July 2017

Relation of types of tenancy to types of farming in Iowa

C. L. Holmes
Iowa State College

Follow this and additional works at: http://lib.dr.iastate.edu/bulletin
Part of the Agricultural Economics Commons

Recommended Citation
Available at: http://lib.dr.iastate.edu/bulletin/vol17/iss214/1

This Article is brought to you for free and open access by the Extension and Experiment Station Publications at Iowa State University Digital Repository. It has been accepted for inclusion in Bulletin by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Relation of Types of Tenancy to Types of Farming in Iowa

AGRICULTURAL EXPERIMENT STATION
IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS

C. F. Curtiss, Director

AGRICULTURAL ECONOMICS AND FARM MANAGEMENT SECTION

Ames, Iowa
# Table of Contents

Summary ................................................................. 324  
Introduction ......................................................... 325  
The growth of tenant farming in Iowa ....................... 325  
  Why tenancy has increased .................................... 326  
  Why cash renting has increased .............................. 327  
  Regional differences in tenancy ......................... 328  
Prevailing types of tenancy ...................................... 331  
  The terms of rental ............................................. 333  
  Regional variations in prevailing type .................. 339  
  Recent changes in methods of renting .................... 344  
Farm organization under the different types of tenancy . . . 347  
  Size of the business ........................................... 347  
  Utilization of land ............................................ 350  
  Sources of income ............................................ 354  
  Profits to operators and returns to landlords .......... 359  
Proper adjustment of rental contract ....................... 361
SUMMARY

1. The growth of tenancy in Iowa from 23.8 percent in 1880 to 41.8 percent in 1920 has been due primarily to the rapidly increasing size of the farm investment and the fact that it has taken a constantly increasing amount of farm products to purchase a given amount of land. The remarkable gain of cash renting over share renting is probably due to the change in type of farming from grain to livestock.

2. Tenant farms in Iowa are let under three types of rental; cash, crop-share and stock-share. In crop-share renting, cash rent is usually paid for the use of hay land and pasture. In stock-share renting the tenant pays no cash rent but gives a share of all cash receipts and increases whether in livestock or crops the landlord, carrying a part of the operating expenses and a part of the investment in livestock. For thirty years prior to the recent agricultural depression, more Iowa farms were rented for cash than on shares. Recent developments have caused a decided shift to share renting. The stock-share lease has grown rapidly in popularity.

3. Cash rent for the state as a whole averaged about $8 per acre in 1921 and $7.50 in 1922. Rent has fallen rather sharply since the crisis of 1920. There are very marked regional variations in the rent rates. The normal share of crop rent is 2/5 to one half for oats land. The share for corn tends to be less in the regions where the growing season is shortest. The prevailing rent under the stock-share lease is one half of the gross receipts and accruals.

4. There are very distinct differences in the types of farm organization found under the different forms of leases. These differences are manifested both regionally and locally. In general cash renting has prevailed in the areas where cattle feeding is most important, stock-share renting is prevalent in the dairy area, and crop-share renting prevails in the areas where a great deal of grain is sold and livestock is a comparatively minor enterprise. Locally it is found that the owner-operated farms and those stock-share rented lead in the amount of land in hay and pasture and the amount of receipts from livestock. The crop-share farms have the largest acreage in grain, the largest percentage of their receipts from the sale of crops, and the minimum area in hay and pasture. The cash rented farms fall about midway between these two types in their organization.
THE RELATION OF TYPES OF TENANCY TO TYPES OF FARMING IN IOWA

By C. L. Holmes

Most of the discussions of farm tenancy have dealt primarily with the economic condition of the tenant class, the maintenance of soil fertility under tenant farming, and the more general and sociological aspects of the so-called tenancy problem. Very little attention has been directed to the relation of tenancy to the concrete problems of farm organization and management. It is the purpose of this bulletin to present some details of this relationship as revealed in a limited investigation.

To this end the effect of changes in the agriculture of the state on the increase in tenancy and on the methods of renting land is traced briefly thru the 40 years since tenancy statistics were first available. The prevailing types of tenancy are analyzed in their relation to the peculiarities of farming in each section of the state and the terms of rental under each tenancy type are given. Finally, the specific variations in the organization of the farm under the different types of tenancy are presented as revealed by the analysis of farm survey data from several representative counties. In conclusion the importance of properly adjusting the lease bargain to the type of farming best fitted to each individual farm and to the characteristics of the landlord and tenant is pointed out.

The following data have been utilized in this study:
1. Federal census statistics on the extent and kind of tenancy in Iowa.
2. Certain data collected by the Agricultural Extension Service of Iowa State College in the spring of 1922 by means of a questionnaire sent to landlords, inquiring relative to types of leases, rates of cash rent and other lease terms.
3. Data from farm management survey records taken in various counties of the state.

THE GROWTH OF TENANT FARMING IN IOWA

The first statistics on tenancy became available with the federal census of 1880. They showed that 23.8 percent of the Iowa farms were operated by tenants. This percentage has steadily increased. The 1920 census showed that 41.7 percent of the farms of the state were rented. Fig. 1 presents graphically the tenure situation as it developed during 40 years. Besides showing the decline in the proportion of owners and the corresponding increase in renters, this chart shows that some very interesting changes in the type of renting took place during the 40 years. In 1880 a very small number of farms were rented for cash. The number and proportion thus rented increased remarkably between 1880 and 1890 and somewhat less rapidly between 1890 and 1900. At this last date cash tenants exceeded
share tenants and tho they have increased less rapidly since 1900 they were in 1920 still in excess of share tenants. However, the tendency in the last two years has been very strongly away from cash toward share renting and it is practically certain that there are more share rented farms in the state now than cash rented ones.

WHY TENANCY HAS INCREASED

The most important single factor behind this change is the increasingly capitalistic nature of the farming business as it passes from the elementary stages incident to land settlement to the mature development which it has reached in Iowa.

In 1880 the average investment per farm in Iowa was $3,893. In 1910 it was $17,259 and 1920, $39,942. This rising valuation has acted as a growing barrier to land ownership by operators. It has lengthened the period of tenancy and in the case of many tenants has definitely removed the hope of ownership.

Figure 1.
Number and Tenure of Iowa Farms 1880 to 1910.

Note the increase in the proportion of farms in the hands of tenants. More striking, however, than this change is the increase in the proportion of the farms which are rented for cash. The chart shows a slight decline in the proportion for 1920 over that of 1910. This shift from cash to share renting has gone much farther since 1920.
It is true that in large part this increased investment is capitalized farm income, mostly reflected in land value, and as such is indicative of growing profits in farming; but too often the capitalization has outrun the increase in real income, making investment in land of questionable wisdom.* For example, in 1880, when Iowa farmers were receiving about 25 cents per bushel for corn and about $8 per head for fat hogs, it required 117 bushels of corn or 3.6 hogs to buy an average acre of Iowa land. In 1910, with corn at 36 cents per bushel and hogs at $14 per head, it took 307 bushels of corn or 7.9 hogs to buy an average acre. In 1920, with corn at 47 cents and hogs at $20 per head, the average acre was worth 542 bushels of corn or 12.7 hogs. Meantime types of farming and farm practice have changed in the direction of greater investment in livestock and implements.

All of these things have had their influence in retarding land buying by tenant farmers. Were it not for the importance of inheritance in maintaining a land owning class of farmers, the percentage of tenancy would be much higher.

WHY CASH RENTING HAS INCREASED

The remarkable growth in cash renting shown by fig. 1 seems to be due primarily to the changes in the type of farming which took place in the period covered. Like the other states of the upper Mississippi Valley, Iowa was first a grain state. This type of production was easiest, cheapest, and probably the most profitable for the new settlers. It is this type of farming which lends itself best to the share method of renting. As the country developed and market conditions changed, the shift to livestock farming was made.

Fig. 2, derived from federal census statistics, indicates the extent of this change. In 1880, when acreage figures were first given, 3,049,288 acres of wheat were reported. In ten years this acreage shrunk 81 percent, leaving only 585,548 acres. It increased to 1,690,000 acres by 1900 but dropped back again to half a million in 1910, rising again in the war years. During this same period the area in the feed crops, corn and oats, as shown by the chart, was increasing rapidly. This chart also shows the increase in livestock. There were 2,612,036 cattle on Iowa farms in 1880. This number approximately doubled by 1890 but thereafter increased only slowly. There were 6,000,000

*When land values are rising rapidly the difference between the rate of current income from investments in land and the interest rate on real estate mortgages becomes so great as to make purchase dangerous when large deferred payments are involved. If the purchaser must pay six per cent and the land yields him only two per cent net, there is much danger that the returns from operation will not cover the interest due. It is this phase of the situation which explains why a high percentage of tenancy goes with the high land values; or, more correctly, with rapidly rising values.
A comparison of Figures I and II shows that as feed crops and livestock have taken a larger and larger place relatively to other enterprises, cash tenancy has steadily increased. Recent data indicate that share renting and the raising of grain for sale tend to go together while livestock farming, with some exceptions, favors the cash method of renting.

swine in the state in 1880, 8,250,000 in 1890, and almost 10,000,000 in 1900. However, the figures for 1910 and 1920 are almost 2,000,000 short of this number. The changes in the number of horses and mules, tho marked, did not quite parallel those in the number of meat producing animals.

REGIONAL DIFFERENCES IN TENANCY

Figs. 3 and 4 present the geographical aspect of tenancy and the regional changes that took place in the decade between 1910 and 1920. In these maps the state is divided on the basis of the percentage which rented farms make of the whole number of farms. In 1910, it will be noted, a few counties in the northwestern part of the state showed a tenancy percentage of over 50. That is, more than half the farms in these counties were in the hands of tenants. Over a considerable area in the northwestern, central and western portions of the state the percentage was between 40 and 50. Almost without exception the counties in the eastern and southern portions of the state had a low percentage of tenancy.

By 1920 in two counties, Lyon and Osceola, tenancy had passed 60 percent and in a number of the adjoining counties it was nearly as high. The area having between 50 and 60 percent tenancy had by this time expanded eastward and south-
ward to include 25 counties. Thus in over a fourth of the counties of the state more than half the farms are in the hands of tenant operators. The map shows also that renting has increased in the areas of low tenancy in the eastern and southern parts of the state, tho the rate of increase in these areas has been less rapid than elsewhere. Moreover, these figures do not take account of the land rented by farmers who own some land and rent additional acreage. Such farmers, who make up 11 percent of all the farmers of the state, are, in the figures used in these maps, classed as owners. In 1910 tenants occupied 39 percent and in 1920 44.4 percent of all the farm land in Iowa. These percentages again do not include the land rented by owners renting additional acreage. Such acreage amounted to 7.5 percent of the total farm land studied in a survey in Tama county for the year 1921, which covered 48,000 acres of farm land.

