Buying of Farms in Story County, Iowa, 1940-48

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FOREWORD

The contrast between the land boom of 1919-20 and the land price rise of 1946-48 is striking. Farm mortgage debt in the state, according to U. S. Department of Agriculture estimates, was 1,504 million dollars in 1921 but only 384 million in 1949. Frequent use has been made of "Farm Land Values in Iowa" by L. C. Gray and O. G. Lloyd, for its record of what happened in the land boom following World War I.[1] For a record of the recent land market rise we have the present study by Virgil Hurlburt.

To provide a close view of what happened in the recent period, a random sample of farm buyers in Story County was interviewed. What these buyers reported, an analysis of the buying process, and suggested improvements in buying based in part on the interviews, forms the subject matter of this study. A significant feature is a comparison between present market price and earning value of the land. One of the suggested improvements—the need for more examination and appraisal of farms before buying—is well worth the attention of prospective purchasers.

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[1]Gray, L. C. and O. G. Lloyd. Farm land values in Iowa. U. S. Dept. Agr. Bul. 874. 1920. (Out of print.)

SUMMARY

Study of the activities of buyers shows what took place in Story County between 1940 and 1948. Though land purchase did not give rise to serious difficulties during this period of favorable farm incomes, the evaluation of land presents significant problems now and for the future. The years following the land inflation of World War I give evidence that serious difficulties can arise when farm land prices and land income are significantly out of line, and when heavy debts press against low incomes.

This study has dealt primarily with the buyer's side of the land market, with particular attention to analysis of procedures followed by buyers in purchasing land. Within this framework there is need for additional information and further analysis. More needs to be known, for example, about how buyers formulate their estimates of the future; about the kinds of data that are used in making important decisions; about the bases for investing in land rather than in some other business. There is also need for analysis of the sellers' side of the market. Among other pertinent questions—upon what bases do sellers decide to sell? How is the asking price determined?

The farm land market in Story County during the last 12 years has been influenced strongly by the general economic situation and by forces both within and outside agriculture. Many of the land owners and operators of 1948 have known nothing but a rising agricultural market. Persons who started farming since 1936, either as tenants or as owners, experienced only one short period of recession (in 1938) and no depression. One expression of this fairly long period of economic growth and expansion is the rise in land prices, which was slow from 1936 to 1940 but which was continuous and rapid between 1940 and 1948.

The drive to become an owner-operator was a strong force in the land market. Desire for owner-operatorship as a force in itself may motivate purchase, and may outweigh economic considerations as to advantages of ownership. The urge to become an owner emphasized the irritation or dissatisfaction resulting from imperfections in landlord-tenant relations. When this urge was combined with a financial situation in which funds are available for a substantial down-payment, little specific attention was given to alternatives.

Financing of purchases in Story County during the years 1940-48 caused no particularly difficult problems. Mortgage investment funds were available. Most buyers had money for sizeable down-payments. But the amount required for down-payments increased and mortgage investors are increasingly hesitant about loaning at high total amounts per acre. With rising operating costs, the difficulty of accumulating down-payments also in-

creased. Financing of purchase, therefore, promises to be a more serious problem in the future. The problem will be especially difficult for young men who wish to start on the road to ownership.

Buying a farm presents a complicated problem in determination of value. The buyer is confronted with the difficulty of estimating future net land incomes, and of comparing the long-time income producing value with present market price of land. The main fault in this procedure as practiced by buyers of farms is the tendency to make decisions largely in terms of current market prices alone. Land prices in Story County were low in the late '30's and early '40's, in the light of what net land incomes averaged later in the '40's. At the end of 1948, land prices were high, on the basis of assumed net incomes for the future, capitalized at 5 percent.

There appear to be no significant differences between types of buyers as to intent and practice in obtaining clear title to farm land. The practices in this respect have been the same whether or not the buyer believed at the time of purchase that the price paid was above the long-time income-earning value of the land. Those who thought the price paid was above the long-time value behaved in the same way as those who believed otherwise.

This does not mean that no problem existed concerning the relations of land income, long-time value and market price. Rather, during this short period it was not serious. The final adjustment will come later. And the problem continues, especially for those who are now committing themselves at current market prices, with the expectation of heavy future payments.

The success with which people have bought and paid for land in Story County since 1940 is one of the outstanding characteristics of the agricultural economy. There were virtually no foreclosures. Land tax delinquency was practically unknown. Other indications of financial distress (aside from a few instances of capricious weather—heavy rains, temporary drouth, a late frost) are likewise lacking. By and large land operators have cash reserves and their financial status shows up more favorably than for any other comparable period in the past. But past experience also demonstrates that current trends cannot always be projected into the future.

There is nothing in the outlook from which anyone can conclude that land prices and income earning possibilities in 1958 might be as much above those in 1948 as 1948 is above 1938. Which way land prices will go remains to be seen. The point of emphasis here is that the direction will be determined in part by what buyers and sellers decide to do. Buyers will need to follow careful appraisal practices.

Market price of land in a locality is an expression of the exchange value of a number of things. Besides buying the right to future income from land, the farm operator acquires a home, a business, and the opportunity of living in a particular community. Land units vary as to size, location, kind and number of improvements, producing ability and many other factors. The land may be bought with or without a standing crop.

There is need for methods of appraising and evaluating these various characteristics more carefully so that the buyer will know more specifically the price that is being paid for each factor and will be able to make more specific comparisons between farms that are for sale.

Buying of Farms in Story County, Iowa, 1940-48[2]

By Virgil L. Hurlburt[3]

PURPOSE AND METHODS

This study analyzes the practices followed by buyers of land. It is a study of buyer behavior in a local market setting—what they did and why they did it. The purpose is to assist prospective buyers in making wise decisions in the various phases of the complicated transaction of buying a farm.

Story County, Iowa, provides the setting for the study. The problem under consideration is: How can individuals go about the task of buying farm land in order to accomplish their purposes most effectively? The basic problem is that of determining the value of farm land. In this setting the differences between current market price and long-time earning value of farm land are especially pertinent. If purchasers feel that market prices are significantly above the value attributable to future land incomes, how do they justify their actions and what steps do they take to prevent financial distress later?

In 1948, it was known that market price of land was increasing and had been increasing for a decade. Although farm incomes had increased more and faster than had land prices, these favorable farm incomes were not generally expected to continue. Farms were being bought on a rising market. What could buyers do to protect themselves? What precautions were buyers exercising?[4]

Story County is the local area of study. Emphasis is upon the problem and the method of analysis rather than on the area as such. Data on number of sales, land prices and finance arrangements were obtained from the county records. There were 883 voluntary sales in Story County between January 1, 1940 and March 31, 1948. A total of 690 properties was involved; some of

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[2]Project 1069, Iowa Agricultural Experiment Station.

[3]Bureau of Agricultural Economics, U.S.D.A. The author acknowledges the contributions of his co-workers in the Bureau; particularly those of Clyde E. Stewart, for assistance in designing the study, obtaining field data and reviewing the manuscript. Chester B. Baker, graduate student at Iowa State College, participated in interviewing the buyers. Members of the Department of Economics and Sociology offered valuable counsel; W. G. Murray contributed throughout the course of the study. The Land Prices Subcommittee, North Central Regional Land Tenure Committee, reviewed the preliminary manuscript. Appreciation is also expressed to the local real estate agents, and especially to the buyers who were interviewed. They gave willingly of their time, discussed their business affairs openly and provided the foundation upon which this report is based.

