	Yrs.	P. ct.	Yrs.	P. ct.	Yrs.	P. ct.	Yrs.	P. ct.	Yrs.
65 croppers.....	43.1	6.9	72.3	7.1	100.0	6.5	49.2	5.1	(1)	-----	(1)	-----
194 tenants.....	24.5	6.4	48.3	4.9	32.7	4.4	100.0	11.5	3.6	2.6	14.0	4.6
109 owners.....	12.8	5.1	55.1	3.9	21.1	2.4	82.7	8.6	30.3	5.0	88.2	13.5

¹ Nine croppers have been owners or owners additional for an average of 5.2 years.

³⁵ Two examples will illustrate the popular prejudice against the cropper stage: One man whose sons were seeking to begin as farmers advised them to go to Dallas and seek employment, simply because they were unable to rent land except as croppers, his remark being, "If my boys have to farm like 'niggers' I don't want them to be farmers." Another case is that of a young man who had been a cropper on his mother-in-law's place for two years and had saved enough to buy farming equipment. He asked his mother-in-law for a share-tenant contract, and failing to get it from her he spent two weeks searching for a farm for rent to a share tenant (this was in 1918), but failed to find a satisfactory place. He quit farming and began work as a barber, saying that if he couldn't be anything but a cropper he wouldn't farm at all.

The relative importance of the share-tenant stage is shown by the fact that the 109 owners had spent more time in the share-tenant stage than in the cropper and farm-hand stages and in other occupations combined. Furthermore, owners who received no fortuitous assistance in their tenure advance had been share tenants an aggregate of 4,876 years as compared with an aggregate of 2,183 years spent in other occupations in the farm-hand stages and the cropper stage combined.

More than half of all croppers, and 36 of the 194 share tenants, had attempted to operate in higher-tenure stages, but had failed in the attempt.

MOVEMENTS OF OPERATORS ON THE AGRICULTURAL LADDER.

If a man should climb the agricultural-tenure ladder by taking successively all the tenure steps that are found in the black land, he would pass through, in the order named, the following stages: farm-hand, share-cropper, share-tenant, cash-tenant, owner-additional, and owner-operator stages. However, only one of the 368 operators had taken all of these steps. For all practical purposes the tenure ladder in the black land may be given as follows: The farm-hand and cropper stages as the first step; the share-tenant stage as the next step; and the owner-operator and the owner-additional stages as the final step.

Very few operators climb the tenure ladder without interruption by reverses.³⁶ Twenty-six share tenants had never been in any other tenure stage, and had farmed for an average of 10.8 years each; 111 operators had been either croppers and share tenants or farm hands and tenants, but 56 of these had at one time or other been reversed in tenure, and 82 operators had taken all three tenure steps, 59 of these having had no tenure reversals. Thus only 16 per cent of all operators had climbed the agricultural ladder to the top without suffering some reverse in tenure status.

The proportions of all operators in each tenure class who had suffered tenure reverses were as follows: Croppers, 60 per cent; share tenants, 29.8 per cent; owners additional, 19.2 per cent; owner operators, 14.5 per cent. Economic pressure or failure caused 61.8 per cent of all reverses of croppers, 46.8 per cent of the reverses of share tenants, and 44.4 per cent of the reverses of owners. The different proportions of operators in each tenure who suffered reverses are largely due to the different proportions of operators of inferior ability in the different tenure classes. These differences in ability will

³⁶ A reverse here means a change from a higher to a lower tenure form unless such a change was accompanied by unmistakable evidence that the operator was better off financially by the change and made it of his own free will.

be more clearly shown in connection with the comparisons of the rates of accumulation of wealth by operators of the different tenure classes. In comparing these figures on reverses in the different tenure groups, it should be borne in mind that a tenure reverse from the owner stage is a more serious reverse than a reverse from the share-tenant stage, and that a reverse from the cropper stage is the least serious of all reverses.

WEALTH USED AND PROPORTION BORROWED AT TIME OPERATORS ENTERED EACH TENURE STAGE.

Very little wealth was needed for operators to begin the share-cropper stage. In fact 20 of the 28 reporting had no wealth to begin with (Table 19). These 20 croppers doubtless were *half hands*, who depended entirely on labor performed for the landlord, and advances he made to them, for their living expenses during the year. The 8 croppers reporting wealth owned an average of \$380 and borrowed \$194, or about one-third of the total wealth used.

TABLE 19.—Average wealth used and amount borrowed at the beginning of the share cropper, share tenant, and owner stages, operators classified by present tenure.

Items classified by present tenure of operators.	Operators at beginning of cropper stage.		Operators at beginning of share-tenant stage.		Operators at beginning of owner stage.	
	Operators who owned wealth.	Operators who owned no wealth.	Operators who owned wealth.	Operators who owned no wealth.	Operators who owned wealth.	Operators who owned no wealth.
Share croppers:						
Number.....	8	20	21	15	6	1
Average wealth owned.....	\$380		\$287		\$1,167	
Average wealth borrowed ¹	\$194	\$77	\$284	\$149	\$1,908	\$720
Per cent wealth used that was borrowed.....	33.8		49.6		62.0	
Share tenants:						
Number.....			136	55	36	
Average wealth owned.....	(²)		\$525		\$2,436	
Average wealth borrowed ¹			\$415	\$282	\$3,910	
Per cent of wealth used that was borrowed.....			44.1		61.6	
Owners:						
Number.....			67	24	103	2
Average wealth owned.....	(²)		\$346		\$2,780	
Average wealth borrowed ¹			\$203	\$184	\$3,397	\$550
Per cent of wealth used that was borrowed.....			36.9		54.9	

¹ Borrowed wealth includes amount borrowed for operating and living expenses during the first year in the tenant stages, and wealth borrowed for these purposes and land debt during the first year of ownership.

² No data secured for share tenants and owners at time of beginning as a cropper.

It will be noted that over one-third of operators who are now croppers, and of operators who are share tenants and owners, owned no wealth when they began as share tenants. These operators either began on a very small scale or had concessions such as free use of teams, tools, etc., from kinfolk.

Of the operators who owned wealth on entering the share-tenant stage, those who are now croppers used the least wealth and borrowed the largest proportion and those who are now share tenants used the most wealth (an average of \$940).

The average amount of wealth used by all tenure classes on beginning as share tenants was \$787, and this was but slightly less than the average amount of wealth used by 43 operators who began the stage since 1909. It would seem, therefore, that this represents about the amount of wealth needed to begin the share-tenant stage before the rise of prices owing to the World War, the amount needed under war prices probably being at least 50 per cent more.

Owners borrowed a smaller proportion of the wealth they used than did either of the other two classes. From this fact it might be concluded that the less the operator borrows the more likely is he to succeed, a conclusion that in all probability is erroneous. These data, however, may suggest that the present credit facilities are at fault, and that the owners were possibly more judicious borrowers because of these faults.

Both the share croppers and share tenants who had tried the owner stage had borrowed almost two-thirds of the capital they used upon becoming owners, but the latter used almost twice as much capital as did the former. Share tenants and owners both used over \$6,000 on becoming owners, but owners borrowed \$513 less on an average than did share tenants.