To those familiar with the physical characteristics of Iowa it is apparent that tenancy is highest in the regions of level, fertile, highly productive land, and lowest in the regions of rough surface and poorer soil. Further, the increase in rented farms as shown by these maps is more rapid in the parts of the

Figure III.
Percentage of Iowa Farms Operated by Tenants 1910.

Note that the counties showing the highest percentage of tenancy are, with the exception of Grundy County, in the northwestern corner of the state. This is an area of big farms and high land values.
state which have the best natural resources and where farming is normally more profitable, and lowest where the land is so poor that it gives but a modest return for the labor and capital investment put upon it.

Other things being equal, the land which is best from the point of view of physical properties will be highest in price. Market accessibility and other economic forces are so nearly uniform for the whole of Iowa that variations in the value of land are due almost wholly to differences in its physical productivity. The highest values per acre are usually found where the yields per acre for a given degree of cultivation are highest and where the highest percentage of the entire surface is capable of being cropped.

Reference has already been made to the relation between tenancy and the high capitalization of the farm business, particularly as affected by rising land values. Fig. 5 is a map showing regional variations in real estate value and is inserted here that it may be compared with fig. 4 in order to show how closely the areas of highest land values coincides with those of the highest percentage of tenancy. In fig. 5 the average total value of land and buildings per farm is used rather than the average value per acre in order to take account of the variations in size of farms; for it is the size of this total investment in land the farmer finds necessary in order to employ his labor and equipment to best advantage that is the significant thing in its effect upon tenancy rather than the price he pays per acre. Abundant examples might be cited from the fruit areas of the West and the truck areas of the east where high values per acre do not mean a high percentage of tenancy, whereas almost without exception high total investment in land per farm does mean a high percentage of tenancy.

**PREVAILING TYPES OF TENANCY**

There are three important types of farm leasing in Iowa, cash, crop-share, and stock-share.

*Cash:* In the case of cash rent the tenant buys the use of the landlord's land and improvements for a specified price. This gives him the right to use them in his business pretty much as he chooses, without let or hindrance from the landlord. The cash lease usually contains some general restrictions to protect the landlord's interest against soil depletion and excessive deterioration of improvements, but in general the cash tenant is almost as free to determine the kind of farming he will carry
Figure IV.
Percentage of Iowa Farms Operated by Tenants in 1920.

Compare this with Figure III and see how the area of highest percentage of tenancy has expanded eastward and southward.

Figure V.
Average Value of Land and Buildings Per Farm in Iowa, 1920.

Comparison of this map with the one preceding shows that there is fairly close geographical coincidence between the area of maximum investment in the farm unit and that of the highest percentage of tenancy.
on as is the owner-farmer. The cash tenant assumes practically all the risk involved in the business and for this reason usually gets the use of the land at a somewhat lower rate than the tenant who gives a share (see table IV).

**Crop-Share:** In the case of crop-share renting a specified share of the crops is taken by the landlord as rent. In some parts of the country where pasture is of little value the share of the crops taken is assumed to cover the rent for pasture and buildings, but in Iowa practically all crop-share renters pay a cash rent of so much per acre for pasture. The hay land is usually rented for cash, also, the occasionally the landlord takes a share of the hay. Under the great majority of share leases in Iowa the landlord's share is net except for taxes and repairs and depreciation on buildings. That is, he bears no part of the operating expenses.

Under crop-share renting the return to the landlord depends upon the kind of crops grown as well as the care and skill with which the farm is operated. Under this type of leasing, therefore, the landlord retains a large degree of control over the business. The acreage of each crop is usually stated in the contract and as is also the landlord's right to interfere in case the tenant fails to care properly for the crops. Because of the function of supervision which the landlord of a share rented farm usually performs, but more because of the risk he assumes, since his income is affected by fluctuations in yields and prices, his rate of return on investment in normal seasons is distinctly higher than that of cash landlords. This difference in rate of return is to be noted in the tabulations of survey data given later in this bulletin.

**Stock-Share:** The third type of leasing, the stock-share, has until recently been of very little importance in Iowa. Prior to 1920 probably not more than 5 percent of the rented farms of the state were held under this arrangement. It has long been the most important type of share leasing in Wisconsin and other dairy states and since the crisis of 1920, which resulted in such great loss to cash tenants, many renters have taken up this form. It differs from crop-share renting in two important particulars; first, the division is on the basis of proceeds from sales, whether of grain, livestock, or livestock products, instead of on the basis of crops produced; and second, the landlord participates in the farming enterprise to the extent of supplying a part, usually one-half, of the investment in the livestock and feeds used on the farm. These two features make the landlord even more vitally interested in the operation of the farm than he is under crop-share renting. The result is that he usually cooperates even more closely with the tenant in the management of the farm.
In addition to the farmers who rent all the land they use, there are as has already been stated, a considerable number who own some land and rent an additional tract either for cash or on shares.

**TERMS OF RENTAL**

Before taking up the differences in farm organization under the various forms of rental it is of interest to note the terms on which Iowa farms are let. The questionnaire mentioned above, which was sent to Iowa landlords in the spring of 1922, contained inquiries on the rents received by landlords, both in cash and as a share, the expenses of maintenance borne by landlords, and the things which in share renting the landlord contributed to the business under the lease bargains of the seasons of 1921 and 1922. Some interesting correlations between rental terms and the type of farming are to be observed in the returns from these inquiries.

**CASH RENT**

The inquiry in this schedule which brought most complete returns was that with reference to the amount of cash rent paid. Figs. 6 and 7 show the geographic variations in the average rents for the years 1921 and 1922 as shown by this inquiry. Fig. 6 is based on returns from 524 cash rented farms for the year 1921 and fig. 7 on returns from 505 such farms for 1922. It will be noted from an examination of these maps, and particularly from a comparison of fig. 6 with figs. 5 and 9 (see pages 331 and 340) that the areas of highest rents in 1921 coincide fairly well both with the areas of highest land values and with the sections of the state where livestock farming is most highly developed and with the central area where a large amount of...
This map is based on the cash rent rates as stated by landlords. The figures represent averages by counties and are the basis on which the borders of the various zones are determined. However, in locating these borders county boundaries are ignored and the figures used merely as weights to determine the directions of the zone lines. From some of the counties where share renting is most prevalent no returns were received. Note that one area of highest rent rather closely coincides with the area of highest value per farm but that there is another area of high rents near the southeastern corner. In this area the farms are smaller than in the other area.

Figure VI.
Average Cash Rent per Acre, 1921.

This map is based on data from the same source as that given in Figure VI, and is similarly constructed. It reflects a very decided reduction of cash rents from the figures of the previous year. This and the reduction in the number of cash renting tenants came as a result of the losses suffered by cash renting tenants in the seasons of 1920 and 1921.

Figure VII.
Average Cash Rent Per Acre, 1922.
grain is sold for cash. The area showing the very highest rent—that is, $9.00 or more per acre—is approximately coincident with the area in which land speculation was most pronounced in 1919 and in which the values of land reached their very highest figure. Some exception to this may be noted in the case of the area of highest rents in the eastern part of the state.

When one compares fig. 6 with fig. 7, he notes a very decided lowering of rents between the seasons of 1921 and 1922. The highest group of rentals for 1921, as shown in fig. 6 had entirely disappeared in 1922, and the area with rents between $7.00 and $9.00 had shrunk to something like half its former size. In 1922 the whole northeastern part of the state was included in the rents which run from $5.00 to $7.00 and the similar area in the southern part of the state was extended to nearly three times its size as it appeared in fig. 6. The weighted average cash rent per acre as reported in this questionnaire was $8.11 for 1921 and $7.52 for 1922, a reduction of 7.3 percent.

The rental rates as just presented do not, of course, represent the landlords' net return for their land, but the gross return. To arrive at their net return their expenses, such as taxes and repairs on improvements, must be deducted. The questionnaire contained an inquiry on this point but most of the landlords reporting neglected to answer it. Only 195 cash renting landlords reported their taxes and repair bills. From their figures an average of $1.98 per acre for these expenditures was derived. On checking this with similar figures obtained in the spring of 1922 from some 500 farmers in two counties by means of farm organization surveys, it appears that this average is not too high to be representative. For example, the average expenditure per acre for repairs and taxes in the season of 1921 as reported for 84 landlords in Tama county coincided exactly with the above figure.

The foregoing discussion of cash rent rates is based upon the reports of landlords who rented their entire farms for cash. On most Iowa farms which are share rented it is only the grain land for which the tenant gives a share. He ordinarily pays a cash rent for the hay land and the pasture. For the year 1921, out of 893 share rent landlords reporting on the rental of hay land, 791 or 88.5 percent rented their hay land for cash. In 1922, 970 out of 1,092, or 88.8 percent, reported renting for cash. The average rent of hay land was 1921 was $7.14 and for 1922 it was $6.53, making a reduction of a little over 7 percent. In practically all cases the pasture land was rented for cash. The average rate per acre of pasture rent was $6.93 in 1921 and $5.33 in 1922.
This general reduction in the rate of cash rent was, of course, a result of falling prices of agricultural products and the hard times which resulted. We do not know with any degree of accuracy how great a reduction from the maximum rates which obtained in 1919 and 1920 these rates of 1921 represented. Presumably there was some reduction, altho there is reason to believe it was by no means as sweeping as the one for which we have figures. In many cases the rents which were provided in the contracts of 1920 and 1921 could not be paid and were remitted in large part to the tenants by the landlords. Reference has already been made to the remarkable shift from cash renting to share renting. It is evident that those landlords who preferred to rent for cash found it necessary to offer very liberal terms in order to hold their tenants on a cash rent basis.

CROP-SHARE RENT

The returns to landowners renting for a share of the produce is to a considerable degree automatically adjusted to the changes in agricultural prosperity by means of changes in the prices of the products. Consequently we find no such sweeping change in the fractional share of the products received by the landlords as was shown for cash rent, altho the questionnaire returns do indicate that there is a slight tendency for landlords to take a somewhat smaller share than was customary during the more prosperous years which preceded the present depression.

On the typical crop-share rented farm in Iowa the tenant gives one-half the corn and two-fifths or one-half of the oats and other small grain, either placing the grain in storage for the landlord on the farm or delivering at the local market. Hay land and pasture, as already stated are usually rented for cash. These payments in kind and in cash are tacitly assumed to cover the rental for the house and other buildings and improvements as well as for the farm garden plot, and frequently for the orchard and woodlot. In other words, no portion of the rental payments is commonly specified as rent for these things.