[4]Supposedly, in a rising market, if buyers feel that land prices are above the long-time earning power of the land they will (1) discount present incomes heavily; (2) make advance payments on mortgage indebtedness; (3) capitalize more than land income into land values; (4) buy less land or smaller farms than otherwise; and (5) allocate additional worth to home value, location and the satisfaction of ownership. These probable lines of action guided the study and served to direct the analysis of the problem.

them were sold more than once during the period. Tabulation showed that 527 had been sold once; 136 had been sold two times; 24 had been sold three times; and 3 had been sold four times. A random sample of 10 percent of these properties was selected to provide information for analysis of processes that were followed in acquisition through voluntary purchase.[5]

At the time of purchase, the distribution of type of buyers in the sample was as follows: 21 were tenants (31 percent); 18 were owner-operators (26 percent); 5 were retired farmers (7 percent); 25 were nonfarmers (36 percent). These buyers were interviewed during the spring and summer of 1948. The questions dealt with the details of finding the farm, appraising it, bargaining and financing. Information was obtained on reasons for buying. Data from these interviews provided the material for analysis of buyer behavior and processes in buying.

Income data were selected from farm account records in central Iowa, to serve as a basis for calculating the earning value. These data are the basis for the section on current market price and long-time earning value.

PROCESSES IN BUYING

For the purpose of analysis, the whole process of buying was divided into several parts. These four fairly distinct steps characterize the habits of buyers: (1) finding the farm, (2) appraising it, (3) bargaining and (4) financing. In the individual case these may not stand out separately. The first might be the mere knowledge that the owner of the adjoining land is ready to retire and the farm is for sale; No. 2 may be no more complicated than ascertaining the asking price and meeting it. There may be no bargaining, and No. 4 may amount only to the buyer writing a check for the full amount of the purchase price. Nonetheless, these are the procedures which most buyers go through, and taken together constitute the act of buying a farm.

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[5]A list of all transfers of farm lands was obtained from the recording of deeds in the county court house. From this list were excluded tracts of less than 10 acres, cases of title clearing, family deals which were made at less than market prices, and transfer of fractional interests unless the buyer owned the other interest or unless several fractional interests added together constituted a whole interest. Attention was limited to bona fide voluntary sales. The period covered extended from January 1, 1940 to March 31, 1948, for the sample and the interview of buyers.

The list of transfers was arranged by legal descriptions, and the instances of resale of the same property were grouped together. The list became one of sales of farms or tracts rather than of all sales. The reason here revolved around the necessity of contacting the most recent buyer because of the impossibility of contacting previous buyers. This process gives extra weight to recent years in the study. More of the cases fell into the later years, because some of the farms had been sold twice or more during the period.

Sampling for interview purposes consisted of selecting a random group of properties sold. Preliminary analysis indicated that a sample of one in ten would be sufficient for the purposes intended. A random number between one and ten was chosen and this number happened to be seven. The seventh case in the list and each following tenth case were chosen for interview. Of a total of 69 cases in the county sample, 60 persons were interviewed. The other nine were located too far away for interview, but the general characteristics of the sale were obtained from local sources.

FINDING THE FARM

Real estate dealers play an active and important part in bringing buyers and sellers together and in completing the transactions. Sellers usually list their farms with one or more dealers, unless they have a specific buyer in mind at the time that they decide to sell. Buyers contact real estate dealers to find out about farms for sale. Real estate offices are the "local market place" for farm real estate.

In the 60 cases of interviews with buyers, 2 were sales at auction, 38 were handled by agents and 20 were direct negotiations between buyer and seller. Thus, two-thirds of the transfers were handled by agents. The agent acquainted the buyer with the farm, and in most instances handled the papers and helped negotiate the loan.

In connection with finding the farm it is appropriate to note that the farm real estate market is primarily a local market. Although real estate firms sometimes act as agents for nonresident owners, and may handle farms in other states, the bulk of the sales are to local buyers. Among the 60 cases interviewed, only five buyers lived more than 40 miles from the land they bought. All tenant purchasers had lived in the community 2 or more years. At least three of the buyers not interviewed were residents of Story County at time of purchase. This local buyer population is an important aspect of the land market. There is no general clearing house for the transfer of title to land, in the sense that there is a central market for wheat or securities. Also, the unit of exchange is a tract or a farm. One buys a tract of 40 or 80 acres, another quarter section to add to land already owned, or buys another whole farm. Local residents have knowledge of the various parts of the county, and they have opportunity to become familiar with the properties they want to buy.

The general process of finding the farm consisted of (1) checking specific sources of information—the newspapers, real estate agents, neighbors and friends—and (2) at least a casual examination to draw comparisons between farms. The more detailed examination is a part of the appraisal process. In an instance or two the buyer had a particular tract in mind; he therefore went to the seller and made an offer. In others, the seller approached a particular buyer with an offer to sell. But in most cases, intention of sale was publicly announced by the seller or by his agent.[6]

APPRAISING THE FARM

The most common practice, whether of farmers or of nonfarmers, was to figure out how the transfer could be financed in the short run. Attention may have been given to long-time earn-

[6]More needs to be known about the searching process of buyers. Over how long a period is it continued? Does it differ between periods of prosperity and depression? Does the buyer have an ideal type in mind? How is one possibility compared with another, without going into the detail of actual appraisal?

ing capacity in determining an offering price, but going market price played a more important part in decisions.

Land value is a relative term. Buyers tended to judge the price of a given tract of land in relation to market price of other land, and in relation to possible price of the same land in the future or actual sale in the past. Most buyers recognized a distinction between market price and long-time value, but the difference may be slight and in either direction. Buyers were more concerned with the immediate problem of retiring any debt incurred in purchase than with the more remote problems which might arise if price and long-time value differ significantly.

Determination of offering prices by buyers was composed of finding out how much the seller wanted, then deciding whether that amount could be paid with any degree of certainty. Each buyer was asked how he determined his offer for the particular farm. Forty-two replied that "I met the asking price," or "the price was fixed by the seller."

Buyers who had recently sold land stated that their asking prices were determined largely with an eye to what they thought the market would bring. Both buyer and seller were influenced by the trend in land prices. In a seller's market—which characterized the period from 1940 through 1948—a buyer could go through a most careful appraisal procedure to determine the worth of the farm to him, but he still had to meet the seller's asking price if he wanted that particular farm.

Although only eight buyers (five tenants, one retired farmer and two nonfarmers) reported the use of a specific set of figures in calculating income earning capacity, only seven reported that no income calculating procedure was used. In other words, 53 out of 60 cases went through some sort of income calculating process. These buyers, and especially the active farmers, translated income into land value, making use of observations drawn from experience.

The prevailing practice regarding advice sought and kinds of information analyzed when buyers were making up their minds was that the immediate family discussed the matter and made its decision. The farmer and his wife decided, usually without benefit of outside advice at that particular time. Younger farmers often discussed the problem with parents and in-laws. In a small number of instances there were discussions with neighbors and friends. Two sought the advice of private and public agencies.

The pattern was much the same with nonfarmer buyers. The individual and his immediate family made the decision without particular attention to advice from outside sources. Most of the nonfarmers were acquainted in the communities in which they bought land. Both groups have access to the same sets of information and have the same opportunities to view the possibilities for making a profit on investment in farming.

A bit of caution is necessary in interpreting the practices regarding advice sought and used. The decision on buying a farm is usually a long-time one, to which much thought is devoted over a period of years. If the buyer has been farm raised, and if his parents owned and operated a farm, there is the pressure of tradition, in which it is the "thing to do." This same pressure exists to some extent for nonfarmer buyers. Many were born and raised on farms and it has been tradition and custom to own land. The question is not only whether to buy but also when to buy.

It is difficult to determine the exact sources of information and advice, because the decision process extends over a long period of time. When does the buyer get the idea? Where does he pick up the guides for a specific decision? Only one owner-operator and one retired farmer reported seeking advice from a public agency at the time of purchase. But all had read publications previous to the time of purchase. Many had studied information from one source or another on the general question of buying and paying for a farm. Although at the time of purchase few went outside the family for advice, many were aware of the information available and had used some of that information in the process of making decisions. The main conclusion that can be drawn is that the making of the specific decision is usually a family matter at the time, but that the general character of the decision has been made long in advance and with the aid of outside information.