The data given in Table 19 seem to indicate that under prevailing credit facilities purchasers of land are safe if their net worth is about half of the value of the farm bought. Loans for longer periods of time and at lower rates of interest than is now commonly paid, with arrangements permitting payments to be made on the amortization plan, would no doubt make it safe to increase to more than 50 per cent the proportion of borrowed capital in land purchases, thereby encouraging ownership.

TIME REQUIRED FOR OPERATORS TO ATTAIN THE SHARE TENANT AND OWNER STAGES DURING DIFFERENT DECADES.

One of the causes for the rapid growth of tenancy sometimes suggested by writers on the subject is the increasing price of land and equipment, especially the increasing price of land. As a result, it is claimed that young men starting out must work longer than they formerly did in order to accumulate enough to make their first payment on land.

The information collected on this subject from the 368 operators of the farms surveyed is summarized in Table 20. No operators were included in the table if they had received as much as \$200 from

fortuitous sources before attaining tenancy or as much as \$500 before becoming owners.

TABLE 20.—*Time required during different decades to attain the share tenant and owner stages, and the amounts of wealth used on beginning each stage, for operators who have received no fortuitous assistance.*¹

Decade.	Conditions under which operators who are now tenants or owners attained tenancy.				Conditions under which operators who are now owners attained ownership.			
	Number of operators.	Years to attain tenancy.	Average wealth used when beginning as a tenant.	Per cent of wealth borrowed.	Number of operators.	Years to attain ownership.	Average wealth used when beginning as owner.	Per cent of wealth borrowed.
Before 1889.....	42	7.1	\$424	52.6	17	16.1	\$6 141	49.2
1889-1899.....	51	4.9	564	46.2	18	13.0	5,463	59.7
1899-1909.....	56	2.2	794	58.1	16	9.4	6,804	62.8
1909-1919.....	43	1.3	788	52.9	3	4.3	6,317	72.6

¹ Any value of \$200 or more received by gift, inheritance, or marriage, before or at the time of becoming a share tenant was considered *fortuitous assistance to tenancy*, and any amount received thus, of \$500 value or more, before or at the time of becoming an owner, was considered *fortuitous assistance to ownership*.

These data on share tenants are for men whose sole reliance in financial advance has been their earnings, and since they attained tenancy each decade in a shorter time and owned more wealth at the time of becoming tenants, it follows that ability to accumulate wealth had increased each decade, this increase, no doubt, being primarily due to an increased earning power.

The data on owners are not based on sufficient numbers to be conclusive, but the fact that they show the same tendency that is shown in the case of tenants is presumptive evidence of reliability.

With each decade, from the time prior to 1889, the total value of the farm has changed but little, which means that the size of the purchased farm has been reduced each decade. But there was a tendency to borrow a greater proportion of the wealth used with each succeeding decade, which would itself tend to shorten the time required to attain the owner stage. However, there is a difference of 6.7 years in the time required to attain the owner stage prior to 1889, as compared with the decade between 1899 and 1909, while the increased amount borrowed is only \$1,251, which could not account for the entire decrease of 6.7 years. Therefore, these data would indicate that in these groups, also, increased ability to accumulate wealth has shortened the time required to attain the owner stage.

SPECIAL CONDITIONS AFFECTING THE INDIVIDUAL'S TENURE STATUS.

One of the most important special conditions affecting the individual's tenure status is the receipt of wealth from fortuitous sources—inheritance, gift, or marriage. There were in all 50 owners who had received \$500 or more from fortuitous sources either at the

time or before they became owners. The average wealth thus received was \$3,578, and the operators receiving it attained the owner stage an average of 3.6 years sooner than did the owners who received no fortuitous wealth. In other words, each \$1,000 received fortuitously shortened by about 1 year the average time required to attain ownership.

It is interesting to note that owners receiving fortuitous help shunned the cropper stage and made use of the farm-hand stage more than did those who received no fortuitous assistance. The number of operators who had been farm hands, in the group receiving fortuitous help, was 3.6 times as many as the number who had been croppers. On the other hand, of the group receiving no fortuitous assistance, only 1.8 times as many had been farm hands as had been croppers. Operators receiving fortuitous assistance and who had been farm hands spent an average time of 5.4 years in the stage as compared with an average of 4.6 years spent by those receiving no fortuitous assistance, while of the operators who had been croppers, those receiving fortuitous assistance were croppers for an average period of 1.8 years, and those receiving no fortuitous assistance were croppers for an average of 2.6 years.

Calculations on the effects of receipts of fortuitous wealth on the time required to reach share tenancy³⁷ showed that for each \$703 received fortuitously before, or at the time of attaining tenancy, the average time of attaining the stage was shortened by one year.

About 89 per cent of all land owned was purchased by the owners, and the remainder was received in about equal amounts through marriage and inheritance. The proportion of all land owned that was received in these three ways are approximately the same for tenants and owners. The tendency for inheritance to break down the size of holdings is suggested by the fact that the average inherited farm was 65.5 acres in size, while the average size of the purchased farm was 141.6 acres—more than twice that of the inherited farm.

In order to determine whether or not there is any relation between the tenure of father and that of the son, data on the tenure status of the fathers of operators were taken. It was found that of the fathers who were farmers, 38.6 per cent of those of croppers, 68.2 per cent of the fathers of tenants and 75 per cent of those of owners were owners. From general observation, while interviewing operators, it is believed that the greater financial encouragement and assistance given by fathers who were owners was a more important influence in this regard than was the training and inherited traits of the operators whose fathers were owners. Nevertheless, it will be noted from Table 21 that there is a relation

³⁷ Only amounts of \$200 or more are considered fortuitous assistance to attaining tenancy.

between the tenure and the education of the operator, croppers as a class having less education than share tenants had, and share tenants having less as a class than had owners. However, it should not be inferred from the data presented in the table that the relation is all due to the effects of education on tenure.

TABLE 21.—*Relation between tenure and the education of the operator.*

Tenure group.	Extent of educational attainment.					
	Below fourth grade.		Fourth to ninth grade, inclusive.		Above ninth grade.	
	<i>Number.</i>	<i>Per cent.</i>	<i>Number.</i>	<i>Per cent.</i>	<i>Number.</i>	<i>Per cent.</i>
Share croppers.....	21	32.3	40	61.5	4	06.2
Share tenants.....	37	19.1	134	69.1	23	11.8
Owners.....	17	15.6	80	73.4	12	11.0

FINANCIAL HISTORY OF OPERATORS.

NET WORTH OF OPERATORS AND ITS SOURCES.

The wealth of the operator and the rate at which he accumulates it are better indications than tenure status of the operator's progress in agriculture. However, it is a well-known fact that financial and tenure progress generally develop together. This fact is brought out by Table 22, which gives the present net worth of the operator and the sources of his wealth. Owner operators, it will be noted, whose average present net worth was \$32,901, had almost 38 times as much wealth as croppers who owned on an average \$868.