The grain going to the landlord usually is delivered free of charges. That is, the landlord does not usually pay any share of the production expenses, such as seed grain, twine, threshing, shelling and the like. He, however, frequently pays for the grass seed, largely as a means of encouraging the sowing of a larger acreage of grass in order the better to maintain soil fertility.

In this investigation the shares of products received and the share, if any, of the expenses borne by the landlord were obtained for the two seasons, 1921 and 1922. Under the 1921 contracts reported, the landlord received one-half the corn on about 80 percent of the farms, two-fifths on 19 percent and one-
third on 1 percent. The figures for 1922 showed a slight tendency toward a diminished share for the landlords. Seventy-eight percent of those reporting were to receive one-half; 21 percent, two-fifths; and 1 percent, one-third. In the case of oats a much higher percentage of the landlords normally received the minor share. In 1921, 55 percent of those reporting received one-half, 44 percent received two-fifths, and 1 percent received one-third. For 1922 the corresponding percentages were 50, 47 and 3.

Our figures show that the smaller share to landlords is more prevalent in some parts of the state than in others. This is particularly true in the case of corn. In general the two-fifths share tends to be more common than the half share in the northern counties of the state and especially in the 10 or 12 counties located in the extreme northwest corner. Presumably the prevalence of a smaller share of corn to the landlord in this part of the state is due to the greater risk in corn raising in that locality because of the shorter growing season. Reference to fig. 8 shows that the average length of season free from killing frosts is 10 days shorter in the area where the prevailing share of corn

![Figure VIII.](image-url)

The Relation of Length of Growing Season to the Share Rent on Corn Land.

The figures in the counties indicate the percentages of share renting landlords reporting who were receiving two-fifths rather than one-half the corn. The length of growing season as here given is the number of days between the average date of the last killing frost in the spring and that of the first one in the fall.
to landlords is two-fifths than it is in central Iowa and 20 days shorter than in southern Iowa.2

Differences in the share of oats do not show any marked regional variation. The two-fifths share to landlords is a little more prevalent in a limited area centering around Waterloo in Black Hawk county, but the difference is not great enough to be significant.

A method of adjusting terms between share landlords and their tenants in the interest of a fair division which is resorted to frequently in some states is that of the landlord bearing a share of the operating expenses. Seed and threshing are two items most frequently shared in this way. The returns to the questionnaire show that this method is not resorted to in a very large measure in Iowa. Only 208 out of 1,324 crop-share landlords answering the question for 1922 reported paying any part of the threshing expense and only 194 reported furnishing any part of the grain seed. A very few reported paying half for shelling corn.

STOCK-SHARE RENT

Under the stock-share form of leasing, by which the landlord furnishes a large portion of the working capital in the form of livestock, feed, seed, and other supplies, there is great opportunity for adjustment of terms in the interest of equity to the parties, both by shifting the proportion of the receipts going to each party and by making changes in the items furnished to the business by each. It is rather surprising, in view of the widely differing productive value of different farms, that the terms of these leases are so uniform. Very little difference, apparently, exists in the division of the receipts on farms rented under this system. The 420 reports received from the stock-share landlords showed that all of these men were renting for one-half the gross receipts. This return, of course, covers not only the use of the land but the use of a considerable body of working capital.

When one examines the share of the working capital furnished by the landlord, however, he finds much less uniformity. It has usually been assumed that the prevailing practice is for the landlord to furnish the land and improvements and pay taxes and repair bills on them; for the tenant to furnish the labor, equipment, work stock, and all maintenance expenses upon these things excepting feed for his work stock; and for the two to furnish jointly in equal shares the other livestock and all the feed, together with the expenses incident to the care of these jointly furnished items. However, there are so many excep-

2. The lines on this map showing length of growing season are copied from "Frost and the Growing Season" by William Gardner Reed, Advance Sheets No. 2, Atlas of American Agriculture, Government Printing Office, Washington, D. C.
tions to this arrangement that it can hardly be said to be the prevailing practice. Our information shows that it is departed from very frequently in two important respects, namely, that the landlord may furnish half the investment in work stock as well as in other livestock and that he may also own half the machinery and other movable equipment. Of the 420 stock-share landlords reporting for 1922, 217, or 63.5 percent, furnished none of the workstock; 120, or 28.5 percent, furnished half; 12 furnished all; 3 furnished irregular portions, and 18 failed to specify. In the matter of implements and machinery, 244 landlords furnished none, 124 furnished one-half, 17 furnished all, 5 furnished irregular portions, and 30 failed to specify.

The geographical aspect of these differences in what the landlords of stock-share rented farms furnished is very significant. By far the larger number of cases in which the landlord furnishes part of the investment in machinery and horses were reported from the southern counties where land values are the lowest in the state. Indeed if these cases are placed on a map the area showing the largest number coincides almost exactly with the triangular area of low total farm value as shown in fig. 5. It is evident that where the land surface is rough, making it impossible to utilize so high a proportion of it for raising heavily yielding crops, the relatively higher contribution made to the business by the operator is recognized and the lease bargain modified accordingly.

**REGIONAL VARIATIONS IN PREVAILING TYPE OF TENANCY**

When tenancy in the state is examined for geographical variations in methods of leasing it is found that there is a close relation regionally between the types of leases prevailing and the types of farming. To be sure, one finds examples of all the different types of leases in any locality and there are regions where two or more types of renting are almost equally mingled, but over large areas of the state one given type of renting is so far in excess of the others as to indicate a causal relationship with prevailing farming conditions. It is not easy to determine in all cases which is cause and which effect. Doubtless in many cases the nature of the lease bargain is the thing which determines the sort of farm business developed on the farm. However, it seems that in general the causal sequence runs in the other direction. Natural and economic conditions determine what type of farming pays best and tend to fix this type of farming upon the area. This in turn determines and establishes the prevailing type of renting. There is, of course, a wide diversity in the nature of the different farms of any locality.
as well as in the economic and personal qualifications of the landlords and tenants and these factors make for a greater or less degree of diversity in leases. In this section of the bulletin the regional variations in leasing methods are discussed and related so far as possible with the prevailing farming types and other causal factors. Figs. 9 and 10 show the relative percentages of rented farms held under cash and share rent, respectively, in 1910 and 1920. Since the census does not report crop-share and stock-share renting separately we have no complete data on the relative importance of these two forms.

Examination of the first of these two maps shows two areas, one in the western and the other in the eastern part of the state, where cash tenants in 1910 made up 60 to 80 percent of all the tenants and share renting was correspondingly unimportant. In an irregular wedge-shaped area, with the base of the wedge lying along the northern border from Osceola county to Worth county, and the point extending southward as far as Dallas county, share tenancy was the prevailing type with very little of cash renting. The same condition existed in a few counties in the southern and southwestern parts of the state. In the remainder of the state cash and share renting were in approximately equal amounts. For the state as a whole, 57.3 percent of the tenants were renting for cash and 42.7 on shares.

![Figure IX. Relative Percentage of Cash and Share Renting, 1910.](http://lib.dr.iastate.edu/bulletin/vol17/iss214/1)
This map is constructed on the same basis with Figure IX. On comparison it is found that while cash tenancy has increased somewhat in certain limited areas, for the state as a whole it has declined during the ten year interval. Share tenancy is the predominating form of renting in 55 counties in 1920 whereas in 1910 it was the predominating form in only 43 counties.

Fig. 10 shows that a marked change in the distribution of cash and share tenants took place between 1910 and 1920. The western cash tenancy area had shrunk from 12 to 10 counties and the eastern area from 21 to 16. Share tenancy had expanded until it occupied an irregular area running from north to south across the state and taking in a third of all the counties. In 1920 the cash tenants were 52.8 percent of all tenants and the share tenants, 47.2 percent.

On examination of the differences in farming in the several parts of the state we find some very significant coincidences between the type of farming and the type of leasing. Both of the cash tenancy areas are roughly identical with the areas of most intensive production of hogs and beef cattle. The area having the highest percentage of share tenancy is largely made up of the counties from which a large percentage of the crops is marketed as grain instead of being fed to livestock. Fig. 11 shows by counties the relative proportions of the farmers' receipts coming from the different sources.\(^3\) In comparing this with figs. 9 and 10 particular note should be taken of the size

---

\(^3\) This is based on the census figures for the year 1909 as reported in the thirteenth census. The fourteenth census (1920) failed to report sales of livestock and sales of crops. Hence a computation of sources of income cannot be made for the last census year.
Figure XI.
Percentage of Farmers' Cash Receipts From Different Sources, 1909.

The circles show the variations in the average gross income from the sale of principal products. Crop receipts include those from hay and forage, corn, oats, barley and wheat, but not potatoes, truck or other minor crops. Livestock receipts include also the value of animals slaughtered on the farm. This map, with its series of charts for each county, affords perhaps the best available single index of the type of farming in different parts of the state. It was necessary to use 1909 figures since the recent census does not furnish the necessary statistics.
of the sectors representing receipts from crops and from live-
stock. These are the leading two sources of receipts. It will be
noted that in general the counties in which the portion of the
income derived from livestock sales is highest show highest in
cash tenancy, while in the counties where crop sales are de-
cidedly higher than in the other counties, share tenancy is the
prevailing type.

To explain this localization of cash and share renting it is
necessary to explain what is back of the differences in farming
in these separate regions.

The most important factor in these differences is the relative
proportion of the land which can be used only for permanent
meadow and pasture and the proportion which can be used for
grain crops. It is noticeable that in most of the cash rent areas
there is a high percentage of the farm land in pasture. Where
a large part of the farm land is in pasture and meadow, cattle
must be kept to realize on it. The presence of a large cattle
enterprise determines the cropping program. Feed crops must
be raised and they must be retained for feed and not be sold
from the farm. If the tenant were to rent for a share of the
crops he must either curtail his livestock enterprise or buy back
most of the landlord’s share of grain. Crop-share renting,
therefore, does not fit livestock farming. The stock-share lease,
which is growing in favor, is resorted to on some livestock farms,
but the average tenant with sufficient capital and experience
prefers under ordinary conditions to pay a cash rent for the
sake of the higher returns and greater degree of independence,
which go with this type of renting.

In the part of the state where share renting and heavy sales
of crops are coincident the percentage of the farm land in pas-
ture is at a minimum. Where the surface is such as to make
tillage easy and the productivity of the soil is not rapidly re-
duced by constant cropping, the farmer can ill afford to devote
much land to pasture and hay for the support of slowly matur-
ing livestock, such as cattle. The owner-farmer tends to restrict
his livestock enterprise to hogs and to sell much of his grain,
while the tenant who gives half his corn as rent can still fatten
as many hogs as he finds it feasible to raise. The landlord
under these circumstances prefers a share of the crops since it
gives him a larger income than he would get from cash rent and
the division of the crop is simple and requires much less of his
time and attention than if he were renting on the stock-share
plan.