The pattern of behavior with regard to the extent and kind of examination given the land bought was much the same among the different types of buyers. But the details of examination varied within and among groups. It depended upon how well the individual purchaser was already familiar with the property in question. In only one instance can it be said that the examination was casual.

One tenant and three owner-operators reported a thorough examination of the farm, which involved study of soils, use of soil auger or spade, and careful study of buildings and improvements. Thus, only 4 of 60 persons followed thorough appraisal procedure. But here again the lack of such detailed investigation is not necessarily an indication of laxity in examination. All but one buyer reported a general examination of the farm, consisting largely of walking over the place. Many of the buyers were accompanied on these examination trips by friends or relatives who also knew farming. Some of the buyers reported the use of soils maps, or discussion of soils information with agricultural specialists. Furthermore, the extent of the examination at time of purchase is partly the same situation as that of getting advice about purchase. The buyer who has farmed in the community for 20 years may see no need to examine the farm in minute detail at the time of purchase.

The poorer farms were examined just as carefully as were the good farms. What buyers bought was a question separate and distinct from the question of how they went about determining the offering price for what they bought.

Nine buyers reported that they purposely bought a farm containing lands of poorer grades—lands which they knew were in run-down condition, were sandy or had buildings in poor condition. In each of these cases the buyer was thinking in terms of relative quality as compared to relative price of land available for purchase. In each case the buyer figured that he could do some of the improvement work and would have a smaller total investment than if he bought higher quality land and buildings at a higher market price. All buyers looked for the best farm possible for the money available.

Some wanted a particular tract of land for a particular reason—it was part of the old family farm or it joined the land they already owned. The buying of these particular tracts directly affected the offering prices of buyers. When a buyer wanted a specific tract he offered more for it; which might or might not have been related to his idea of the income-producing capacity of the property. The land across the road was considered more valuable than a similar tract 5 miles away, because costs of operation would be higher on the more distant tract.

Appraisal processes of buyers cannot be explained without reference to some of the forces motivating the buyers. The desire for a modern home explains part of the difference in price between two units which are the same so far as productivity is concerned. Differences between sets of buildings were taken into account through differences in value attributed to the biuldings. It does not necessarily follow that proper account was taken of differences in buildings. An individual's interest may be in getting land of a certain grade and he may not care about the buildings. In contrast, one owner-operator sold one farm and bought another of the same size because the second had a set of buildings more to his liking. Likewise, account was taken in the appraisal process of differences in location and some price differential was attached.

There were varying amenity values as well as differences in personal tastes for which individuals were willing to pay, but for which there was no specific way of calculating value in dollars and cents. A prospective buyer may have calculated the productivity value of the farm quite rationally, carefully estimating income and returns for the particular farm. The value so determined in some cases was below what he was willing to pay for the farm for a variety of reasons. It was located in an area with a good reputation for schools. He wished to associate with a particular group of neighbors, or to attend a certain church. Or the choice between farms was made on the basis that his wife did not want to move out of the community in which she had lived for the last 5 years.

The appraising process can help answer some of the questions that arise in regard to these personal tastes, but cannot specify the weight to give to the specific factor. By and large, active farmers depend upon the income from the farm to pay for the land and to furnish the family living.

If the buyer places a high weight on living in a community in which a certain nationality and a particular church denomination predominates, and if the only way he can obtain land in that area is to pay a price far above what the farm will produce, then it can easily be seen that specific choice is made between money or income values and personal tastes and satisfactions.

BARGAINING FOR THE FARM

In 42 out of 60 cases buyers met the asking prices of the sellers. The explanation of this lack of bargaining rests in the rising land market. There were more persons interested in buying farms, both for operation and for investment, than there were farms for sale. Buyers, sellers and other owners were aware that the increase in market price of land was relatively less than the increase in farm income.

The effectiveness of bargaining in the individual case depended mainly upon the position of the buyer. What were his alternatives? How soon did he have to find another place? How soon did he have to move? Was it essential, or did he feel that it was essential for him to buy some land to be able to farm? The tenant who was forced to move was not in an effective bargaining position. He could do little but accept the best proposition he could find. Or, an owner-operator with an 80 which was insufficient for an operating unit wanted the 80 acres across the road. When it was put on the market and he knew that five other persons were interested in buying it, he quickly met the asking price of the seller.

The owner-operator who already had a good operating unit but who wished to add another unit could afford to wait to get the kind of deal that he wanted. Also, the nonfarmer purchaser did not usually act under pressure. His bargaining was in terms of getting the kind of land wanted, in the area chosen, at a satisfactory price. Thus, whether the buyer attempted to bargain and whether his bargaining was effective depended upon his own situation and that of the seller, as well as upon his judgment of the price of the particular farm as compared to asking prices for other farms.

A seller not in a strong bargaining position was not able to obtain a given asking price. For example, heirs interested in settling an estate were often willing to accept less than their first asking price. An owner-operator who wanted to sell one farm to buy another within a time limit, took less than his first asking price as the time approached for him to complete the other transaction. But, generally, sellers were in a stronger bargaining position than buyers between 1940 and 1948, because there were more interested buyers than there were farms for sale.

Bargaining for farms took place in an unusual economic setting. First, as background, were the recovery years of the late 1930's, and second, the war and postwar period. The outstanding characteristic of the farm land market in Story County from 1936 through the first 3 months of 1948 was the increase in land prices (table 1). The change was slow from 1936 to 1941. After 1941 the rate of increase in prices from year to year approximated the rate during the 5-year period of 1936-1941.

Volume of sales was highest in 1943. The number of sales and number of acres sold in the highest year were more than double the figures for the lowest year, 1946. Greatest activity occurred in the 3 years, 1943, 1944 and 1945; sales then were from 15 to 35 percent above the 12-year average. The smaller number of sales in 1946 probably reflected the uncertainties as to reconversion and recession at the end of the war.

Even with this larger number of sales in 1943, only a small proportion of land in farms changed ownership through voluntary sale. The proportion varied from a low of 1.9 percent in 1946 to 5.2 in 1943.

Sales by lending companies were an especially important part of the land market activity during the years 1936 through 1943.[7] These sales were an aftermath of the foreclosures of the earlier 1930's. In 1936, nearly one-half and in 1943, nearly one-third of the sales were by lending companies. There were few such sales after 1944.

One reason for the smaller volume of sales in 1946, 1947 and 1948 is that land was in strong hands. Land owners were not faced with the immediate prospect of loss. There was no heavy pressure of land debt for the majority of owners. The income prospects were good. There were few farms in the hands of investment companies conducting active real estate sales programs. In this favorable land-price environment, relatively little effective bargaining took place.

ARRANGING FOR PAYMENT

The usual procedure in financing the purchase of a farm in Story County between 1940 and 1948 was for the buyer to make as large a down-payment as possible, and then to obtain mortgage funds for the balance. Selection of the lender was an unimportant

[7]The study is limited to voluntary sales. A complete list of all changes in ownership would include farm mortgage foreclosures and other forced transfers. Foreclosures and assignments were especially high in the years 1931-39. For further information see: Murray, W. G. Corporate land, foreclosures, mortgage debt and land values in Iowa, 1939. Iowa Agr. Exp. Sta. Bul. 266. 1939.

TABLE 1. FARM LAND SALES, STORY COUNTY, IOWA, 1936-1949.