Of the total net worth of all operators, 53.5 per cent came from net accumulations from earnings, 39.6 per cent from increases in land values, and 6.9 per cent from fortuitous sources.³⁸

Owners accumulated from their earnings an aggregate of 1.7 times as much as owners additional accumulated, 5 times as much as have tenants, and 21.2 times as much as have croppers. These differences in rate of accumulation from earnings by the different tenure groups are more significant when considered in connection with the average number of years the operators of the different tenure classes have been working for themselves. On this basis owners had an average annual accumulation from their earnings 1.3 times that of owners additional, 3.4 times that of tenants, and 15.3 times that of croppers.

It is obviously impossible to ascertain how much of the wealth received from increases in land values is attributable to the owner's superior judgment in securing and holding possession of the land and how much of it should be credited to things wholly outside the

³⁸ For a statement of what is included in the concepts of *net accumulation from earnings, increases in land values, and fortuitous wealth*, see footnotes under Table 22.

owner's efforts and ability. If such a separation were possible, a figure on *accumulation from all human efforts*, mental and physical, would show much greater differences for the operators than are shown by the comparisons made in the above paragraph.

TABLE 22.—Average present net worth per operator and its sources, by tenure classes.

Present tenure status.	Number of operators.	Average present net worth per operator.	Average amount of wealth accumulated from earnings. ¹	Wealth received from increases in land values. ²		Wealth received from fortuitous sources. ³	
				Number of operators receiving.	Average amount received.	Number of operators receiving.	Average amount received.
Share croppers.....	65	\$868	\$721	5	\$732	15	\$444
Share tenants.....	192	3,979	3,047	34	3,014	91	840
Owners additional.....	26	16,166	8,761	26	5,981	14	2,645
Owner operators.....	83	32,901	15,254	83	15,807	53	2,882
All operators.....	366	10,851	5,822	148	10,632	173	1,577

¹ This figure does not include wealth received from increases in land values and fortuitous wealth, but does include any wealth made by the use of capital from these sources. *Accumulations from earnings* represent approximately the wealth the operator has earned from his farming efforts (labor and management) and any wealth made from the use of capital from whatever source received.

² *Increases in land values*, as used in this bulletin, means net increases from this source, all value of improvements put on the land by the owner being deducted.

³ Wealth received through inheritance, gift, and marriage.

Every owner interviewed had made more money from changes in land values than he had lost. Forty-eight per cent of the total present net worth of owner operators and 37 per cent of the present net worth of owners additional was secured from increases in land values. Only 34 of the 192 share tenants and 5 of the 65 share croppers received wealth from increases in land values, and the average amounts thus received were very small in comparison with the amounts received by owners.

The wealth received from fortuitous sources was relatively small as compared with the wealth received from the other two sources. However, it should be noted that owners received larger amounts of wealth from this source than did tenants. Fifty of the 67 owners who received fortuitous wealth got \$500 or more at the time of becoming owners or before. It is very probable that most of these operators received their fortuitous wealth at a time in their financial history when it was relatively of great importance to them as a "boost."

VARIATION IN ACCUMULATIVE ABILITY OF OPERATORS AND ITS INFLUENCE ON TENURE.

The extent to which men differ in their ability to accumulate wealth from their earnings is brought out by Table 23 and Figure 5. It will

be noted from the table that by far the greater proportion of tenants have accumulated less than \$200 annually, and that the 19 owners

FIG. 5.—Average annual accumulation of wealth for 367 operators, classified by tenure.

in this class actually lost, on the average, instead of accumulating wealth from their earnings.

TABLE 23.—*Operators classified by tenure and by average amount accumulated from earnings annually.*

Operators whose net annual accumulation has been—	Share croppers.		Share tenants.		Owners.		All operators.	
	Number of operators.	Per cent of accumulation of all croppers.	Number of operators.	Per cent of accumulation of all share tenants.	Number of operators.	Per cent of accumulation of all owners.	Number of operators.	Per cent of accumulation of all operators.
Less than \$200.....	58	49.2	108	19.0	19	— 0.5	185	10.0
\$200 to \$400.....	6	34.8	45	27.4	29	15.3	80	21.3
\$400 to \$600.....			27	28.8	29	24.5	56	25.3
\$600 to \$800.....	1	16.0	4	6.0	14	16.8	19	12.1
\$800 to \$1,000.....			3	5.7	8	12.6	11	9.1
\$1,000 or more.....			4	13.2	10	31.3	14	22.2

It will be noted, furthermore, that 136 of the operators fall within the groups of farmers who saved \$200 and less than \$600. These operators, who are 37.1 per cent of all operators, and who save 46.6 per cent of the aggregate annual accumulation of all operators, are, in the main, what might be called consistent accumulators of wealth. They are not outstanding accumulators, on the other hand, nor are they failures.

From Figure 5 it is evident that there is a very great range between the two extremes, that of the few high accumulators, and that of the large number of low accumulators. This point is illustrated concretely by the fact that the best 14 accumulators, whose average annual accumulation from earnings was \$1,000 or more, saved annually \$23,940, as compared with an annual accumulation of \$24,105 by 238 who were the poorest accumulators. In other words, 14, or 3.8 per cent of all operators, accumulated annually about as much as 238, or 64.8 per cent of the 367 operators. The former saved 22.2 per cent of the aggregate annual accumulation of all operators; the latter, 22.4 per cent.

These facts concerning the extent to which men differ in ability to accumulate wealth from their earnings are fundamental in the tenure problem. The most important thing brought out by them is the dual function of the different stages of tenancy. Not only do these different stages function as stepping-stones to the rising operator, but they function also as selective agencies, often reversing the operator of inferior ability into the lower stages, or else keeping him there, where he is subject to the supervision of an operator of proved efficiency and capacity.

This dual functioning of the different stages of tenancy is strikingly shown in Figure 5. The best accumulators of the two tenant classes are the men who have worked for themselves the shortest time; while the poorest accumulators are those who have worked for them-

selves longest. In other words, figuratively speaking, the operators of greatest capacity and efficiency (which undoubtedly are the main determinants of largest accumulating power) crowd upper strata of the tenant stages and soon pass off into the owner stage. On the other hand, the poorest accumulators of the owner and share-tenant stages suffer reverses and settle toward lower stages, out of which some never rise.

Among owners, however, the majority of best accumulators have worked for themselves longest—the reverse of the situation with the tenant classes. Many operators become owners through fortuitous assistance and often can remain in the stage throughout life, even though suffering a small annual loss. Nevertheless, reversals from this stage (there were 42 tenants out of the 258 who had at one time been owners) largely involve incompetent operators, many of whom can provide for their families best in a state of tenancy, where they are supervised by more competent operators.

These two functions of the different tenure stages are based on the fundamental fact that men vary greatly in ability to produce and accumulate, which fact must not be neglected in shaping any land policy. It is highly important that the road to advanced stages be kept open and free from uneconomic handicaps, such as speculative land values; that care be taken that the operators in the lower stages get a return commensurate to their efforts and ability; that they have proper houses to live in; that they be given a chance to expand as they prove their ability; and that they have contracts protecting them in their rights and protecting the landlord from any dishonesty on the part of unscrupulous renters.