There are, to be sure, important influences other than type
of farming which affect the rental method. The amount of risk
involved in the farming business is one of these. Wherever the
hazard from crop failure is great there is a strong tendency
for the tenant to shift part of this risk upon the landlord by the use of the share rent contract. The poor drainage of a large area in the north-central part of Iowa, covered by what is known as the "Late Wisconsin drift," subjected the farmers to frequent loss of crops thru flooding. Here share renting becomes well established and still persists even tho artificial drainage has been provided and has removed most of the risk of crop failure from this source. In the southern and southwestern counties the grain crops are occasionally injured by dry hot winds. This, doubtless, has contributed to the prevalence of share renting in that region.

**RECENT CHANGES IN TENANCY**

The very noticeable tendency toward the substitution of share renting for cash renting, shown by the data of 1920, is doubtless due primarily to the unusual movement of agricultural prices during the war and post-war years. In the prosperous years from 1916 to 1919 the gross receipts of farmers increased very greatly. On cash rented farms the landlord's share of these receipts does not increase, as does that of the share landlord, with increases in price of products which come in the course of the year or during the term of contract. Further, the tenants strenuously resist increases in the rental rate when contracts are renewed even tho prices are rising. Many landlords, therefore, sought to shift to a share basis that they might participate more fully in the results of rising prices. To be sure, the rates of cash rents were raised on many farms but there is evidence to show that these increases were smaller and less general than has been supposed.
PRICE SLUMP BRING TENANT DEMAND FOR SHARE RENT

With the slump in prices and the resulting disastrous seasons of 1920 and 1921 it was the tenant who wanted share rent. Those who had contracted to pay a fixed sum at an increased rate for the use of their farms were threatened with bankruptcy. Court records show that of the farmers who took advantage of the provision for voluntary bankruptcy, by far the larger proportion were cash tenants.

Many landlords remitted a large part of the rent due on their contracts. Under these conditions share renting was resorted to as a means of dividing the risk due to falling prices and unstable economic conditions.

RENTING PRACTICE IN 1922

Of the landlords reporting on their leases for 1921, there were 525 renting for cash, 1,248 renting on the crop-share plan, and 383 on the stock-share plan. For 1922 there were reported 521 cash rentals, 1,313 crop-shares and 453 stock-shares. Fig. 12 shows the distribution by counties of these different forms of rentals as reported for the year 1922. Tho there are no previous figures to use as a basis of comparison, it is evident that cash renters in large numbers have shifted to the stock-share plan.

It was hoped that so large a number of reports as the questionnaire returned would give a representative sample of the methods of renting now prevailing in the state and that we might get a reliable measure of the change in rental methods since the census year of 1920. It must be admitted, however, that the comparatively small number of cash leases reported casts some doubt upon the representative character of the returns. It will be recalled that the census reported that 52.8 percent of the tenant farms in 1920 were rented for cash. There has been a general and very marked abandonment of the cash lease in favor of share renting, but one may well doubt whether it has gone as far as is indicated by the questionnaire figures. It may be that the owners of share rented land responded to the questionnaire in somewhat larger proportions than did the cash landlords, thus giving them a disproportionate representation in the returns. Recent evidence indicates that in many parts of the state there is a noticeable reaction toward cash renting for the season of 1923. As reported in this inquiry cash leases make up 22.8 percent, crop share 57.4 percent, and stock share 19.8 percent of the contracts of the season of 1922.

A good degree of dependence may doubtless be placed on the questionnaire figures with reference to the geographical distribution of the different types of renting. Reference to fig. 12 shows that the stock share lease is most used in the northeastern
Figure XII.
Distribution of Farm Leases of the Several Types in 1922.

The figures which form the basis of this map were secured by a questionnaire sent to landlords. They show the relative geographical distribution of the cash, crop-share and stock-share methods of renting although it is doubtful that the limited returns give a fair sample of the relative numerical importance of the three types for the state as a whole. There are probably a larger proportion of cash renters than is here shown. Note how important the stock-share method is in the dairy counties of the north-eastern part of the state and how the crop share predominates in the areas where grain farming is most important. Compare this map with Figure XI.
counties of the state where dairying has assumed some importance. However, a large number of cases of this sort of renting are reported from the areas of the state where beef cattle and hogs are most important. It is evident from all the available information that stock share renting has made a much higher percentage of gain than crop share and probably a considerably higher absolute gain.

**FARM ORGANIZATION UNDER THE DIFFERENT TYPES OF TENANCY**

In the foregoing section the relations between the prevailing types of tenancy and the regional differences in farming were pointed out. In this section these same relations are examined as found in certain limited areas. In order to determine as nearly as possible some of the most outstanding differences in the organization of the farms under the different tenure types, a number of farm organization survey records taken in several counties of the state were grouped into the five important tenure classes and the figures analyzed to show differences in the size of the business, the utilization of the farm land, the sources of income, and the returns made by both landlord and tenant.

The counties from which these records were taken are Clay, Greene, Henry, Montgomery, Tama and Warren. They are widely scattered over the state and afford a fairly good sample of conditions for the state as a whole. Two of the sets of records, those from Tama and Warren counties, numbered 197 and 175, respectively, and covered the farm business for the year 1918. The sets from the other counties were smaller in number, ranging from 49 to 68 each, and gave figures on the business for the season of 1914. The small number of records from some of the counties and the fact that these records are not all for the same year make the material objectionable in some degree, but care has been taken to utilize it so as to avoid unwarranted conclusions arising from these objectionable features.

The five tenure classes into which the farmers are divided are (1) owners, (2) owners renting additional land, (3) cash tenants, (4) crop-share tenants, and (5) stock-share tenants. The rent paying adjustments characteristic of each of the last three—which include all those usually classed as tenant farmers—have already been described. In the entire lot of records used there were 253 owners, 105 owners renting additional land, 115 cash tenants, 98 crop share tenants, and 30 stock share tenants.

**INFLUENCE OF SIZE OF BUSINESS ON TENURE**

The first comparison is on the basis of the size of the business carried on by the farmers of the several tenure classes. Practically all available data show that tenants operate larger farms
TABLE I. AVERAGE SIZE OF THE FARM BUSINESS BY TENURE CLASSES AS SHOWN BY SURVEY REPORTS IN SIX IOWA COUNTIES 1914 and 1918*

<table>
<thead>
<tr>
<th>Counties</th>
<th>Owners</th>
<th>Owners-Add.</th>
<th>Cash</th>
<th>Crop-Share</th>
<th>Stock-Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of farms</td>
<td>Area acres</td>
<td>Inv. $</td>
<td>No. of farms</td>
<td>Area acres</td>
</tr>
<tr>
<td>Clay</td>
<td>27</td>
<td>146</td>
<td>31,578</td>
<td>8</td>
<td>243</td>
</tr>
<tr>
<td>Greene</td>
<td>23</td>
<td>168</td>
<td>32,911</td>
<td>7</td>
<td>184</td>
</tr>
<tr>
<td>Henry</td>
<td>22</td>
<td>170</td>
<td>33,831</td>
<td>8</td>
<td>208</td>
</tr>
<tr>
<td>Montgomery</td>
<td>22</td>
<td>170</td>
<td>33,831</td>
<td>8</td>
<td>208</td>
</tr>
<tr>
<td>Tama</td>
<td>77</td>
<td>220</td>
<td>65,465</td>
<td>27</td>
<td>207</td>
</tr>
<tr>
<td>Warren</td>
<td>82</td>
<td>171</td>
<td>31,011</td>
<td>43</td>
<td>180</td>
</tr>
<tr>
<td>Weighted average</td>
<td>253</td>
<td>181</td>
<td>42,540</td>
<td>105</td>
<td>196</td>
</tr>
</tbody>
</table>

*In this and the following tables certain figures are printed in bold type. This is to indicate that they are based on so small a number of records that their representative character is somewhat in doubt.
and employ a larger total investment in the farm business than
do owner operators. The federal census shows that in 1920 the
tenants of Iowa were holding farms averaging 167 acres in size,
representing an average investment of $38,898 in land and
buildings, while the owners held farms averaging only 148 acres
and worth $32,911. In 1910 the differences were not so wide.
The owners’ farms averaged 152 acres with an average invest­
ment of $14,606, while the average tenant farm was 161 acres
and worth $15,464.4

The census gives no figures showing to what degree the size
of the business carried on by tenants of the different classes
differs. In an attempt to ascertain this the survey data referred
to were analyzed. Table I gives the results of this analysis by
the counties represented. When the averages of the records from
all the counties are taken the stock share farms are shown to be
26 acres larger than those of any other class. Tho this average
is based on only 30 farms, the fact that stock share farms are
largest in every group in which they occur would indicate that
the average may be fairly representative. Table II shows that
these stock share rented farms have a high percentage of their
area in pasture. Other survey data in possession of this station
indicate that the larger the farms the higher the percentage of
the area in pasture.5

It is likely that the large amount of land on these farms which
can be used only for pasture may be a strong factor in causing
them to be rented under this type of tenure.

The farms next in size, according to the general average, are
the cash rented ones. Here, however, the figure is not so clearly
representative, for the county averages show these farms to be
second in size in only two of the areas studied. Further, the
prevailing size of all farms differs so greatly in the different
parts of the state that it tends to distort the general average
when, as in this case, the numbers belonging to a given class
vary greatly in the different counties. For example, in Tama
county, where all farms are large, there are 72 cash rented
farms in the figures but in Warren county, where all farms are
small, there are only nine. The result is that the general aver­
age is not a very dependable representative figure when used to
indicate relative size of farms in this and other tenure classes.
The same criticism may be offered to the general size averages
for the owner-additional, crop-share, and owner farms. How­
ever, it is quite evident from these and other survey data that
farms operated by owners tend to be smaller than rented farms

4. A part of these wide differences is due to the fact that a higher percentage
of the farms are rented in the parts of the state where all the farms are large than
in the parts where all farms are small. However comparison by counties shows
rented farms to be larger than those operated by owners.

Published by Iowa State University Digital Repository, 1921

29
and that the farms partly owned and partly rented, tho larger than owner-operated farms, are not so large as the farms entirely rented. In this the survey data are in substantial agreement with the census figures already given.

Not all the reasons for this difference between the size of tenant operated farms and those operated by their owners are apparent, but there are at least three rather obvious explanations. In the first place, tenants are for the most part young men with lots of strength but with little capital. They have both the ability and the motive to handle a business of ample size. Further, as tenants they are not tied down to a given farm as an owner is and hence find it easy to shift about until they find a farm large enough to employ their labor and operating capital to the best advantage. This is of particular importance at the time when the tenant's sons become large enough to supply an appreciable amount of labor. It is a matter of common observation that tenants do adjust themselves to the proper size of farm much more freely than owners do.