Year	No. of sales*	No. of acres	Price per acre**	Acres sold as percentage of land in farms	Number of sales by companies
1936	103	10,895	95	3.1	47
1937	85	9,801	102	2.8	26
1938	87	9,856	106	2.8	26
1939	95	11,638	99	3.3	35
1940	92	11,190	106	3.2	26
1941	97	12,156	108	3.5	35
1942	93	11,366	124	3.2	24
1943	137	18,177	128	5.2	40
1944	121	14,637	149	4.2	15
1945	114	13,667	155	3.9	8
1946	59	6,755	164	1.9	1
1947	102	11,405	180	3.2	5
1948†	97	11,338	210	3.2'	—
1949†	64	7,147	213	—	—

*These are voluntary sales, as recorded in the public records in the court house. Fractional interests are included, when the transfer is to all other purposes a bona fide sale; for example, the sale of half interest in 120 is counted as the sale of 60 acres. Quit claim deeds are counted if information available shows them to be bona fide sales at going market prices. Family deals at less than market prices are excluded. Sales on contract are only those that are recorded; therefore, many transfers do not appear, until a deed is recorded at later date. In such case, the transfer is counted as a sale in the year in which the agreement was made, whenever data could be obtained on that date. Thus, a sale recorded in March, 1948, with a deed date of November, 1947, but terminating a contract in 1943 is counted as a sale in 1943. Some of the sales in later years are undoubtedly the terminations of contracts made earlier, but it is not possible to discover all of these. Tracts of 10 acres or less, and those sold for nonfarm purposes are excluded.

**Prices are calculated from revenue stamps or are taken as given in the deed; these have been checked with real estate dealers who knew the particulars of the cases.

†Data for 1948 and 1949 were obtained after the interviewing was completed. Preliminary figures for 1949: average price would change little, but number of sales and acreage will be larger when transfers recorded in 1950 for deals in 1949 are included.

problem. Buyers made general comparisons of terms, often proceeding on the basis of previous experience, and sometimes making inquiries among friends and neighbors as to experience with lenders. In few cases did borrowers make a careful search and comparison of the alternatives available, seeking exactly the kind of terms wanted. Chief attention was given to the privilege of paying off as rapidly as possible in the high income period.

The nature of the finance arrangement itself is the explanation of why a small number of transfers took place. For example, two sellers wanted payments over a period of years rather than in one lump; and the buyers were unable to buy except with small down-payments. Also, most of the sales by mortgage lending companies specified that the buyer obtain the loan from the seller.

Of the 69 cases in the sample, 27 were cash transactions, 7 were purchase contracts, and 35 involved a mortgage at time of deed.[8] Only one of the purchases by tenant farmers was for cash. The other 20 were financed by mortgages or contracts (6 contracts and 14 mortgages). Six of the 18 purchases by owner-operators were for cash; two additional ones were the same as cash because the seller would not accept full cash payment at time of sale;[9] there were 10 mortgages. Four of the purchases by retired farmers were for cash and one involved a mortgage. The 16 purchases by the nonfarmers who were interviewed were equally divided between cash and mortgage cases; but two of the mortgages were the same as cash, involving payment restrictions in assumed mortgages.[10] The county records show that of the purchasers who were not interviewed, four paid all cash, one bought on contract, and four used mortgages.

Mortgages and contracts were used more frequently by farmer purchasers than by nonfarmers. Roughly, 70 percent of the purchases by farmers and 50 percent of the purchases by nonfarmers were financed with mortgages or contracts. Aside from numbers and frequency, there were no particular differences between the mortgage financing practices of farmers and those of nonfarmers, except in debt per acre.

Debt per acre at time of purchase averaged higher for tenants and for owner-operators than for nonfarmers. The range in debt per acre was nearly the same for the different types of buyers, but there were more instances of heavier debt by active farmers, particularly tenants. One of the main reasons why tenants did not become owners more quickly, is that they had to accumulate the necessary cash or liquid assets to make the down-payments.

During the period 1940 to March 31, 1948, the average debt at time of purchase was $88 for tenants; it was $71 for owner-operators, $63 for retired farmers and $67 for nonfarmers.[11] If three nonfarmers buying to operate are included as farmers instead of nonfarmers, then average debt per acre for nonfarmer buyers drops to $61, which is the lowest for any group.[12]

The record of repayments on mortgages during the last 8 years has been an impressive one in Story County. On March 31, 1948,

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[8]This proportion of cash transfers differs slightly from the proportion of cash sales each year, because the sample is of farms sold once or more during the period rather than a sample of all sales each year. The sample may also give a somewhat different comparison of financing practices for different types of buyers. The farms bought by farmers for operation probably change hands less frequently than do those bought by nonfarmers for an investment. If the farm is bought as an investment, there is greater likelihood of resale—because the unit has not been bought as a home as well as a business.

[9]These are counted as cash transfers.

[10]These are counted as cash transfers.

[11]This is a simple average of debt per acre per case—and is not weighted by acres or years.

[12]The nine cases not interviewed are excluded from comparisons here, because only data from county records are available, and sometimes the particulars of the situation are not quite as is indicated by the county records; e.g., amount of unpaid balance on assumed mortgage is not known; contract balance is not known; or an assumed mortgage may not be mentioned in the deed.

9 of the 35 mortgages had been released. Two more had only a small payment left to be met with income from the 1948 crop; thus, 30 percent of the mortgages were retired. Prepayments were made on most of the mortgages that had been outstanding more than one crop year. In each instance where no prepayment has been made on the mortgage there was an explanation of additional and unforeseen expenses, or shortness of term. The total debt on the farms purchased since 1940 was reduced by nearly 40 percent by prepayments and retirements of mortgages. Owner-operator buyers made somewhat heavier payments than have other types of buyers. Those who were tenants at time of purchase followed a consistent program of making prepayments.

The primary source of funds for prepayments was income from the farm; clauses in mortgages were often worded to that effect. In 21 of 27 cases, all advance payments came from farm income. In one case a tract of land was sold and the mortgage balance was thus reduced. Four cases involved outside work or custom work with farm machinery, and one used income from other business to help retire the mortgage. There was no reported instance of an inheritance used to make prepayments on the mortgage.

The source of funds for down-payments was more varied. Inheritance played a part in 14 of the 60 cases (23 percent) and in 10 of the 44 farmer cases (also 23 percent). Income from farming was the source of part of the down-payment in 47 of the 60 cases interviewed (table 2).

In eight cases among the 39 active farmers, part of the funds for down-payment were obtained by borrowing in addition to the

TABLE 2. SOURCE OF FUNDS FOR DOWN-PAYMENTS ON FARMS, STORY COUNTY, IOWA, 1940-1948, BY TYPES OF BUYER.*

Source	Number of cases				
	Tenants	Owner-operators	Retired farmers	Non-farmers	All buyers
All from farming	11	6	0	0	17
Farming and sale of property	0	4	4	0	8
Farming and borrowing	4	4	0	0	8
Farming and inheritance	3	2	1	0	6
Farming and off-farm work	1	0	0	3	4
Farming, inheritance and work	1	0	0	1	2
Farming, inheritance and borrowing	1	2	0	0	3
Nonfarm work and inheritance	0	0	0	3	3
Nonfarm work and borrowing	0	0	0	2	2
Sale property, business or work	0	0	0	2	2
Work and business	0	0	0	4	4
Farming, property sale, business	0	0	0	1	1
Total	21	18	5	16	60

*Based on interview cases for 10 percent of properties sold.

mortgage. None of the owner-operator purchasers had to use a chattel mortgage, but two tenant purchasers had to mortgage livestock and machinery. Three owner-operators and three tenants had to borrow on notes for part of the down-payments. The notes and chattel mortgages were usually paid within one crop year. Thus, the financial position of the buyer at time of purchase is only partly reflected by mortgage debt. Total debt load, the circumstances under which the debts are incurred, the nature of the repayment schedules, and the prospects for net income in the years immediately following are the tests of financial condition at the time of purchase.

THE BUYING PROCESS AS A WHOLE

Although the several processes of finding, appraising, bargaining and financing the farm may be studied separately and in themselves, the larger meaning as to how these separate processes fit together into a unit transaction must be analyzed. The explanation of one step in buying may rest in some other step, factor or force. For example, buying may result as much from family tradition as from any detailed or particular economic analysis of the advantages of buying compared to leasing. Buying a farm is "the thing to do," somewhat aside from the economic advantages or disadvantages of buying at a particular time. Owner-operatorship is a goal which active farmers set up for themselves, and seemingly it is one of the criteria upon which active farmers judge each other.