CLASSIFICATION OF OPERATORS ACCORDING TO ABILITY TO ACCUMULATE WEALTH.

The reasons why men differ in their ability to accumulate wealth are numerous. In fact, each case probably has its own set of reasons that are somewhat different from all others. Nevertheless, there are some general conditions associated with the rate of accumulation which can well be brought out by way of comparison.³⁹

A glance at Figure 5, in the light of what has been said on the dual function of the tenure stages, will show that a tenure classification within itself is a rough classification of operators into classes of accumulators. However, within each tenure class there are good as well as poor accumulators; therefore operators within each tenure class were divided into the *best*, the *medium*, and the *poorest accumu-*

. ³⁹ The factors that enter into the individual operator's ability to accumulate wealth from his earnings are as follows: (1) Ability to produce, which depends on the operator's capacity and efficiency; (2) ability to save wealth produced; and (3) ability to use saved wealth in the production of more wealth.

lators on the basis of the average annual accumulation of wealth from earnings.⁴⁰

Data presented in Table 24 indicate the reliability of the above classification of accumulators. It will be noted that the present net worth of the different classes of accumulators increases without exception in passing from the poorest to the best in all three tenure classes, increasing from an average net worth of \$187 for the poorest cropper accumulators to \$46,903 for the best owner accumulators. Furthermore, the 1919 net family accumulation increases from the poorest to the best without exception, in each of the tenure classes. The best accumulators from earnings also accumulated most from increases in land values, as would be expected.

TABLE 24.—Average present net worth, its sources, and the average family accumulation of wealth during 1919, for the different classes of accumulators.

Items of correlation.	Croppers.			Tenants.			Owners.		
	Poorest.	Medium.	Best.	Poorest.	Medium.	Best.	Poorest.	Medium.	Best.
Number of operators.....	21	19	22	65	62	64	39	31	34
Present net worth of operators.....	\$187	\$731	\$1,697	\$2,001	\$3,305	\$6,685	\$16,063	\$21,498	\$46,903
Average amount received from fortuitous sources ¹ ...	143	72	107	480	137	563	1,981	1,666	1,599
Average received from increases in land values ¹	21	106	18	369	355	862	8,661	10,156	20,869
Average family accumulation of wealth for 1919 ² ...	-11	169	231	54	199	618	-178	862	977

¹ Averaged on all operators in class whether wealth was thus received or not.

² See item 10, Table 15.

RELATION BETWEEN SIZE AND VALUE OF FARM OPERATED AND ACCUMULATION OF WEALTH FROM EARNINGS.

It is quite definitely shown in Table 25 that the best accumulators in each tenure class are now on farms which have the largest value in land and buildings, the largest value in equipment, the greatest acreage, and largest number of work stock. Moreover, it will be seen that the best accumulators had generally operated the largest farms when they were in other tenure stages. On the other hand, the opposite condition is shown by data on the operators who were the poorest accumulators.

This close relation between the best accumulators and the largest and most valuable farms is not only the result of demonstrated effi-

⁴⁰ In making this division of operators it was recognized that accumulation of wealth is influenced by the age of the operator; also by the period of time in which the accumulation was being made. Consequently operators were first grouped by periods of time when they began for themselves and were then regrouped by age groups so as to eliminate as nearly as possible these two influences before the operators were divided into the above three classes of accumulators. After selecting the three classes of accumulators in the final groups, based on age of the operators, the best accumulators in each tenure class were brought together, as were the other two classes of accumulators.

ciency and capacity of the operators, but is also partly due to the superior *wealth saving and using ability* of the best accumulators.

In agriculture, development of ability and advance in one's vocation is more largely dependent on the amount of personally accumulated wealth than in many other vocations. The farmer must have capital, and this is usually owned, borrowed, and rented, or is owned and borrowed. The amount the farmer can borrow depends to a considerable extent on his wealth, much of which is, as a rule, secured from accumulations from earnings. But wage hands, skilled mechanics, professional men, and men employed in numerous corporate industries can, and frequently do, rise in their vocations, whether they save from their earnings or not. Saving from earnings for the farmer is, therefore, not only one of the most important factors in accumulation of wealth, but it is also a means to the expansion of his business and to the fuller development and employment of his ability as an operator.

TABLE 25.—*Relation between different classes of accumulators of wealth and the size of the farm business in 1919, and average size of farm operated under the different tenure stages of the operator's history.*

Items of correlation.	Croppers.			Tenants.			Owners.		
	Poorest.	Medium.	Best.	Poorest.	Medium.	Best.	Poorest.	Medium.	Best.
Number of operators.....	21	19	22	65	62	64	39	31	38
Average value of land and buildings operated in 1919.	\$6,805	\$7,158	\$15,399	\$13,657	\$15,332	\$19,028	\$14,571	\$18,891	\$26,248
Average value of equipment used in 1919.....	\$596	\$774	\$1,173	\$1,261	\$1,567	\$2,014	\$1,452	\$2,101	\$2,344
Average acres in crops in 1919.	37.9	45.8	79.9	85.9	88.0	106.9	81.1	107.2	136.7
Average number of work stock per operator in 1919.	1.9	2.7	2.8	3.7	3.9	4.8	3.9	4.5	6.1
Average acres operated when a cropper ¹	42.4	47.8	75.1	45.3	59.9	52.4	58.5	30.8	102.9
Average acres operated when a share tenant ¹	66.5	50.2	67.4	78.8	85.9	100.0	73.9	78.3	89.9
Average acres operated when an owner ¹	102.0	.....	55.5	94.7	83.0	87.5	100.1	116.1	168.1

¹ The number of operators in these three lines varies from the number given at the top of the tables in most cases the number being less.

RELATION BETWEEN THE OPERATOR'S DEGREE OF APPLICATION IN OPERATING HIS FARM AND HIS ACCUMULATION OF WEALTH FROM EARNINGS.

Constancy of purpose and application to the business of operating a farm has evidently been exercised more among the best accumulators than among the poorest. This fact can be seen by comparing the sets of data of almost any two classes of accumulators in Table 26, but the data on the two extreme classes will be used to bring out the point. In the case of owners the best accumulators have been working for themselves an average of 24.5 years, while the poorest accumulators among croppers have been working for themselves for an average of 19.4 years. The former

group have spent on an average only 2.1 years, or 8.6 per cent of the total time since they began for themselves in other occupations and as farm hands, while the latter group (the poorest cropper accumulators) have spent on an average 9.9 years, or 51 per cent of their total time, in other occupations and as farm hands. Put in another way, the best owner accumulators have applied themselves to operating a farm 91.4 per cent of the time since they began for themselves, while the poorest cropper accumulators have applied themselves only 49 per cent of their time.

The data showing the value of the labor done on the farm and off the farm show that in each tenure group the best accumulators did more work on the farm they operated and less work off the farm than the poorest accumulators. In other words, the best accumulators confined their efforts to their own farms more than did the poorest accumulators.