In the second place, tenants on buying farms for themselves frequently take less land than they can operate most profitably because they have too small a sum to invest or fear to assume so heavy an investment as would be necessary to give them an adequate farm. Many of them plan to enlarge their farms as they accumulate more funds. Under conditions obtaining in recent years, however, the owner when he finally gets a farm of adequate size is about ready to retire and place it in the hands of a tenant.

A third reason why tenant farms are larger than those worked by their owners is that the owner tends to be a more intensive farmer than the tenant. Because he finds it harder to increase the amount of land he uses, he expands his business as his resources increase by using more equipment and adopting those lines of production which absorb relatively larger amounts of operating capital. The tenant, on the other hand, finds it unsafe to build up a business on intensive lines because he cannot, under our system of tenancy, be sure of permanent occupancy of any farm.

**UTILIZATION OF FARM LAND**

The second comparison of the organization of farms operated under the different terms is made on the basis of the relative amounts of the farm area used for the several crops, for pasture, and for other purposes. Table II gives the averages by county groups for the entire number of farms whose records were considered. These figures show very definitely certain tendencies in the use of land operated under the different forms of tenure;
which in turn point to fundamental differences in the type of farming carried on under each tenure.

Probably the most striking thing in this comparison is the great importance of pasture and hay on the stock-share rented farms and the relatively smaller importance of both corn and oats, contrasted with exactly the opposite condition on crop-share rented farms. The average figures for all the counties show the stock-share farms to be highest in the percentage of the farm area devoted to pasture and hay as compared with the other tenure classes and lowest of all the classes in the percentage devoted to grain. When the averages for the several counties are considered, the ranking is not entirely uniform but, considering the small number of farms in some of the groups, the consistency of the figures is quite remarkable. It is very evident that the cropping program on the stock-share farms is designed to support a heavy livestock enterprise and that it is particularly fitted to go with heavy cattle production. On the other hand the crop-share cropping program is designed to supply a large amount of grain for market. To be sure, such a distribution of acreage might go with heavy production of hogs; but figures to be given presently show that hogs are relatively less important on the crop-share farms than on those of the other tenure classes.

Examination of the averages for the owner-operated farms show an acreage distribution very similar to that of the stock-share farms. In the general averages owner farms are second only to the stock-share farms in the proportion of land in hay and pasture and only slightly above them in proportion devoted to corn and oats. In other words, owner farms tend to specialization in livestock, or at least to greater attention to cattle than is shown on the crop-share farms. The cash rented farms show a land utilization more nearly similar to the crop-share farms than to the owner-operated and the stock-share farms while the farms made up of owned and rented land occupy an intermediate position without extreme specialization in either direction.

Here, as in the case of size differences, complete explanation of the facts discovered is impossible. There is always the question of whether the nature of the land, which might induce greater or less attention to livestock, depending on whether there were a considerable amount of land fit only to be used in permanent hay meadow and pasture, determines the type of farming and the form of tenure follows as an effect, or whether the tenure type is the cause which modifies the crop and livestock enterprises. Doubtless the causal sequence is not the same in all cases. It is very evident, however, that permanency of tenure and an active participation of the land owner in the
## TABLE II. AVERAGE UTILIZATION OF LAND UNDER VARIOUS TENURES AS SHOWN BY SURVEY REPORTS IN SIX IOWA COUNTIES

1914 and 1918

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Acreage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Pasture</td>
</tr>
<tr>
<td></td>
<td>No. farms</td>
<td>Total</td>
</tr>
</tbody>
</table>

**Clay County (1914)**
- Owners: 146.6 39.8 46.0 30.6 6 17.5 11.8 27 100 27.2 31.6 20.9 4 11.9 8.0
- Owners-additional: 242.8 40.9 87.0 69.0 30.5 16.8 9.0 13 100 16.8 35.5 28.6 11.7 7.0
- Cash: 180.0 28.0 68.1 47.5 19 25.0 9.0 13 100 15.7 35.9 28.6 11.7 7.0
- Crop-share: 188.5 36.7 68.8 54.0 19 16.8 12.2 10 100 16.8 36.5 28.6 4 8.6 6.4
- Stock-share: 288.0 30.0 136.0 75.0 40.0 17.0 100 10.1 45.6 25.2 13.4 5.7

**Greene County (1914)**
- Owners: 168 35 57 38 4 23 100 20.9 33.8 22.3 2.6 13.3 7.1
- Owners-additional: 209 47 90 43 5 18 6 100 22.7 43.1 20.5 2 8.5 3.0
- Cash: 165 35 59 35 5 21 100 21.2 35.7 21.2 3.3 11.9 6.7
- Crop-share: 191 37 81 48 4 18 100 14.3 42.6 25.0 1.0 9.5 6.7
- Stock-share: 217 58 71 32 100 38.5 32.6 14.6 10.5 3.6

**Henry County (1914)**
- Owners: 147 30 68 24 2 14 100 26.5 32.5 7.0 13.9 11.9 7.3
- Owners-additional: 208 47 90 43 5 18 6 100 25.5 37.5 20.5 22.7 13.0 5.7
- Cash: 200 47 90 43 5 18 6 100 22.7 43.1 20.5 22.7 13.0 5.7
- Crop-share: 203 64 67 33 5 21 100 31.6 32.8 16.1 2.5 10.1 6.9
- Stock-share: 214 43 70 30 8 11 100 18.7 48.0 22.1 4.6 6.9 4.7

**Montgomery County (1914)**
- Owners: 170 45 56 13 21 20 100 26.5 32.5 7.0 13.9 11.9 7.3
- Owners-additional: 208 53 75 12 27 26 15 8 100 25.5 37.5 20.5 13.0 12.7 7.1
- Cash: 164 35 62 12 23 23 9 15 100 21.4 37.3 7.5 14.2 13.0 5.7
- Crop-share: 270 58 94 21 47 19 32 7 100 21.6 34.8 7.7 17.3 6.9 11.7
- Stock-share: 340 98 129 12 18 78 15 2 100 28.7 33.3 5.4 5.1 22.9 4.8
Holmes: Relation of types of tenancy to types of farming in Iowa

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Total</th>
<th>Pasture</th>
<th>Corn</th>
<th>Oats</th>
<th>Other small grain</th>
<th>Hay</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tama County (1918)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners</td>
<td>290.2</td>
<td>68</td>
<td>58</td>
<td>17</td>
<td>16</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>207.8</td>
<td>53</td>
<td>70</td>
<td>15.1</td>
<td>13.6</td>
<td>12.1</td>
<td>18</td>
</tr>
<tr>
<td>Cash</td>
<td>222</td>
<td>60</td>
<td>73</td>
<td>43</td>
<td>14</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Crop-share</td>
<td>194</td>
<td>37.4</td>
<td>66</td>
<td>42</td>
<td>23</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>Stock-share</td>
<td>237</td>
<td>88</td>
<td>74</td>
<td>31</td>
<td>17</td>
<td>24</td>
<td>11</td>
</tr>
<tr>
<td><strong>Warren County (1918)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners</td>
<td>171</td>
<td>76</td>
<td>37</td>
<td>15</td>
<td>17</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>180</td>
<td>68</td>
<td>47</td>
<td>16</td>
<td>22</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Cash</td>
<td>158</td>
<td>62</td>
<td>41</td>
<td>16</td>
<td>10</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Crop-share</td>
<td>170</td>
<td>30</td>
<td>47</td>
<td>25</td>
<td>15</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Stock-share</td>
<td>204</td>
<td>93</td>
<td>44</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Weighted average for six counties</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners</td>
<td>180.5</td>
<td>59.3</td>
<td>73.3</td>
<td>26.0</td>
<td>12.7</td>
<td>17.1</td>
<td>11.5</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>107.3</td>
<td>55.9</td>
<td>61.3</td>
<td>38.6</td>
<td>15.0</td>
<td>17.4</td>
<td>11.1</td>
</tr>
<tr>
<td>Cash</td>
<td>201.5</td>
<td>58.1</td>
<td>67.1</td>
<td>36.0</td>
<td>16.4</td>
<td>16.3</td>
<td>11.7</td>
</tr>
<tr>
<td>Crop-share</td>
<td>185.3</td>
<td>31.2</td>
<td>76.0</td>
<td>37.6</td>
<td>13.8</td>
<td>15.8</td>
<td>12.4</td>
</tr>
<tr>
<td>Stock-share</td>
<td>226.6</td>
<td>68.7</td>
<td>63.8</td>
<td>25.2</td>
<td>16.0</td>
<td>23.7</td>
<td>14.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acreage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. farms</td>
<td>Total</td>
</tr>
<tr>
<td>Tama County (1918)</td>
<td></td>
</tr>
<tr>
<td>Owners</td>
<td>77</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>27</td>
</tr>
<tr>
<td>Cash</td>
<td>72</td>
</tr>
<tr>
<td>Crop-share</td>
<td>13</td>
</tr>
<tr>
<td>Stock-share</td>
<td>8</td>
</tr>
</tbody>
</table>

| Warren County (1918)  |       |         |      |      |                   |     |       |
| Owners                | 82    | 100     | 44.1 | 21.5 | 9.0               | 9.1 | 9.8   |
| Owners-additional     | 43    | 100     | 38.0 | 26.0 | 9.7               | 12.0| 8.8   |
| Cash                  | 9     | 100     | 41.3 | 27.0 | 16.8              | 6.8 | 5.5   |
| Crop-share            | 25    | 100     | 95.7 | 31.2 | 14.5              | 12.2| 10.0  |
| Stock-share           | 16    | 100     | 45.5 | 21.0 | 9.4               | 7.8 | 7.7   |

| Weighted average for six counties |       |         |      |      |                   |     |       |
| Owners                   | 253   | 100     | 39.0 | 29.5 | 14.7              | 7.0 | 9.5   |
| Owners-additional        | 105   | 100     | 58.5 | 32.8 | 16.6              | 7.6 | 8.8   |
| Cash                     | 116   | 100     | 36.0 | 32.8 | 18.4              | 8.2 | 8.1   |
| Crop-share               | 98    | 100     | 38.7 | 30.8 | 20.8              | 7.3 | 8.6   |
| Stock-share              | 30    | 100     | 38.3 | 27.9 | 10.2              | 7.1 | 10.5  |

Published by Iowa State University Digital Repository, 1921
business encourages the livestock enterprise and discourages the more exploitative grain selling system of farming, while short, uncertain tenure characteristic of share renting, and perhaps in less measure of cash renting, tends to have the opposite effect. In respect to the control of the landlord over the business the stock-share arrangement comes closer to ownership than does any other rental system, since the landowner furnishes a part of the working capital and therefore retains a large measure of control of the business. Further, under this type of leasing family relationship often exists between the parties. The son as tenant on his father's land is much more likely to operate it after the manner of an owner than a non-related tenant would be.