Several characteristics of the buying processes stand out as tendencies in the land market in Story County:

1. Few buyers, whether farmers or nonfarmers, reported the use of a specific schedule of costs and probable income in determining their offering price.

2. Most buyers, whether or not a specific schedule of cost and return calculation was used, compared income possibilities and market price by drawing on previous experiences.

3. Buyers who financed the purchase with a mortgage were more concerned with the amount of the unpaid balance than with the total purchase price. "If the mortgage is safe, the farm is safe."

4. In this period of favorable farm income, purchasers made the commitment and then sought a mortgagee if borrowing were necessary, rather than finding the mortgagee first and then making the deal. Mortgagors were well aware that mortgage funds were available.

5. The actions of some buyers were prompted in part by questionable rules of thumb such as "one can make more by owning 80 acres than by renting 160," "buying a farm is safe if the annual cost of payments and interest is no more than cash rent."

6. Tenants often operated within a narrow range of opportunity. Decision had already been made that farming was the life occupation; the problem is one of where and under what conditions. The tenant who thought he could not find a farm to rent became a buyer.

7. Alternative investment opportunity in any meaningful sense does not exist for many of the persons who buy land. The owner-operator buying

another unit, or the nonfarmer making an investment can think and act in terms of alternative investment opportunity; but even these may be and are conditioned by previous experience and family tradition.

Tenants as a class of buyers tended to follow a general pattern in acquiring title to farm land. Most of them expressed a desire to own; it was the thing they intended to do at some time. The timing of the purchase might be "forced" by a variety of circumstances. Perhaps the farm occupied came up for sale; the lease was not or could not be renewed; there were no farms available for rent. Some of these persons expressed the desire to have continued renting longer, in order to acquire more capital and thus be able to buy a larger farm. But the point emphasized here is that they *had* made up their minds that some day they were going to be owner-operators.

The history pattern for tenants before making the commitment was composed of the same elements. Each had leased for a number of years; then came the motivation to buy, either as force of circumstances, as a result of finding the kind of farm that had been sought, of finding the kind of deal that could be swung, or of having the money for a down-payment. Those who were forced to buy usually did not go through as long or as arduous a searching process to find the farm they acquired. They did not usually get quite as much of what they wanted in terms of size, location or quality of buildings; and they were not able to make quite as high down-payments. In other words, the financing processes and the details of the finance terms of the individual case resulted in part from the time the transaction came in their general schedule of plans for the future.

The age factor is a complicating force that helps to explain the actions of some of the purchasers. Pressure to buy came from a number of directions. The tenant who was past 50 years of age, for example, looked forward to a future in which ability to obtain the use of land on a lease may be denied because of his advancing age. Several of the buyers who were tenants at time of purchase expressed the thought that landlords are interested in aggressive managers. At least two of the tenants bought because they felt that they might not be able to get a farm on a lease within a few years.

Buyers who were owner-operators at time of purchase followed much the same general procedure as did the tenants. In two phases especially, the buying process as a whole differed for tenant and owner-operator buyers. First, owner-operators seldom bought under any kind of pressure—other than the pressure of acting at a given time to obtain the land they wanted; whereas, tenants may have been forced to act by termination of a lease. Secondly, owner-operators usually had larger equity at time of purchase.

Three of the 16 nonfarmer purchasers bought to operate. The other 13 cases were instances of investment, in which the buyer was not dependent upon the return from the farm as the main source of income for family living. In this sense purchases by nonfarmers were motivated differently from purchases by farmers who bought to operate. The nonfarmer purchaser and the farmer buying to lease were concerned with rate of return on investment, with safety of investment, with a combination of the two. Nonfarmers also mentioned family traditions, hobby, use of leisure time, or intention to "retire to the country." The fact that nonfarmer purchasers had other sources of income made them less dependent upon the farm than were farmer purchasers. Nor were nonfarmers as dependent upon the farm paying for itself as were active farmers, because most of these nonfarmers had other funds to make a payment *if* the farm income would not pay taxes and interest in a given year.

So far as can be determined, farmers and nonfarmers bought the same kinds of farms. Some nonfarmers intentionally bought tracts of land without buildings; others bought farms with good sets of buildings, in order to attract good tenants. Likewise, some farmers bought unimproved tracts of land and others bought adjoining tracts of land with buildings even though they were not especially interested in the buildings.

Interest in size and condition of the buildings depended upon the purpose for which the land was purchased. In 15 percent of the cases in the sample, no buildings were involved. Buyers who bought to operate, and especially those who owned no other land, bought land with buildings. They bought complete operating units. Tenant purchasers bought tracts of land with sets of buildings sufficient to operate the farm. Farmers and others who bought an additional unit to lease to someone else usually bought land with buildings. Nonfarmers and farmers who bought additional land to operate with that already owned paid no particular attention to buildings. In some cases the buildings entered into the purchase price of the land, and in others the transfer apparently would have been made at the same price without the improvements. A few buyers intentionally bought land without buildings because of the additional management problems involved when buildings are present; but on the other hand even some of the nonfarmers buying to lease bought land with buildings in order to be able to attract a tenant.

Farmers who owned other land tended to buy smaller tracts. There was a higher proportion of purchases of less than 100 acres by owner-operators than by other types of buyers (table 3). The average size of tract bought by farmers who owned (or had owned) other land was smaller than the average unit bought by tenants, largely because these were additional purchases. The average size of tract bought by nonfarmers was larger than that bought by owner-operators or by tenants. Nonfarmers and tenants

TABLE 3. PERCENT DISTRIBUTION OF PURCHASES, BY TYPES OF BUYERS AND SIZE OF TRACT, STORY COUNTY, IOWA, JANUARY 1, 1940, TO MARCH 31, 1948.*

Size	Tenants	Owners	Nonfarmers	All buyers
	percent	*percent*	*percent*	*percent*
0-40	5	13	8	9
41-100	52	52	28	43
101-200	28	35	40	35
201-300	10	—	16	9
300	5	—	8	4
Average size tract	129 acres	92 acres	148 acres	124 acres
Number of cases	21	23	25	69

*Ten percent sample of properties sold.

seldom bought tracts of 40 acres or less, and none of the owner-operators bought a tract larger than 160 acres.

Purchase for enlargement of operating units was not an outstanding characteristic of the land market in Story County. Seven of the 18 purchases by owner-operators were for enlargement of the operating units, five were additional units to lease out (three to relatives and two to nonrelatives); and six were replacements for land recently sold or previously leased (three of each). As proportions of all properties bought during the period, 10 percent was for enlargement of the operating unit of an owner-operator; 9 percent were replacements, and 7 percent were investments; purchases by owner-operators were 26 percent of all purchases.

Ownership enlargement took place in greater proportion than did operating enlargement. Three of the five retired farmers had other land; five owner-operators bought additional units; the three replacements of rented land increased the size of ownership unit. These, with the seven enlargements, account for 18 of 21 purchases by farmer-landowners. Thirteen of 25 nonfarmers owned other land.

Retirement or partial retirement was the main reason for sale by farmers; sale for replacement was next (table 4). During this favorable income period few farmers sold in order to enter some other occupation. Sales by estates, by mortgage companies, and by nonfarmer individuals accounted for more than two-thirds of the sellers. As shown earlier, sales by mortgage companies declined in number during the period; therefore, the distribution of types of sellers in 1947 or 1948 would be made up of a higher proportion of the other types.