It is obviously impossible to say to what extent the lack of application to the farm business on the part of the poorest cropper accumulators is the cause of inability to accumulate or to what extent it is the result of it. However, it is very important to note that poorest accumulation and the least application to the farm business are closely associated, and that the greatest accumulation of wealth and the most application to the farm business are closely associated.

TABLE 26.—*Relation between accumulation of wealth and the application of the operator to his farm business.*

Item of correlation (average for each operator in the class).	Croppers.			Tenants.			Owners.		
	Poorest.	Medium.	Best.	Poorest.	Medium.	Best.	Poorest.	Medium.	Best.
Number of operators.....	21	19	22	65	62	64	39	31	38
Average present age.....	40	36	39	38	39	37	45	44	45
Average years as farm operators.....	9.5	9.5	11.5	13.3	14.1	13.1	21.2	19.0	22.4
Average years at other occupation ¹	3.0	2.8	3.4	1.9	1.4	1.2	0.3	0.7	0.3
Average years as farm laborer ¹	6.9	4.6	4.3	3.1	2.1	1.3	2.7	1.8	1.8
Per cent of total years since beginning for self spent in other occupations and as farm laborers.....	51.0	43.8	40.1	27.3	19.9	16.0	12.4	11.6	8.6
Average amount per operator received for labor done off farm, for year 1919.....	\$253	\$183	\$112	\$145	\$94	\$138	\$124	\$94	\$67
Average value of operator's labor on farm, 1919.....	\$324	\$292	\$393	\$425	\$494	\$456	\$468	\$491	\$543

¹ Averaged by all operators in group and not by actual number who were in other occupations or farm laborer stages.

RELATION BETWEEN DIVERSIFICATION OF FARM ENTERPRISES AND ACCUMULATION OF WEALTH.

It will be noted from Table 27 that the per cent of all crop land on the farm planted to cotton was highest in the group of poorest accumulators and smallest in the case of the best accumulators.

On the other hand, small grain was grown in the largest proportions to all crops by the best accumulators and in the smallest proportions by the poorest accumulators, in each of the three classes of tenure.

On farms where cotton is a large proportion of all crops there are seasons when practically the whole labor force and all equipment are idle. These same periods are usually times when teams, tools, and men can be employed profitably in small grain fields, and it is this use on the mixed grain and cotton farm of (what on the cotton farm would be) idle labor and equipment, that helps to swell the profits on the mixed grain and cotton farm. Furthermore, when several years of operation are considered, the risks from agriculture are much more uniformly distributed and probably made less by the mixed grain and cotton type, as against the one-crop type of agriculture.

It will also be noted that the greatest number of animal units other than work stock, the greatest number of poultry, and the greatest value of garden, fruit, poultry, and dairy products used for family and furnished by the farm are associated, without exception, with the best accumulators in all the tenure classes. On the other hand, in every case (except two) the smallest amounts of the items above mentioned are associated with the poorest accumulators in each tenure class.

TABLE 27.—*Relation between the diversification of farm enterprises and classes of accumulators.*

Items of correlation.	Croppers.			Tenants.			Owners.		
	Poorest.	Medium.	Best.	Poorest.	Medium.	Best.	Poorest.	Medium.	Best.
Number of operators.....	21	19	22	65	62	64	39	31	38
Per cent of all crop land planted to cotton.....	90.8	83.9	69.8	72.1	66.6	64.2	59.5	65.8	56.4
Per cent of all crop land planted to small grain....	1.8	2.6	8.9	11.7	16.1	19.0	20.5	18.6	22.2
Average number of animal units other than work stock ¹	1.1	1.5	3.0	2.3	3.8	4.5	4.5	4.5	7.0
Average number of poultry per farm.....	18	26	43	50	66	66	67	64	77
Average value in dollars received from farm for family living from garden, fruit, poultry, and dairy products.....	135	205	269	314	369	375	408	457	493
Average value in dollars of groceries bought.....	355	329	278	279	281	317	286	292	296
Average value in dollars of clothing bought.....	155	182	274	255	260	293	322	330	423
Per cent of all operators who reported sickness in family during 1919.....	42.9	25.0	19.1	25.8	22.4	18.3	26.3	26.7	27.0
Per cent of all operators in class that used short time credit in 1919.....	81	100	77	94	82	72	82	81	53

¹ "Animal unit" as used here is the equivalent of one horse, one cow, or 7 hogs or sheep. Poultry is not included.

There is little difference in the amounts spent for groceries by the different classes of accumulators, but there is a large difference in the value of food raised on the farm, the poorest cropper accumulators receiving an average of \$135 worth of food from the farm as compared with \$493 worth received by the best owner accumulators. Edibles raised on the farm apparently do not reduce family grocery bills appreciably, but they do raise the family dietary standards.

The extent of this increase in dietary standards from edibles raised on the farm is not adequately shown by a comparison of values, for the most important difference is due to the quality of the food rather than to its value in dollars, and it is not at all unlikely that the lower dietary standards of the poorest accumulators cause much of the larger amount of sickness found among them and indirectly influences accumulations. (See data on health in Table 27.) The somewhat high per cent of sickness reported among all classes of owners is no doubt due to the advanced age of several operators in this tenure class.

Advocates of diversification have claimed, with good reason, that increased diversification would remedy the credit situation, making it less imperative for the operator to resort to short-time credit for running expenses. The data on this point show that the proportion who used short-time credit in 1919 was greater with the poorest accumulators than with the best accumulators by 4 per cent for croppers, 22 per cent for share tenants, and 29 per cent for owners. Although these differences are not entirely attributable to differences in degree of diversification, the marked association of the greatest diversification with the least short-time credit used indicates that diversification lessens the need for short-time credit for consumption purposes among the two poorer groups of accumulators in all tenure classes.

RELATION BETWEEN THE SHIFTING OF OPERATORS FROM FARM TO FARM AND THE
ACCUMULATION OF WEALTH.

Tenants in the black land have little to attach them to a given farm from one year to another. Almost all farm enterprises are completed annually, the relatively unimportant enterprise of raising stock being the only one that lasts from one year to another. Even this enterprise as conducted in the black land can be transferred from one farm to another with little difficulty. Because of these conditions tenants move very often for little or no reason.

Similarly, landlords can change tenants with practically no inconvenience or financial loss. Tenants are often asked to move without knowing in what particular they have failed, or have displeased

their landlords. As a result, the connection between landlord and tenant, as a rule, is transitory, neither party being willing to continue the connection if either finds the least objection to it.

The average number of years between shifts from farm to farm for share croppers, share tenants, and owners is shown in Table 28. The poorest cropper accumulators moved on an average every 2.3 years, while the longest time between shifts was 7.6 years for the best owner accumulators. The average cropper has nothing but a few household goods and his family to move, consequently he is more of a transient than the share tenant who owns his farming equipment.

The most important thing to note in connection with frequency of moves is that the poorest accumulators in each tenure class are also the operators who have moved most frequently; and that the best accumulators have remained longest, on an average, on the farms they have operated. Although it would require a detailed study on the subject to establish the optimum number of years between shifts, it can be said from the data presented in the table that most tenants move more frequently than they should for their best financial interests.