SOURCE OF INCOME

Probably sources of gross receipts constitute the best criterion of the type of farming. Table III shows the results of this test as applied to the survey data in hand. Examination of these figures shows them to be essentially corroborative of those of Table II and of the conclusions already drawn from them.

They show that almost without exception the stock-share farms lead, not only in the absolute amount of the receipts from cattle, but in the percentage of total receipts which come from this source. This is to be expected in view of the importance of hay and pasture on these farms. In the percentage of total receipts coming from hogs the leadership of the stock-share farms is not so pronounced. Practically 40 percent of the receipts, according to these figures, are derived from sale of hogs on the farms of three tenure types, namely, owner, cash-tenant, and stock-share tenant. Owner-additional farms are not far short of this, but on crop-share rented farms the percentage of receipts from hogs is only slightly above 20 percent.

From reference to figures on receipts from crops one finds the farms of the different tenure classes taking rank in the opposite order. Stock-share rented farms are shown to get only 6 percent of their gross receipts from sale of corn and owners only 9.5 percent while crop-share farms derive more than a third of their income from this source. Owner-additional and cash rented farms again occupy an intermediate position. In receipts from sale of small grain the differences are not so marked, tho the order is the same as for corn.

Receipts from "all other" sources include those from dairy and poultry products, from sale of animals other than cattle and hogs, and receipts from miscellaneous minor sources. It will be noted that in the general averages the differences here as between the several tenure classes are slight and are probably
of little significance. Receipts from dairy and poultry products tend to be slightly higher on stock-share and owner-operated farms than on the others.

These figures, taken with those of Table II, give a fairly adequate indication of the normal differences in the crop and livestock programs on farms of different tenures. As already pointed out, the stock-share and owner farms on the one hand and the crop-share farms on the other represent opposite extremes in their organization. The one represents a farming system in which the land is used for producing feeds for livestock and the livestock and their products are the medium thru which the farmer realizes on the use of his land, equipment, labor and management. In this system such receipts as there may be from direct sale of crops are incidental and result from a surplus which frequently represents a margin of safety against short crops in the farmer's adjustment of his cropping program to his livestock enterprises.

On the other hand, crop-share renting necessarily results in the major portion of the crops leaving the farm as grain rather than being fed. The landlord takes from a third to a half of them as rent and with short tenure and inadequate equipment the tenant usually finds it inexpedient to feed all of his own share. On these farms less hay is raised and less land used for pasture than on farms of any other tenure class. To be sure, the crop-share tenant raises hogs; but the figures show that only about one-fifth of the gross receipts on crop-share farms came from this source, while the cash tenant gets two-fifths of his from it. Hogs require but little pasture and the crop-share farmer grows slightly more corn than the cash renting farmer. Further, hogs mature quickly, require but little investment and are hence less dependent on permanence of tenure than cattle are. The explanation is, of course, to be found primarily in the fact that the crop-share tenant, paying his rent in crops, must either buy back a large portion of the landlord's grain or keep down his livestock enterprises to a smaller ratio with his crops than is necessary with the cash tenant. It is doubtful whether the crop share tenant sells a larger proportion of his share of the crops than does the cash tenant of his entire production.

6. It should be understood that in table III the figures are based entirely on the whole farm business and that in all cases where share rent of any kind is involved such rent has not been deducted. The purpose is to compare the business as a whole on the farms of all the tenure classes.
### TABLE III. AVERAGE RECEIPTS FROM SPECIFIED SOURCES ON FARMS OF VARIOUS TENURES AS SHOWN BY SURVEY REPORTS FROM SIX IOWA COUNTIES 1914 and 1918

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Clay County (1914)</th>
<th>Greene County (1914)</th>
<th>Henry County (1914)</th>
<th>Montgomery County (1914)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owners</td>
<td>Owners-additional</td>
<td>Owners</td>
<td>Owners</td>
</tr>
<tr>
<td></td>
<td>Owners-additional</td>
<td>Stock-share</td>
<td>Owners-additional</td>
<td>Owners-additional</td>
</tr>
<tr>
<td></td>
<td>Stock-share</td>
<td></td>
<td>Stock-share</td>
<td>Stock-share</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stock-share</td>
<td>Stock-share</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stock-share</td>
<td>Stock-share</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stock-share</td>
<td>Stock-share</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stock-share</td>
<td>Stock-share</td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Clay County (1914)</td>
<td>2,241</td>
<td>474</td>
<td>585</td>
<td>68</td>
</tr>
<tr>
<td>Owners</td>
<td>541</td>
<td>241</td>
<td>701</td>
<td>1,054</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>1,066</td>
<td></td>
<td>805</td>
<td>805</td>
</tr>
<tr>
<td>Stock-share</td>
<td>2,138</td>
<td>1,156</td>
<td>1,064</td>
<td>1,064</td>
</tr>
<tr>
<td></td>
<td>4,073</td>
<td>1,054</td>
<td>1,054</td>
<td>1,054</td>
</tr>
<tr>
<td>Greene County (1914)</td>
<td>3,318</td>
<td>673</td>
<td>788</td>
<td>222</td>
</tr>
<tr>
<td>Owners</td>
<td>3,088</td>
<td>658</td>
<td>952</td>
<td>1,572</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>2,118</td>
<td>117</td>
<td>644</td>
<td>547</td>
</tr>
<tr>
<td>Stock-share</td>
<td>1,814</td>
<td></td>
<td>1,814</td>
<td>1,814</td>
</tr>
<tr>
<td></td>
<td>5,073</td>
<td>1,166</td>
<td>1,166</td>
<td>1,166</td>
</tr>
<tr>
<td>Henry County (1914)</td>
<td>3,230</td>
<td>304</td>
<td>705</td>
<td>1,005</td>
</tr>
<tr>
<td>Owners</td>
<td>2,534</td>
<td>536</td>
<td>905</td>
<td>1,005</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>1,196</td>
<td>700</td>
<td>1,453</td>
<td>1,453</td>
</tr>
<tr>
<td>Stock-share</td>
<td>2,633</td>
<td>584</td>
<td>839</td>
<td>839</td>
</tr>
<tr>
<td></td>
<td>3,462</td>
<td>511</td>
<td>511</td>
<td>511</td>
</tr>
<tr>
<td></td>
<td>4,054</td>
<td>1,461</td>
<td>1,083</td>
<td>1,083</td>
</tr>
<tr>
<td>Montgomery County (1914)</td>
<td>3,369</td>
<td>550</td>
<td>951</td>
<td>258</td>
</tr>
<tr>
<td>Owners</td>
<td>5,657</td>
<td>468</td>
<td>1,215</td>
<td>631</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>2,677</td>
<td>454</td>
<td>2,259</td>
<td>2,259</td>
</tr>
<tr>
<td>Stock-share</td>
<td>4,567</td>
<td>460</td>
<td>605</td>
<td>1,550</td>
</tr>
<tr>
<td></td>
<td>4,434</td>
<td>765</td>
<td>647</td>
<td>248</td>
</tr>
</tbody>
</table>

#### Receipts
- **All sources**: Cattle, Hogs, Corn, Small Grain, All other
- **Percentage**: No. of farms, Cattle, Hogs, Corn, Small Grain, All other

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Clay County (1914)</th>
<th>Greene County (1914)</th>
<th>Henry County (1914)</th>
<th>Montgomery County (1914)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Clay County (1914)</td>
<td>2,241</td>
<td>474</td>
<td>585</td>
<td>68</td>
</tr>
<tr>
<td>Owners</td>
<td>27</td>
<td>100</td>
<td>92</td>
<td>20.2</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10.8</td>
</tr>
<tr>
<td>Stock-share</td>
<td>2,138</td>
<td>1,156</td>
<td>1,064</td>
<td>22.4</td>
</tr>
<tr>
<td></td>
<td>3,318</td>
<td>673</td>
<td>788</td>
<td>24.4</td>
</tr>
<tr>
<td>Greene County (1914)</td>
<td>3,318</td>
<td>673</td>
<td>788</td>
<td>24.4</td>
</tr>
<tr>
<td>Owners</td>
<td>19.1</td>
<td>27.3</td>
<td>18.8</td>
<td>100</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>19.1</td>
<td>27.3</td>
<td>18.8</td>
<td>100</td>
</tr>
<tr>
<td>Stock-share</td>
<td>3,088</td>
<td>658</td>
<td>952</td>
<td>32.7</td>
</tr>
<tr>
<td></td>
<td>2,118</td>
<td>117</td>
<td>644</td>
<td>43.4</td>
</tr>
<tr>
<td>Henry County (1914)</td>
<td>3,230</td>
<td>304</td>
<td>705</td>
<td>20.8</td>
</tr>
<tr>
<td>Owners</td>
<td>12.9</td>
<td>16.7</td>
<td>16.3</td>
<td>25.2</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>12.9</td>
<td>16.7</td>
<td>16.3</td>
<td>25.2</td>
</tr>
<tr>
<td>Stock-share</td>
<td>2,633</td>
<td>584</td>
<td>839</td>
<td>16.8</td>
</tr>
<tr>
<td></td>
<td>3,462</td>
<td>511</td>
<td>511</td>
<td>16.8</td>
</tr>
<tr>
<td>Montgomery County (1914)</td>
<td>3,369</td>
<td>550</td>
<td>951</td>
<td>21.9</td>
</tr>
<tr>
<td>Owners</td>
<td>5,657</td>
<td>468</td>
<td>1,215</td>
<td>6.2</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>2,677</td>
<td>454</td>
<td>2,259</td>
<td>36.0</td>
</tr>
<tr>
<td>Stock-share</td>
<td>4,567</td>
<td>460</td>
<td>605</td>
<td>36.0</td>
</tr>
<tr>
<td></td>
<td>4,434</td>
<td>765</td>
<td>647</td>
<td>21.8</td>
</tr>
</tbody>
</table>