Nature of motivation, previous experience, relative economic status, available liquid assets, personal tastes and intentions with respect to operation are primary explanations of the differences

TABLE 4. TYPES OF SELLERS, STORY COUNTY, JANUARY 1, 1940-MARCH 31, 1948*

Type of seller	Number	Percent
Nonfarmer, business and professional	17	28
Mortgage company	9	15
Active farmer, buying a replacement	7	12
Farmer, cutting down or retiring	10	17
Farmer, changing occupation	2	3
Estate	15	25
Total	60	100

*Based on 10 percent sample of properties sold. In the nine cases not interviewed, one seller was an estate; one a corporation; two a mortgage company; and five individuals cannot be classified.

in buying practices among types of buyers. These are also the main explanations of differences in buying practices among buyers of the same type. No nonfarmer bought under the pressures that influenced tenant buyers. A nonfarmer buyer who buys a farm to operate may feel under pressure, as when he is working at a job in which he is not especially interested, or facing a termination of present employment. But in such cases the particular action may be only rationalization for action already decided. In times of full employment, nonfarmers apparently do not feel "forced" to buy land in order to have something to do. This may not be true in depression times.

A nonfarmer buyer may be seeking some form of security for his investment in the sense that a tenant is seeking security from his eviction.[13] Several nonfarmers mentioned that they bought land early in the war period for the specific purpose of hedging against inflation. Others mentioned that a given amount of money would be "safer" in land than in any other form of investment. At least one informant bought a farm to "move to when the crash came after the war."

The buying processes during the period 1940 to 1948 must also be interpreted in terms of the economic characteristics of the period. Buyers and sellers were aware that the immediate income earning prospects were good. During the early war years it was obvious that farm incomes would remain good for a few additional years. Each succeeding year demonstrated that the judgment of the year before (that is, the expectation of a favorable income) had been correct. Buyers had the funds to make substantial down-payments. With funds available and with prospect for future farm incomes favorable, people were willing to buy. More persons were ready and willing to buy at their given sets of offering prices, than were willing and ready to sell. There were no cases of foreclosure in the county.

Buyers and sellers were aware that the market price of land

[13]No attempt has been made to devise measures of the relative significance of this "security motivation" in buying land.

was increasing. Some, and especially those who bought to operate, were motivated to buy before land prices went any higher. Others withheld, waiting for land prices to taper off or begin to decrease. Even though many felt that the price of the tract was higher than the capitalized value of expected income, those same persons were willing to go ahead and commit themselves for that price.

Most buyers were aware that the rate of increase in the market price of land was less than the rate of increase in the income from land. A few bought with the specific intention of paying off the debt with farm income in one or two years. Several farmers and nonfarmers commented during the interview that there was no equal investment opportunity, or said, "Where could I have put my money to earn any more?"

The tone of the seller's market, and the economic environment of this market in the larger economy influenced the behavior pattern of all buyers. In spite of rising land prices there were strong reasons for buying. With the favorable outlook, there was little bargaining between buyer and seller. Both buyer and seller knew that the land would sell if the asking price were at some reasonable figure in comparison to what other farms were bringing.

CURRENT MARKET PRICES AND LONG-TIME LAND VALUES

The idea of normal agricultural value played an important part in the movement of land prices between 1940 and 1948. The fact that farm incomes were not expected to stay at high levels through an indefinite future probably explains more than anything else why land prices did not rise more. In other words, a concept of normal value has served as a sort of yardstick, to help buyers and sellers decide what to do.

At the same time, prospects for high returns for a few years were one of the important forces causing land prices to rise. Buyers heard about the returns received by others from investments in land and were motivated by the prospective return. Sellers raised their asking prices because of the rise in land income.

Buyers recognized a difference between current market price and value calculated from long-time average land income. Some decided to buy even though the two figures for a given farm differed significantly. Many forces and circumstances other than price considerations caused the transfers to be made, but current land price relationships were of primary importance.

PURCHASER OPINION ABOUT PRICE AND VALUE

Buyers were asked two questions about value and price: (1) "At the time of purchase, did you feel that you were paying more, less or the same as you thought this land ought to be worth in the long run?" (2) "What do you think is the long-time value of this farm?" This second question usually had to be explained further in terms of "how much one can afford to pay for this land (this farm) with the expectations of paying for it from income from the land."[14]

The replies to the question of impression at time of purchase are tabulated as follows:[15]

Paid more than it was worth	19
Paid the same as it was worth	15
Paid less than it was worth	14
No reply	12
Total	60

Nonfarmer purchasers accounted for most of the cases in which price was less than long-time value. About one-third of the buyers felt they paid more than the long-time value, but 50 percent of farmer buyers felt they paid more.

	Paid more	Paid same	Paid less
Tenant farmers	11	5	4
Owner-operators	6	8	0
Nonfarmers	2	2	10

There were 42 estimates of long-time value of the farm. When these estimates of long-time value are compared with the sales prices for the 42 cases, the value average is higher than the current price average. But it must be remembered that prices are an average of prices paid during a period of 8 years, in which period land prices were rising. In 1940 the average price in the county was about $100 per acre, and in 1948 the same land averaged $210 per acre. If the estimates of long-time value in 1948 are compared to land prices in 1948, the price would be the higher figure. Value changes less through time than does current market price.

There were no apparent differences in the actions of the buyers, whether they felt that the price paid was more, the same, or less than the long-time value of the land. Nor did the buyers who felt they were under pressure to buy because of the lack of suit-

[14]Although the attributes of location, buildings, and inclusion or exclusion of crops and livestock and machinery vary from sale to sale, the concept of price gave no trouble. Any difficulty arises only in making comparisons between prices of various farms, and the task becomes one of either having enough cases so that the average is a meaningful figure, or of separating the cases into like groups, in which points of time of making the deal are the same, and in which such special items as purchase of crop or additional consideration for livestock and equipment are excluded. Market price is a known and determinate amount. One can ask the question of "What did this farm sell for?" and get a specific answer. Not so with the question "What is this farm worth?" or "What is the long-time value of this farm?" The replies to the questions are difficult to interpret because of the varying concepts of long-time value. Also, the estimates of value are from persons who were optimistic enough to buy.

[15]Asking a question about an opinion held 2 years or more ago may automatically bring forth replies which are colored by events that have taken place since.

able alternative tend to be the ones who felt that the price paid was above the capitalized value. Quite regardless of the opinion as to price versus long-time value, buyers discounted current incomes, made advance payments on mortgages, and allocated additional worth to home value, location, and the satisfactions of ownership. Differences in patterns of actions among individual buyers and between types of buyers are attributable to differences in motivations, intentions, financial status—not to opinion concerning the comparison of current price and long-time value. Those who bought less land than they wanted (an 80 rather than 160) did so mainly because of financial status. Probably the significant test of the importance of the price-value comparison would be among those persons who were interested in buying but did not buy because in their opinion land was too high priced. To these and to those who bought, the foreclosures of the 1930's emphasized the importance of current land prices.

FARM INCOME AND LAND PRICES

When the study was planned it was known that full treatment of the valuation problem would involve a careful appraisal of each farm, but the amount of work involved was beyond the time and funds available for the study. Instead, income and expense information have been summarized from farm record books in central Iowa. The analysis is presented first in terms of net farm income and trend in cost of family living, upon the assumption that for farmers, the amount available for payment on land is the residual above cost of family living and income taxes. Second, calculated land income for past years and assumed land income for future years are used in analyzing long-time value.

During the period, 1936-47, funds available from farm income for payments on land increased significantly (table 5). Production costs, federal income taxes and family living costs also increased; but farm incomes increased relatively more, leaving a larger residual that could be used for buying land or for other expenditures. Also, net farm incomes increased proportionately faster than did land prices.

Although the average amount available from farm income for payments on land and for other expenditures has varied between \$8 and \$48 per acre during the 12 years, it does not follow that all purchasers could have allocated a payment of \$8 per year in advance. The amounts above \$8 per acre in the other years might not be enough to take care of contingencies. Unexpected expenditures for medical care, for example, would easily upset the schedule of payments.