Some interesting facts are brought out in connection with the reason given for each move. It will be noted that a higher per cent of all moves were for "good economic reasons" in the case of owners than in the case of croppers and share tenants. Furthermore, in all three tenure classes the percentage of moves for good economic reasons was higher for the best accumulators than for the poorest accumulators.

TABLE 28.—*Relation between the shifting of operators from farm to farm and the accumulation of wealth from earnings.*

Per cent of all shifts that were made because of—	Croppers.			Tenants.			Owners.		
	Poor-est.	Medi-um.	Best.	Poor-est.	Medi-um.	Best.	Poor-est.	Medi-um.	Best.
Number of operators.....	21	19	22	65	62	64	39	31	38
Good economic reasons or advance in status.....	45.5	44.4	56.7	59.6	66.7	64.7	75.7	80.0	84.9
Plausible social, educational, or health reasons.....	4.5	4.8	9.6	5.6	8.0	12.7	6.4	3.5	5.5
Financial pressure, or personal faults of operators....	21.2	25.4	9.6	13.3	10.9	7.3	4.3	5.9	6.9
Other reasons given which did not seem to justify a shift.....	9.1	17.5	2.4	6.9	2.0	1.3	1.4	1.2	0.0
Reasons which could not be classified, or no reason given.....	19.7	7.9	21.7	14.6	12.4	14.0	12.2	9.4	2.7
Average number of years between shifts.....	2.3	2.2	2.5	3.0	3.6	4.0	4.7	5.4	7.6

Moves for social, educational, or health reasons are relatively few. However, it is interesting to note that the best accumulators of both tenant classes moved for these reasons in a greater per cent of all cases than is true of the poorest accumulators in each class of tenants. This indicates that the best accumulators probably think more of social, educational, and family standards than do the classes of poorest tenant accumulators.

Financial pressure or personal faults of the operator caused a greater proportion of moves among the poorest accumulators than among the best of either of the tenant classes. Among owners, however, the opposite situation is noted, which is possibly owing to the fact that the best owner accumulators have much more valuable farms. They have probably taken heavier risks than the poorest owner accumulators have assumed and have been forced more frequently to move because of these risks.

The data on moves for economic reasons taken in conjunction with the time between moves are, in general, indicative of the degree of application of operators to the farm business. Considered thus, again it will be seen that those operators who have applied themselves most consistently to their farm business have been able to accumulate the most wealth (see p. 45).

DOMESTIC, SOCIAL, AND EDUCATIONAL CONDITIONS IN RELATION TO TENURE.

DWELLING, SIZE OF FAMILY, AND FAMILY HEALTH.

Housing conditions for the different tenure classes are summarized in Table 29. The average value of the dwelling was \$532 for croppers, \$731 for share tenants, \$1,335 for owners additional, and \$1,532 for owner operators. These values were taken during the winter of 1919-20 and are somewhat higher than prewar values, although not so high as general price levels would indicate.

A comparison of value alone is not likely to give an adequate idea of the difference prevailing between the housing conditions of owners and tenants. For example, the owner operator's house has an average value nearly three times that of the cropper's house, but the cropper's house has three-fourths as many rooms. Thus, the average disparity between the construction and repair of the two becomes more evident when considered in the light of comparative number of rooms. Not only is the average renter's house poor and flimsy in construction but it is usually kept in very poor repair. Practically all of the reports of "poor condition" are confined to the tenant classes (see Figs. 6 and 7).

FIG. 6.—Typical owner homes.

Above.—The operator began for himself in the black land 39 years ago, with no wealth of his own; owns 381 acres of fertile black land; has accumulated from his earnings an average of \$781 annually, since he began for himself; has been a farm operator all the time, moving only twice.

Below.—The operator began for himself in the black land 29 years ago; owns now 153 acres of the best black land; has accumulated annually from his earnings an average of \$508; has moved 5 times since he began farming. Compare yards with the tenant yards shown on following page.

FIG. 7.—Typical tenant homes.

Above.—The operator is a “third and fourth share” tenant, beginning for himself in the black land 10 years ago; worked as a carpenter 3 years; has never moved since beginning to farm; has accumulated from earnings an average of \$83 per year. The land on this farm is among the most fertile in the black land. Note that crops are grown to the very door—a common situation on tenant farms in the black land.

Below.—The operator, a share cropper, began for himself 24 years ago in Tennessee and farmed in that State 10 years as a cropper, moving 5 times; he has moved 8 times and has had 4 reverses in tenure during the 14 years he has been in the black land; he attained the share tenancy stage and remained in it for 1 year only. Eleven people, including a married son and wife, live in the house. The operator has lost an average of \$4 per year since he began for himself 24 years ago.

It will be noted that there is no great difference in the average number of persons per room for all tenure classes. In all probability overcrowding is not the cause of much of the sickness found among these people, for the open construction of the houses would, in practically all cases where crowded conditions exist, provide for plenty of fresh air.

TABLE 29.—*Value and size of dwelling, size of family, and family health, by tenure classes.*

Tenure class.	The dwelling and its condition.					Size of family and family health.				
	Average value of house.	Average number of rooms in dwelling.	Number reporting condition of house as—			Average number in family.	Average number of persons per room.	Number reporting good health.	Number reporting poor health in family.	Per cent reporting poor health.
			Good.	Medium.	Poor.					
Share cropper.....	\$532	3.9	16	13	36	5.0	1.4	43	17	28.3
Share tenant.....	731	4.3	63	53	147	5.0	1.2	147	35	19.2
Owners additional..	1,335	5.0	8	3	15	4.9	1.0	20	6	23.1
Owner operators....	1,532	5.4	59	17	7	5.6	1.1	54	28	34.1

It will be noted that the percentage of reported sickness is higher for croppers than it is for tenants or owners additional. Doubtless this is due in large part to the fact that croppers lack the fresh, home-grown foods that the other classes have. Also, it is very doubtful if croppers have as much knowledge of sanitation and dietetics as do the other tenure classes. The highest per cent of reported sickness is found among owners, which is probably due to the much larger proportion among this class who are of advanced age.

RELATIVE STANDARD OF LIVING OF DIFFERENT TENURE CLASSES AS REFLECTED IN COST OF FAMILY LIVING.

The relative standards of living of the different tenure classes is probably better indicated by the total cost of family living than by any other available figure (see Table 30). The living cost of the average cropper family was 55 per cent, and of the average share-tenants family 71 per cent of the average cost of family living for owners. In making this comparison it is well to bear in mind that the average size of family for the different tenure classes was approximately the same.

The differences in standards as indicated by these data are not shown to the fullest extent; for the quality of food, the difference in the knowledge and practice of selection, preparation, and use of articles of food make the variations in standards much wider than are here indicated, especially between croppers and the other two classes.

Share tenants receive from the farm (in garden, dairy, poultry, and pork products) a value that is about 75 per cent as much as owners

thus receive, while croppers receive only 41 per cent as much value from these sources as owners. The most striking lack of these articles is, therefore, found with croppers.