#### Percentage
- **All sources**: Cattle, Hogs, Corn, Small Grain, All other

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Clay County (1914)</th>
<th>Greene County (1914)</th>
<th>Henry County (1914)</th>
<th>Montgomery County (1914)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Clay County (1914)</td>
<td>27</td>
<td>100</td>
<td>92</td>
<td>20.2</td>
</tr>
<tr>
<td>Owners</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10.8</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10.8</td>
</tr>
<tr>
<td>Stock-share</td>
<td>2,138</td>
<td>1,156</td>
<td>1,064</td>
<td>22.4</td>
</tr>
<tr>
<td></td>
<td>3,318</td>
<td>673</td>
<td>788</td>
<td>24.4</td>
</tr>
<tr>
<td>Greene County (1914)</td>
<td>3,318</td>
<td>673</td>
<td>788</td>
<td>24.4</td>
</tr>
<tr>
<td>Owners</td>
<td>19.1</td>
<td>27.3</td>
<td>18.8</td>
<td>100</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>19.1</td>
<td>27.3</td>
<td>18.8</td>
<td>100</td>
</tr>
<tr>
<td>Stock-share</td>
<td>3,088</td>
<td>658</td>
<td>952</td>
<td>32.7</td>
</tr>
<tr>
<td></td>
<td>2,118</td>
<td>117</td>
<td>644</td>
<td>43.4</td>
</tr>
<tr>
<td>Henry County (1914)</td>
<td>3,230</td>
<td>304</td>
<td>705</td>
<td>20.8</td>
</tr>
<tr>
<td>Owners</td>
<td>12.9</td>
<td>16.7</td>
<td>16.3</td>
<td>25.2</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>12.9</td>
<td>16.7</td>
<td>16.3</td>
<td>25.2</td>
</tr>
<tr>
<td>Stock-share</td>
<td>2,633</td>
<td>584</td>
<td>839</td>
<td>16.8</td>
</tr>
<tr>
<td></td>
<td>3,462</td>
<td>511</td>
<td>511</td>
<td>16.8</td>
</tr>
<tr>
<td>Montgomery County (1914)</td>
<td>3,369</td>
<td>550</td>
<td>951</td>
<td>21.9</td>
</tr>
<tr>
<td>Owners</td>
<td>5,657</td>
<td>468</td>
<td>1,215</td>
<td>6.2</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>2,677</td>
<td>454</td>
<td>2,259</td>
<td>36.0</td>
</tr>
<tr>
<td>Stock-share</td>
<td>4,567</td>
<td>460</td>
<td>605</td>
<td>36.0</td>
</tr>
<tr>
<td></td>
<td>4,434</td>
<td>765</td>
<td>647</td>
<td>21.8</td>
</tr>
<tr>
<td>Tenure</td>
<td>All sources</td>
<td>Cattle</td>
<td>Hogs</td>
<td>Corn</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------</td>
<td>--------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td><strong>Tama County (1918)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners</td>
<td>7,610</td>
<td>1,558</td>
<td>3,251</td>
<td>687</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>7,678</td>
<td>1,543</td>
<td>3,188</td>
<td>1,096</td>
</tr>
<tr>
<td>Cash</td>
<td>7,452</td>
<td>1,044</td>
<td>3,177</td>
<td>1,176</td>
</tr>
<tr>
<td>Crop-share</td>
<td>7,223</td>
<td>701</td>
<td>1,953</td>
<td>2,297</td>
</tr>
<tr>
<td>Stock-share</td>
<td>6,020</td>
<td>954</td>
<td>3,397</td>
<td>547</td>
</tr>
<tr>
<td><strong>Warren County (1918)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners</td>
<td>3,702</td>
<td>746</td>
<td>1,743</td>
<td>70</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>4,661</td>
<td>914</td>
<td>1,534</td>
<td>311</td>
</tr>
<tr>
<td>Cash</td>
<td>3,220</td>
<td>1,687</td>
<td>3,232</td>
<td>71</td>
</tr>
<tr>
<td>Crop-share</td>
<td>4,475</td>
<td>987</td>
<td>822</td>
<td>726</td>
</tr>
<tr>
<td>Stock-share</td>
<td>4,194</td>
<td>835</td>
<td>1,657</td>
<td>116</td>
</tr>
<tr>
<td><strong>Weighted average for six counties</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners</td>
<td>4,498</td>
<td>884</td>
<td>1,838</td>
<td>433</td>
</tr>
<tr>
<td>Owners-additional</td>
<td>5,169</td>
<td>968</td>
<td>1,888</td>
<td>711</td>
</tr>
<tr>
<td>Cash</td>
<td>5,707</td>
<td>861</td>
<td>2,293</td>
<td>848</td>
</tr>
<tr>
<td>Crop-share</td>
<td>3,932</td>
<td>820</td>
<td>812</td>
<td>1,336</td>
</tr>
<tr>
<td>Stock-share</td>
<td>5,022</td>
<td>1,050</td>
<td>2,023</td>
<td>288</td>
</tr>
</tbody>
</table>
**TABLE IV. AVERAGE PROFITS TO OPERATORS AND RATES OF RETURN TO LANDLORDS UNDER VARIOUS TENURES 1914 and 1918**

<table>
<thead>
<tr>
<th>Counties</th>
<th>Owners</th>
<th>Owners-Additionl</th>
<th>Cash</th>
<th>Crop-Share</th>
<th>Stock-Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of farms</td>
<td>Profit to operator</td>
<td>Return %</td>
<td>No. of farms</td>
<td>Profit to operator</td>
</tr>
<tr>
<td>Clay (1914)</td>
<td>27</td>
<td>1,000</td>
<td></td>
<td>8</td>
<td>688</td>
</tr>
<tr>
<td>Greene (1914)</td>
<td>30</td>
<td>1,210</td>
<td></td>
<td>7</td>
<td>1,465</td>
</tr>
<tr>
<td>Henry (1914)</td>
<td>22</td>
<td>880</td>
<td></td>
<td>12</td>
<td>1,123</td>
</tr>
<tr>
<td>Montgomery (1914)</td>
<td>92</td>
<td>819</td>
<td></td>
<td>8</td>
<td>1,710</td>
</tr>
<tr>
<td>Tama (1918)</td>
<td>77</td>
<td>1,902</td>
<td></td>
<td>27</td>
<td>2,412</td>
</tr>
<tr>
<td>Warren (1918)</td>
<td>82</td>
<td>354</td>
<td></td>
<td>43</td>
<td>720</td>
</tr>
<tr>
<td>Weighted average all areas</td>
<td>232</td>
<td>1,062</td>
<td></td>
<td>105</td>
<td>1,325</td>
</tr>
</tbody>
</table>
OPERATOR’S PROFITS AND LANDLORD’S RETURNS

The fourth and last comparison is on the results of farming under these several tenure systems as measured by the profits of the operator, and the rates of return on the landlords’ investment. Table IV offers the basis for this comparison. It contains the amount of gain made by the operators above all allowance for interest on investment and farm hand’s wages for their labor, as well as the percent of net return on their investment received by the landlords after deductions from their gross rent receipts are made for taxes and for depreciation and repairs on improvements.

In order to put the profits of the owners on a comparable basis with those of the tenants, the usual practice of charging the owner’s business for the use of the land at the current rate of interest on mortgage loans was abandoned and the land charge to farmers operating their own farms was put on a cash rent basis by using for each area the rate actually realized by the cash renting landlords as given in table IV. All investments in livestock, equipment and supplies for all tenure classes was charged at 8 percent, the current rate for short time loans. It should be kept in mind also that the operator received in addition to the profits as shown in the table, the equivalent of a considerable sum in house rent and farm produced supplies for family use.

Still another caution in the interpretation of these figures should be given. It has to do with the fact that the records from some of the counties were taken for the year 1918, when agricultural prosperity was at its height; while the others represent the year 1914, when profits were decidedly lower. The figures, therefore, should not be taken to represent “normal” conditions as to profits. They are given here merely to show the differences in profits as between tenure types. It should also be pointed out that the wide difference between the profits of cash tenants and those of crop-share tenants shown in the general averages in table IV are due in part to the fact that the bulk of the cash tenant records are from Tama county where farms are large and profits, therefore, normally somewhat higher, while the bulk of the crop-share records come from Warren county where both farms and profits are smaller. For this reason the reader’s attention is directed particularly to the columns showing figures for the individual counties.

It will be noted from this table that stock-share rented farms,

7. The “profits” as given in this table differ from the so-called “labor income” usually computed in the analysis of farm survey data in two important respects: namely, that an allowance for the farmer’s wages has been deducted and that separate rates for land and other investment have been used instead of the usual single rate based on the prevailing rate on farm mortgage loans.
so far as our limited figures reveal it, seem to have been the least profitable to the operator. In three of the five counties where records were secured from them they showed the lowest profits of all the tenure classes and in a fourth county next to the lowest. However, the number of records for this class in practically all counties is so small that these figures are of questionable value. In Warren county, where 16 out of the 30 stock-share records were secured, but where profits in all classes are low, the stock-share farms ranked second in amount of profits, being exceeded only by the owner-additional farms. In recent survey investigations covering the business for 1921 in Tama and Warren counties, stock-share rented farms are found to be relatively much more numerous than in 1918 and their operators made higher returns for their labor and management than those of any other tenure class.

Profits on crop-share rented farms rank fourth in the general averages as well as in three of the five counties. In Clay county they are lowest of all the groups, being a negative quantity, and in Greene county they are third, being lower than those of the owners-additional and owners, but higher than those of the cash renters and stock-share renters.

Cash rented farms, which rank first in profits in the general average, are first in Tama county where they are by far the largest tenant class and almost as numerous as owners. They show next to the lowest profits in Warren county where only a few farmers rent for cash. In the other counties profits on cash rented farms are neither highest nor lowest but are close to the average for all farms of the localities. They are generally highest when the rate of net return on landlords’ investment is lowest.

The men who operate their own land exclusively, according to the survey figures here analyzed, make smaller profits than the cash tenants and owners-additional, but larger than the share renting classes. These differences are to be accounted for largely by variations in the normal size of business under different tenure types and by differences in the returns to landlords under cash renting and share renting. Our figures show that in general both straight tenants and owners-additional farm more land than the strictly owner class. They show, also that both classes of share tenants pay for the use of their land at a higher rate than do cash tenants and those owners who rent additional land. Thus those owners who enlarge their business by renting additional land under normal conditions increase their profits. The table shows that this type of farmer receives profits, in most areas, not only higher than the straight owners, but higher than both classes of share tenants.

From these rather conflicting data on profits two significant
tendencies appear. In the first place there is some tendency in the case of rented farms for the profits to be highest under the type of leasing which is most prevalent in the area. For example, in Tama county, where most of the rented farms are under cash lease, profits on cash rented farms are far above those on other classes, while in Greene county where crop-share renting is the rule the crop-share tenant gets profits somewhat higher than the other tenant classes. The significance of this tendency, of course, lies in the evidence it supplies that one type or another of renting fits a given set of conditions better than all the others and that tenants are adapting their rental methods to local conditions.