It is evident that many purchasers have made payments of more than \$8 per acre per year. In so doing they have paid for land with *farm income* or *family income* rather than with *land*

TABLE 5. AMOUNTS AVAILABLE FROM NET FARM INCOME FOR SAVINGS, INCOME TAXES AND PAYMENTS ON LAND COMPARED WITH TREND IN LAND PRICES PER ACRE, STORY COUNTY, IOWA, 1936-1948.

Year	Land prices per acre	Net farm income per acre (1)	Family cash living costs per acre (2)	Balance available per acre (3)
1936	95	14	3	11
1937	102	12	4	8
1938	106	13	4	9
1939	99	16	4	12
1940	106	17	5	12
1941	108	29	5	24
1942	124	40	5	35
1943	128	39	5	34
1944	149	26	6	20
1945	155	28	7	21
1946	164	53	9	44
1947	180	60	12	48
1948	210	43	13	30

(1) Data from farm record books in central Iowa. Net farm income is gross cash receipts plus food and fuel obtained from farm, plus increases in inventory, minus production and operation costs, decreases in inventory, real estate taxes and depreciation on working capital and fixed assets. No interest is charged on land and buildings here because the purpose is to show the amount available for payment on land.

(2) Obtained from farm home account records scattered over the state. There were more than 100 cases each year. Actual expenditures by Story County farmers might be different, but the relative change from year to year would be the same.

(3) Note that the larger balances in 1946 and 1947 do not indicate corresponding increase in funds available for payments on land because of the significant increase in income tax for which no deduction is made here.

income only; the resulting figure is higher than if *land income* alone were used. Many purchasers have been able to make these heavy payments on land; but it does not follow that other buyers will be able to pay out unless conditions are as favorable.

LAND INCOME AND LAND PRICES

What can be calculated as a capital value or earning value for the land? The answer varies with the individual farm, the individual buyer, and with the nature of the assumptions as to income and costs. According to information prepared by the Bureau of Agricultural Economics:

"Under a given set of assumptions, the determination of warranted values is purely mathematical. It is obvious that the crux of the problem is that of arriving at acceptable land income and interest rates. No one can know with certainty what future rent levels will be. They will depend in the first instance primarily on size of crops, farm commodity prices, and production costs. These three elements in turn will be affected by various other forces, including weather, shifts and cyclical fluctuations in demand and supply, and inevitable developments in agricultural and industrial technology.

"Also highly important for land values as well as for our whole economy in the years ahead will be the social-economic policies of our own and other governments. Land values will be indirectly but very importantly affected by general government policies and action with respect to war and armaments; industrial employment, domestic trade, monopoly, and kindred problems; general international trade; and general national and international monetary and credit problems.

"Government policies that will affect agriculture (and hence land values) more directly include those having to do with crop control, conservation programs, agricultural prices and costs, subsidies, credit, taxes, marketing

TABLE 6. NET LAND RETURNS TO LANDLORDS, CENTRAL IOWA, 1936-48.*

Year	No. cases	No. acres	Average net return per acre
1936	53	10,860	$ 6.00
1937	63	12,955	6.32
1938	72	16,154	4.82
1939	80	17,363	6.55
1940	84	18,299	7.11
1941	83	19,572	8.41
1942	84	18,400	10.62
1943	68	13,887	15.46
1944	48	8,787	12.13
1945	43	8,668	11.67
1946	49	11,560	16.15
1947	56	12,549	19.65
1948	69	14,294	19.95

*Net returns are on cash rented and crop-share leases. Stock-share leases are excluded. Data are taken from record books, Central Iowa. The average is weighted by number of acres.

schemes, nutrition programs, foreign trade in agricultural products, and other elements in our agricultural economy. The net effects on land values will vary from region to region, from state to state, county to county, and even from farm to farm within a relatively small area.

"This incomplete recital of some of the things on which the future of farm real estate values will depend must give pause to any ready acceptance of land value forecasts. Yet, paradoxically, buyers and sellers and borrowers and lenders every day are "predicting"—or at least "gambling on"—what land rents and values will be in the future. These considerations suggest that one of the principal advantages of an income capitalization approach to values is in more clearly portraying the nature of the essential predictions that are inherent in transferring title to land or in borrowing or lending on land.

"Unfortunately, many who borrow and buy land, especially on a rising market like the present, do not realize the true meaning of their actions. They are "betting," possibly only hoping, that they will "come out" in the long run. Probably most buyers up to now (Oct. 1943) will be able to come out all right—on the basis of apparently reasonable expectations of high incomes for the next two or three years."[16]

Returns to land or land income can be approximated by assuming that net returns to landlords is a reasonable measure. The trend in net land incomes, upon this assumption, is shown in table 6.

If it is assumed that the 10-year average ($8.65) for 1936 through 1945 is a reasonable expectation of future land earnings, and if 5 percent is used as the rate of capitalization, then the average capitalized value for land in Story County is $173 per acre. But, it must be noted that this capital value of $173 per acre is only an approximation. It is derived by dividing an anticipated income by an earning rate of 5 percent. The amount will be higher or lower, depending upon the level of income and the rate of capitalization. Nonetheless, the method presents

[16]Regan, M. M., Fred A. Clarenback and A. R. Johnson. The farm real estate situation, 1942-43. U. S. Dept. Agr. Circular 690, pp. 40-41. 1943.

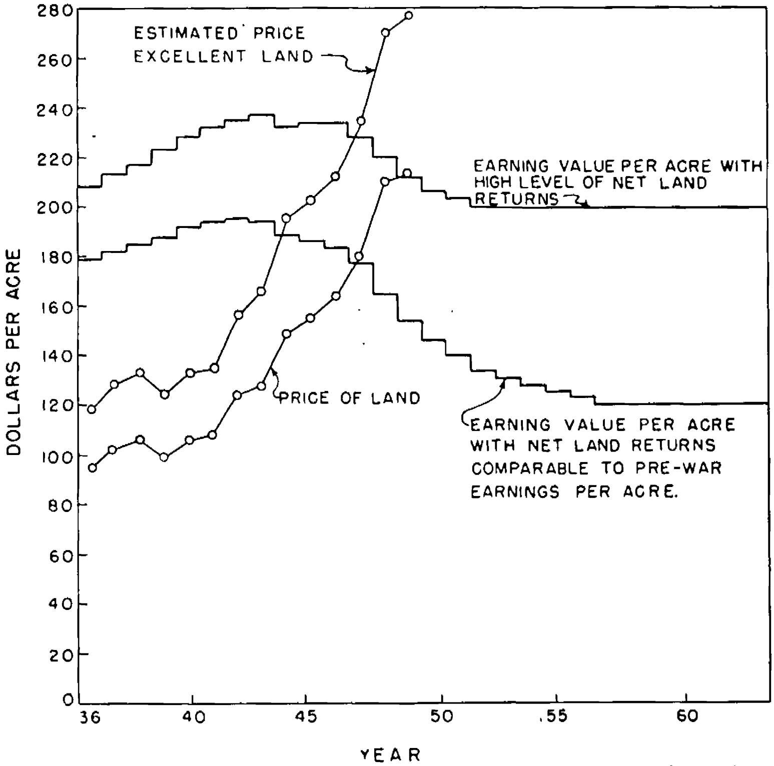

Fig. 1. Land prices in Story County, Iowa, 1936 to 1949, compared with calculated earning value per acre.

The earning value for each year was calculated as follows: (1) Starting with the year in which income levels off as a constant, divide the net income per acre by the rate. This gives a base value; \$6 per acre divided by 5 percent equals \$120, for assumption 1. (2) Move to year 1956. Subtract constant \$6 per acre from estimated income for 1956. Discount the \$3 for one year (\$9 for 1956 less the \$6 base). Add this discounted present value (of \$3 due one year later) to the base value. (3) Move back to 1955. Subtract constant income (\$6 per acre) from \$9 expected income for 1955. Discount the resulting \$3 for one year. Also discount for 2 years the \$3 extra which is expected in 1956. Add both to the base value of \$120 to get the capital value for 1955. (4) Proceed year by year, 1954, 1953, 1952, etc., to 1936 in the same manner, by totaling the present worth (at the beginning of each year) of the incomes expected in following years. The same procedure was followed for assumption 2, with the higher level of net land returns.

a usable guide in helping the seller decide whether to sell and the buyer whether to buy.