TABLE 30.—Average cost of all family living, and of selected items of expense, for 368 operators.

Tenure class.	Average value per family.								
	All family living expenses.	All furnished by farm.	Meat, garden, poultry, and dairy products from farm.	All purchased.	Groceries purchased.	Clothing purchased.	Given to church and charity.	Spent for recreation, entertainment, etc.	Spent for tobacco and other personal expenses.
Share croppers.....	\$965	\$262	\$184	\$704	\$310	\$201	\$13	\$11	\$20
Share tenants.....	1,243	424	338	824	296	259	22	10	20
Owners.....	1,742	575	450	1,167	294	358	53	15	27

An interesting fact brought out in connection with the data on value of groceries purchased is that croppers, with the lowest standard of living, buy the most groceries; while owners who have decidedly the highest standard of living, buy the smallest amount of groceries, notwithstanding the fact that they have the largest families. The edibles from the farm for share tenants and owners supplement their groceries sufficiently to maintain about the same differences in values of foods that are found in clothing values.

The usual diet of operators who do not cultivate gardens and raise fresh meats consists almost entirely of groceries bought at local stores, few of which handle fresh vegetables and fruits. As a result, these important constituents of a well-balanced diet are often wanting in the meals of those who do not have gardens. Furthermore, good milk is relatively hard to buy in many localities. It is the lack of these important articles of food, or their inferior quality when bought, that makes the money value of family living an inadequate measure of the difference in family living standards.

The amount given to church and charity by owners is relatively large. Indeed, the difference in this regard is more marked than in any of the other items of expense.

The average amounts spent for recreation and entertainment is strikingly small for all classes. Few families of any tenure class take vacations, and but few more patronize "movies," theaters, or other entertainments that charge an admission fee. It is interesting to note in this connection that more is spent for tobacco and other personal expenses than is spent for recreation and entertainment. Picnics, fishing trips, pecan hunts, young folks' parties and dances, and school entertainments go to make up the principal entertainments

of the people. The Bohemians and people of other foreign extraction get much entertainment and amusement from public dances.

THE USE OF THE AUTOMOBILE, TELEPHONE, AND R. F. D. BY THE DIFFERENT TENURE CLASSES.

The automobile, the telephone, and the rural free delivery have done a great deal to make life on the farm more enjoyable, and at the same time have been a source of farm profit as well. Table 31 shows the extent to which these agencies are used by the different tenure classes.

TABLE 31.—*Number and per cent of operators in each tenure class that have automobiles, telephones,, and rural free delivery.*

Tenure status.	Automobile.		Telephone.		Rural free delivery.	
	Number reporting.	Per cent having automobiles.	Number reporting.	Per cent having telephones.	Number reporting.	Per cent using R. F. D.
Share croppers.....	61	16.4	65	20.0	65	86.0
Share tenants.....	194	45.9	192	47.4	192	85.0
Owners additional.....	26	80.8	26	69.2	26	96.0
Owner operators.....	82	74.4	83	59.0	81	90.5

Automobiles are used less by croppers than by any other tenure class, about 1 in 6 having cars. Almost 1 out of every 2 share tenants owned an automobile; 4 out of each 5 owners additional, and 3 out of each 4 owner operators owned cars. Sixty owners estimated that on an average 34.3 per cent of the total use made of their automobiles was for farm business; 120 tenants estimated that on an average 37.2 per cent of the total use of their automobiles was for farm business. Forty of the 99 tenants who owned cars paid more on them for running expenses alone in 1919 than their entire family savings for the year amounted to.

The cost of the telephone is relatively small as compared with the cost of keeping an automobile, and there are probably few farmers who had telephones that did not make use of their telephones enough in their farm business to pay for the cost. About 1 out of every 5 croppers, almost half of the share tenants, 7 out of each 10 owners additional, and 6 out of each 10 owner operators had telephones.

Postal free delivery service was utilized by 86 per cent of all share croppers, 85 per cent of all share tenants, and 96 and 91 per cent, respectively, of owners additional and owner operators. Owners' homes are probably more frequently found on the main highways than are tenants' homes, and since these are the roads on which R. F. D. routes most often pass, owners probably are more conveniently located with respect to this service than are tenants.

READING MATERIAL OF THE TENURE CLASSES.

The extent to which the different tenure classes have access to periodical literature is shown in Table 32. Excepting croppers, 39.1 per cent of whom had no periodical literature, practically no farmer's family was without some periodical. Moreover, this encouraging fact is made more bright by the nature of this literature, which in most cases was first-class reading material.

Daily newspapers from the larger cities and towns of the black land constitute the greatest source of reading material for farmers in the area. In all tenure classes there were taken about as many daily newspapers as any other class of literature given in the table; and this fact, coupled with the more frequent issue of dailies, easily places them in the first rank in amount of reading material furnished.

From the instructional standpoint agricultural journals occupy the next most important place in the reading material of farm operators. However, a close second to the agricultural journals are the magazines, which as a rule are issued monthly. A few periodicals printed in the State dominate these two classes, and their influence among farmers is very great. Over 75 per cent of the total receipts of periodical literature were Texas publications.

The time devoted to reading books is relatively small as compared with the time spent in reading periodical literature. No books whatever, excepting school books, were found in 39 per cent of all owners' homes, and in 36 per cent of all tenants' homes.

TABLE 32.—*Periodical reading material in the homes of the different tenure classes.*

Tenure class.	Daily papers.		Nonagricultural weekly papers.		Magazines.		Agricultural journals.		Operators who have no periodical literature.	
	Number reporting on question.	Per cent who had daily papers.	Number reporting on question.	Per cent who had weekly papers.	Number reporting on question.	Per cent who had magazines.	Number reporting on question.	Per cent who had agricultural journals.	Number reporting on question.	Per cent of all operators reporting.
Croppers.....	63	34.9	63	36.5	64	32.8	62	30.6	64	39.1
Tenants.....	185	57.8	183	60.7	186	45.7	184	51.6	186	4.3
Owners.....	106	67.9	103	62.2	105	53.3	105	59.0	106	0.0
All operators.....	354	50.8	349	56.7	355	45.6	351	50.1	356	9.0

RELATION BETWEEN TENURE AND EDUCATION.

In order to ascertain facts as to the relation between tenure and education in the black land, data were taken from the teachers'

record books of five representative black-land schools, supplemented by data taken direct from teachers and pupils.⁴¹

It will be noted from Table 33 that the highest enrollment record for each month was made by the daughters of owners, and the lowest enrollment record for each month, except for April, was made by renters' sons. But monthly enrollment of the sons of owners was higher than it was for the daughters of renters.

It will be noted that the highest enrollment record for both the girls and boys of tenants was made in January. The first day of January is the beginning of the renting year so far as contracts are concerned, but few tenants get all their crops gathered until some time in January, and the majority of "moves" are made some time near the middle of the month. This means that tenants' children who are enrolled in school are in many cases enrolled in two schools at different times in January. Thus some of the children of outgoing renters as well as of incoming renters are enrolled in the same school for January, which accounts for the comparatively large enrollment of tenants' children during this month.