The second significant tendency revealed by the figures in table IV has to do with the relation of the cost of the use of land under the different forms of leasing and its effect on the tenants’ profits. Cash tenants undoubtedly pay a lower rent rate in normal times than share tenants do. In the case of almost all the figures given, this lower land charge is accompanied by higher profits for the tenant. This, of course, is to be expected provided other things are equal. Why, then, do any tenants rent on shares? The main reason is that in renting for cash the farmer assumes all the risk from poor crops and falling prices. If he shifts a part of this risk to the landlord by renting on shares he must pay the landlord for his risk taking by giving him so large a share that in the average year his return will be smaller than if he had rented for cash. In some areas and under some economic conditions the risk is greater than in others. Consequently we find the tendency toward share leasing to vary both as to time and as to geographical location. Probably if the tenant alone controlled the method of leasing there would, in normal times, be much more cash renting. Frequently the landlord desires to rent on shares assuming his part of the risk, in order to get the higher return on his investment.

PROPER ADJUSTMENT OF RENTAL CONTRACT

In the last section some of the peculiarities of farm organization under the various types of tenure have been discussed. It is evident from the figures there presented that certain specific

8. Conditions prevailing during the years covered by our data have been reversed by the developments of the past three years. Cash tenants have lost more heavily during the period of depression than any other class. It is likely that when economic conditions become adjusted to a more stable basis the relative profits and rental rates as between cash and share tenants will be much the same as shown in table IV. There is, however, one factor making for the lower rentals under cash contracts which may not revert to its prewar status. This is the fact that probably the majority of the cash renting landlords have been primarily speculators, many of them absentee. They were interested in realizing on the advance in the price of land and were willing to rent on easy terms. It is likely that for a number of years at least, speculation in land will not assume prewar proportions and that the advantages of cash rent to the tenant as compared with share rent, will not be so great as it appears to have been up to 1920.
methods of renting fit given types of farming better than others do. It has also been pointed out that farms differ widely in their physical and economic characteristics and that because of these differences they must be used in quite different ways. This is one of the important forces back of the diversity one finds in types of farm leases. Other forces making for this diversity are differences in landlords and differences in tenants. Landlord and tenant relations will be most satisfactory and tenant farming most profitable when a proper adjustment is secured with reference to the three important elements in the leasing arrangement, namely, the tenant, the landlord and the farm.

CLASSES OF TENANTS

Tenant farmers differ in respect to age, experience in farming, the amount of capital they have to invest in farming, and in their native ability as business organizers and managers. All of these differences are significant in their relation to tenant farming.

The young, inexperienced tenant usually finds it to his financial advantage, if not to his liking, to rent in a way that will give him the advantage of the superior skill and ripe experience and judgment of a landlord who has been a farmer himself and who now wishes to give a considerable part of his time to looking after the operation of his rented farm. Such a landlord usually wants to rent on shares since, under the practice which has developed in most communities, he can retain the larger measure of control over the business with this form of rental. Many young tenants during their first years of farm operation may well surrender a part of the control of the business to secure the advantage of the older man’s business sagacity and directive skill. The stock-share lease brings the landlord and tenant into closer business relations than any other form of leasing and thus normally affords the best advantages of the sort just mentioned. If, as frequently happens under this form of renting, the landlord is his father the tenant may serve his apprenticeship in management under most favorable conditions.

The crop-share lease offers something of this close relationship between tenant and landlord, but the cooperation, at least under Iowa conditions, is not so close as with the stock-share rental. As the tenant grows older in years and experience he may find it profitable to abandon the close relation with the landlord characteristic of share renting and shift to a cash lease under which, as our figures show, he usually gets the use of the farm for a lower charge than is paid, in the form of share rent, for the use of the farm plus the managerial cooperation of the landlord.

The amount of capital a tenant has is an important consideration in choosing a method of rental. Crop-share leasing,
under Iowa conditions, normally requires the minimum amount of investment for the tenant while stock-share renting, tho requiring more capital, provides that a considerable percentage of the operating investment be carried by the landlord. Cash renting under a system of livestock farming, and particularly when cattle feeding is a part of the program, requires a maximum of working capital and involves a large amount of risk which must be carried by the tenant alone. Only those tenants who have accumulated a considerable body of capital and who have enough experience and managerial ability to carry a business enterprise independently should undertake this form of tenant farming.

It need hardly be added that managerial skill is not alone a matter of experience and age but quite as much of native ability. Some men never can be efficient in the organization and operation of a farm. For such men it is probably the part of wisdom to remain permanently in the share renting class.

CLASSSES OF LANDLORDS

Perhaps the most important differences in landlords as affecting the leasing relations are to be found in the motives and circumstances back of their ownership of the land. Non-operating farm owners buy and hold land from a variety of reasons. A large number of landlords are owning land primarily as a means of speculation. That is, they have bought in the hope of realizing a profit thru the rise in land values. Such owners frequently make undesirable landlords. They expect to own a given farm but a short time and hence are able to give a tenant but a short tenure. Since they are looking for their return primarily from a rise in value they frequently rent for a low figure but for the same reason, and because of their brief term of ownership, they have but slight interest in the development of the land for farming and decline to make necessary improvements. Such men are likely to wish to rent for cash, or in case the farm has a high percentage of its area in cultivation and but little in pasture and meadow, they may wish to rent on the crop-share plan. In any case they pay but little attention to the development of the farm and the farm business.

Quite different from the speculator landlord is the one who holds the farm as an investment. He holds the land with a view to getting income from its current rental earnings and tho he frequently drives a close bargain with his tenant, he is permanently interested in the farm and its development and is more likely to take the view that adequate improvements and an attitude of fairness toward the tenant are in the long run favorable to a maximum income to him as landlord. The retired
farmer who continues to own his farm is usually of this class
and with him there is frequently not a little sentiment mixed
with the purely economic motives in his attitude toward the
care and upkeep of the farm and in the interest he maintains in
its operation. Such men, if they are of the right disposition,
are, because of their farming experience, excellent landlords of
stock-share rented farms. Under any form of rental they are
likely to be the best sort of landlord for a young and inexperi­
enced tenant.

The amount of capital a landowner has makes considerable
difference in his functioning as a landlord. Many land pur­
bchasers have bought largely on time and find it hard to keep up
payments. Under these circumstances they cannot maintain
and improve the farm as it should be. On the other hand the
owner with abundant capital frequently finances his tenant to
the advantage of both parties. It is obvious that a landlord
with limited capital must usually rent either for cash or on the
crop-share plan and that he will find it difficult to joint his ten­
ant in a stock-share enterprise.

THE ADJUSTMENT

The first and most important consideration before a landlord
in renting his farm is that it should be used for the type of
farming which will make it most productive. He should look
for a tenant who by natural aptitude, training and experience,
is best fitted for this type of farming and who has or can get
the necessary equipment and livestock. The consideration of
next importance is to adopt the type of rental that is best suited
to the type of farming to be followed. With the right sort of
tenant the arrangement of the type and details should be easy
if the parties are agreed on what the farming is to be and both
are fair minded. The landlord can well afford to surrender
some of the supervision he would like to exercise over the busi­
ness if it will result in his securing a good tenant who will de­
velop the most profitable type of business on the farm.

For the tenant’s part, since he is not tied to any particular
piece of land, it is well for him to search carefully for a farm
thoroly adapted to the type of farming which he thinks he
can follow with greatest success. He can also select a landlord
whose preference in rental method coincides with the tenant’s
choice and advantage. The matter of proper adjustment be­
tween landlord, tenant, farm, and farm organization is one of
the most important aspects of the tenancy problem.9

9. Another important aspect of the tenancy problem which cannot be discussed
adequately here is the division of returns between landlord and tenant and the
whole matter of lease making. It is hoped that this problem may be treated in a
subsequent publication.
EXPERIMENT STATION OFFICERS AND STAFF

Raymond A. Pearson, M.S.A., LL.D., President

C. F. Curtiss, M.S.A., Director

W. H. Stevenson, A.B., B.S.A., Vice-Director

AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

E. G. Neure, A.B., Ph.D., Chief

C. L. Holmes, A.B., Ph.D., Asst. Chief

C. C. Taylor, B.S., M.S., Asst.

C. L. Benner, A.M., Asst.

John Hopkins, Jr., A.M., Asst.

AGRICULTURAL ENGINEERING

E. V. Collins, B.S., in A.E., B.S., Chief

W. A. Foster, B.S., in E., B.Arch., Asst. Chief

AGRONOMY

W. H. Stevenson, A.B., B.S.A., H.C.D., Chief

H. D. Hughes, B.S., M.S.A., Chief in Farm Crops

P. E. Brown, B.S., A.M., Ph.D., Chief in Soil Chemistry and Bacteriology

L. C. Burnett, B.S.A., M.S., Chief in Cereal Breeding

L. W.彤an, B.S., M.S., Chief in Field Experiments

J. L. Robinson, B.S., M.S., Superintendent of Cooperative Experiments

H. W. Johnson, B.S., M.S., Ph.D., Asst. Chief in Soil Chemistry

ANIMAL HUSBANDRY

H. H. Kildee, B.S.A., M.S., Chief

J. M. Evvard, B.S.A., M.S., Chief in Swine and Beef Cattle Production

Way E. Hammond, B.S.A., M.S., Supt. of Experiments in Animal Husbandry

C. C. Culbertson, B.S. in A. H., Asst. Chief in Animal Husbandry

Q. W. Wallace, B.S., Assistant in Animal Husbandry

A. R. Lamb, M.S., Chief in Nutrition

A. R. Caine, M.S., Chief in Horse Investigations

BACTERIOLOGY

R. E. Buchanan, M.S., Ph. D., Chief, Associate in Dairy and Soil Bacteriology

BOTANY AND PLANT PATHOLOGY

L. H. Fammel, B.Agr., M.S., Ph.D., Chief

Charlotte M. King, Asst. Chief

I. F. Melhus, B.S., Ph.D., Chief in Plant Pathology

L. W. Durrell, B.S., M.S., Asst. Chief in Plant Pathology

CHEMISTRY

W. G. Gaessler, B.S., M.S., Acting Chief

A. R. Lamb, B.S., M.S., Asst.

DAIRYING

M. Mortenson, B.S.A., Chief

B. W. Hamner, Ph.D., Chief in Dairy Bacteriology

ENTOMOLOGY

Carl J. Drake, B.Sc., B.Ped., M.A., Ph.D., Chief in Entomology

F. A. Fenton, B.A., M.S., Ph.D., Asst. Chief in Entomology

HORTICULTURE

T. J. Maney, B.S., Chief in Pomology

Harvey L. Lants, B.S., Asst. Chief

H. H. Plagge, B.S., Asst. in Pomology

A. T. Erwin, M.S., Chief in Truck Crops

RURAL SOCIETY

G. H. VonTungeln, Ph.B., M.A., Chief


BULLETIN SECTION

F. W. Beckman, Ph.B., Bulletin Editor

E. H. Richardson, Photographer

Published by Iowa State University Digital Repository, 1921