TABLE 33.—*Monthly enrollment, attendance, and change in make-up of school body as affected by tenure.*

I. PER CENT OF TOTAL YEAR'S ENROLLMENT REPORTED EACH MONTH.

Tenure of father and sex of child.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.
Daughters of owners..	84.6	86.6	92.0	92.5	87.6	94.5	95.0	74.7
Daughters of tenants.	64.6	70.1	79.6	85.3	84.1	77.7	81.5	79.3
Sons of owners.....	85.2	87.6	93.3	91.0	84.3	90.0	83.8	75.7
Sons of tenants.....	59.6	64.6	78.6	82.1	74.1	72.9	82.7	75.0

II. PER CENT OF DAYS PRESENT TO AGGREGATE DAYS PUPILS WERE ENROLLED.

Daughters of owners.	89.5	85.9	84.2	83.7	88.2	90.6	92.1	93.0
Daughters of tenants.	81.4	79.3	79.1	78.0	83.3	83.4	85.4	88.1
Sons of owners.....	86.9	85.7	85.5	83.7	87.9	92.2	90.7	93.6
Sons of tenants.....	86.0	76.5	77.4	79.4	80.0	83.9	87.7	86.7

II. PER CENT OF ALL PUPILS WHO EITHER ENTERED OR WERE DROPPED FROM THE ROLLS EACH MONTH.

Daughters of owners.	78.6	9.5	7.5	9.5	6.0	2.0	7.5	1.0
Daughters of tenants.	60.5	14.7	14.0	14.6	14.4	9.5	13.6	6.5
Sons of owners.....	88.6	12.0	10.5	8.5	3.8	7.7	13.3	6.7
Sons of tenants.....	56.6	14.3	20.0	20.8	17.0	9.9	12.8	3.6

⁴¹ These schools were as follows: Florence Hill, a strictly consolidated rural school of 6 rooms, situated 6 miles in the country south of Grand Prairie, Dallas County; the Forrester School, a village school in Forrester, Ellis County; the Abbott School, a village school in Abbott, Hill County; Bell-Falls School, a 4-room rural school on the line of Bell and Falls Counties, 6 miles southeast of Troy, in Bell County; and the Macedonia School, a 2-teacher rural school, 5 miles southwest of Granger, in Williamson County, in a mixed American and Bohemian community.

The enrollment of tenants' children, both sons and daughters, shows a decidedly low stage during October, November, and December. This period is cotton-picking time, and tenants' children, as will be seen from a comparison of the data, stay out of school for cotton picking to a greater extent than do the children of owners. This low enrollment of tenants' children during cotton picking is due to the fact that tenants, as a rule, feel that they can not afford to hire their cotton picked, and to the fact that the landlords expect, and sometimes demand, that renters' children be put into the cotton fields in order to rush picking as much as possible.

Aside from the cotton-picking season, it will be noted that the enrollment of tenants' children is considerably less than the enrollment of owners' children during each of the other school months. This is in large measure the result of the fact that children of tenants who move into the school district are not enrolled in the first part of the school term, while those moving out are not enrolled during the latter part of the term. The situation of tenants' children in this regard is, therefore, not so bad as the percentages indicate. Nevertheless, the change of schools, teachers, and classmates in the middle of the year is bound to retard the educational advance of these children.

The daily attendance of the pupils enrolled during each month is much higher in the case of the children of owners than it is in the case of tenants' children. The record is lowest for all four classes of children during cotton-picking time, but is lower for tenants' children than for owners' children during this period.

During each month from November to March, from 14 to 20 per cent of all tenants' children who are in school during the year either enter school or drop out (Part III of Table 33).

The changes in membership of the classes in the schoolroom from month to month are much greater than the figures indicate, for these figures are based on the total enrollment for the year instead of the enrollment for the month. The change in the make-up of the enrollment of tenants' children is from two to three times as great for practically all months as it is for owners' children.

As a result of this shifting and fluctuating school enrollment and irregular attendance on the part of tenants' children, the showing which these children make in grade attainments and in promotions is poorer than the showing made by owners' children.

Referring to Table 34, showing percentages of promotions, it will be seen that there was a much smaller per cent of promotions among tenants' children than among owners' children. Of all

owners' daughters for whom reports were obtained, 96.5 per cent were promoted as compared with 77.2 per cent of tenants' daughters; while 88.6 per cent of owners' sons were promoted as compared with 65.6 per cent of tenants' sons. The same fact is brought out in an even more striking way by the percentages of the four groups that had been retained.

TABLE 34.—*Promotions of children of owners and of tenants.*

Tenure of father and sex of child.	Promoted.			Retained.			Not reporting.	
	Number.	Per cent of all in class.	Per cent of those reporting.	Number.	Per cent of all in class.	Per cent of those reporting.	Number.	Per cent of all in class.
Daughters of owners.	109	73.1	96.5	4	2.7	3.5	36	24.2
Daughters of tenants.	132	58.4	77.2	39	17.3	22.8	55	24.3
Sons of owners.	126	69.2	88.6	16	8.8	11.3	40	22.0
Sons of tenants.	103	43.3	65.6	54	22.7	34.4	81	34.0

If these conditions are general, they would indicate that the average tenants' child is more backward in school attainments than the average owners' child. That this is the case is indicated by Table 35, showing the average age and grade of the four groups of children. For the two groups of grades—the first four grades, and the fifth to eighth grades, inclusive—the tenants' children are from six months to a year older than the owners' children. In other words, the tenants' child is from six months to a year behind the owners' child in grade attainment. The data on pupils above the eighth grade do not show this same backwardness of tenants' as compared with owners' children. However, the numbers involved in this case are too small to make the data reliable.

TABLE 35.—*Average age of pupils in three groups of grades, classified by tenure status of father and by sex, for pupils in five black-land country schools.*

Tenure of father and sex of child.	Pupils in fourth grade and below.		Pupils in the fifth, sixth, seventh, and eighth grades.		Pupils in ninth grade and above.	
	Number.	Average age.	Number.	Average age.	Number.	Average age.
Daughters of owners.	93	8.6	77	12.6	16	15.3
Daughters of tenants.	169	9.3	113	13.5	11	14.4
Sons of owners.	106	8.9	92	13.3	20	16.4
Sons of tenants.	224	9.7	86	13.5	8	16.4

These unfavorable educational conditions associated with tenancy are, no doubt, not all attributable to tenancy. Tenants, as has been shown, are much poorer than owners; and this difference in the eco-

nomie status of the two classes causes tenants to draw more heavily on their children's time for farm labor than do owners. If the tenant were an owner, with his present wealth, he would doubtless still demand more field work of his child than the average owner now demands of his child. Consequently, it is impossible to say how much of the backwardness of the tenant's child is attributable to tenure and how much to financial status.

Regardless of this question, it is quite evident that the tenant's child is having to bear a heavier burden than is the owner's child. And it is evident that some of the more important rural school problems of the area are closely bound up with the problem of tenancy, and that they must be solved in conjunction with solutions of the tenure problem.

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