The specific problem is one of estimating future net land income and selecting a rate of capitalization. The income-producing value of land is a sum of the present worth of future incomes. No one has knowledge of what these future incomes will be 1 year, 10 years or 30 years hence; yet each purchaser who buys for the purpose of obtaining the income from the land must make an estimate of one or another kind as to what that income will be. Furthermore, the income varies from year to year. The estimating-calculating process, therefore, must take some average income amount and divide by a rate of expected return, or calculate the present worth of the income for each year.

For purposes of illustration, fig. 1 gives the calculated earning value of land at two levels of income, and compares these values over a period of years with actual market prices in Story County. These data are not a forecast of the future. Instead, the levels of land income are specific assumptions, for illustration only.

The net land returns for the years 1936 through 1948 for fig. 1 are those given in table 6. The net land incomes from 1949 on through 1958 *are assumed incomes*. In fig. 1, the first assumption was: (1) net land incomes above long-time average returns, at least during the period of the European Recovery Program; (2) beginning in 1953, the returns approximate the average returns from 1936 through 1946; (3) by 1957 the net returns drop down to the same average as the 1936-1940 average, which was just above $6 per acre.

The net land returns from 1936-1948 are for a group of farms which are above average in terms of size, and probably in terms of quality. Thus, the average net land incomes as shown in table 6 are undoubtedly higher than the average for all farm lands in Story County. There is no exact means of estimating how much these average returns are above net land returns on all farms in the county. But supposedly the error would be fairly constant from year to year. In order to compensate for this upward bias in income, the price of "above average" land in Story County was estimated.[17] The income-earning value for "above average" farms may be compared directly with the prices of "above average" farms. Upon the basis of this assumed level of land income (fig. 1) the earning value of land fluctuates from year to year, rising to a peak of $196 in 1942 and decreasing to $120 per acre in 1957.

This curve of earning value of land (fig. 1) takes its shape directly from the assumed level of land incomes. The shape of the curve is determined only by the flow of income after the particular year for which the calculation is made. That is, the income in 1936 or 1938 has no effect on the calculation for 1940. But income in every year after 1940 affects 1940. The constant rate of capitalization has no effect on the shape of the curve, but the rate determines the height of the curve when incomes are assumed.

If one assumes at the end of 1948 that land incomes drop as shown, then in 1948 land had an earning value of $165 per acre (reading from fig. 1). Prices for average Story County land were at $180 per acre in 1947 and $210 in 1948 (table 1). The estimated price of above-average land was $235 per acre in 1947 and $270

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[17]According to information from real estate dealers, excellent land sold at 125 percent of average land from 1936 to 1942, and at 130 percent from 1943 to 1948.

in 1948. On this basis, in 1948 land prices were above values calculated from assumed income capitalized at 5 percent. If the buyer pays more than this value in order to obtain possession, it follows that payment must be made from farm or family income, rather than from land income because the estimated land incomes account for value of only $165 per acre in 1948.

Likewise, in 1942 the curve showing earning value is shaped by the incomes from 1942 on into the future. At the start of 1942, if the buyer estimated that land incomes were going to be as they developed, and if the income after 1949 is taken as assumed here, then the earning value of 1942 was $195 per acre. This value is above the price of land in 1942. In other words, looking back over the past few years, the people who bought at from $95 in 1936 to $165 in 1947 acquired bargains, in the light of subsequent events.

It is known that few purchasers between 1936 and 1940 had any strong ideas that land incomes would increase as they did after 1940. Also, few persons expected net land income to stay at 1947 and 1948 levels indefinitely.

The buyer has to answer for himself the question of, "What will be the level of net land income in the future?" The answer can be only an estimate, at best. But the estimate must have some basis in reason and in probability of happening. One way to look at the problem is to look at the current market price of land. The question can then be posed—What level of net land income does it take to support this present price of land? The price in 1947 for "excellent" land was $235; at 5 percent, this takes an average net land income of $11.75 per acre. The price of average Story County land was $180 in 1947; at 5 percent it takes an average net land income of $9 per acre to justify that price. The average price of $210 in 1948 requires an income of $10.50 per acre.

During the last 4 or 5 years many buyers have felt that the price of the land they bought was above its long-time value. Some of these purchasers expected a few years of high farm incomes and then a drop in incomes. These persons were actually discounting the short term by the same mathematical process used to calculate the curve in fig. 1.

The only difference between assumptions 1 and 2 in fig. 1 is a higher level of assumed net land income after 1952. In assumption 2 net land income declines to $10 per acre by 1952—which is 10 percent above the average net land returns for the period 1936-1948. Furthermore, it is assumed that land incomes stay at the $10 per acre level from 1952 on into the indefinite future. This schedule of incomes may be assumed as an optimistic view.

With the higher level of assumed net land income a higher level of value results. On the basis of this set of assumptions, "excellent" land sold in 1947 at approximately its earning value.

The trend of land price was upward at the end of 1948 in Story County. The calculation in fig. 1 shows that land prices are beginning to exceed earning values. If buyers commit themselves for amounts above the earning value of land, then payment may have to be made from farm income or family income. Or the buyer may have to accept a lower rate of return than the 5 percent used in the above illustrations.

What are the prospects or possibilities that net land incomes will be above $10 per acre through the future? The fact that land prices increased less rapidly in 1948 and 1949 than they did from 1941 to 1948 is a strong indication that most buyers were aware of the possibility of lower land incomes.

There can, of course, be many variations from the average. The individual farm may offer opportunity for a net land income either above or below the assumed future incomes in fig. 1. Also, the individual is at liberty to pay more than a "reasonable" value for a particular farm, located in a choice spot, on a paved road, with an attractive set of modern buildings. But these particular characteristics may not add to the income producing ability of the farm. The evidence indicates that in spite of all the unknowns involved in estimating the future course of events, the purchaser has no choice but to make income estimates for himself. Comparisons may then be made with market prices, and a choice made regarding the non-income characteristics which are also part of the farm as a home.[16]

IMPROVEMENTS IN BUYING PRACTICES

The analysis of processes in buying and the comparison of the trend in market price of land with the calculated earning value suggest a number of ways in which buying practices can be improved. These are presented in terms of the experiences of farmers and others who buy land.

WHEN TO BUY LAND

Advice to prospective buyers of farm land, and especially to those who buy to operate, is sometimes given in terms of "buy when land prices are low;" or "do not buy when land prices are high." Unfortunately, most buyers are unable to follow such advice because of force of circumstances. When land prices are low, farm incomes are low. When land prices are low, purchasers are least able to make payments on land; incomes are not sufficient to allow payments on land nor to allow the accumulation of down-payments. Prospective purchasers are not able to buy when the market price of land is at the point at which they could deal for the lowest number of dollars per acre. The accumula-

[16]How much can I afford to pay for a farm? Iowa Agr. Ext. Service Pamphlet 94, July, 1946.

tion from a good period usually cannot be held long enough to buy when land prices are low. The prospective buyer may be in a better financial position to buy land at a price of $100 per acre than at $50 per acre, if under the one price situation the level of farm income is more than twice that of the other.

The offering of such caution and advice is not amiss, however. There are many reasons for caution in buying a farm, and many of these center around the price that is paid for land and the kinds of financial obligations under which purchasers put themselves. But the emphasis should be upon the nature of relationships, rather than upon a given set of figures or upon a given price of land. The probable future income from which payments on land are to be made as related to the total of the payment to be made, is the significant test, rather than the number of dollars of commitment alone.

The purchase of a farm constitutes the biggest and probably the most important decision in the whole process of farming as an occupation. When to buy, with the involved questions of price of land as related to other economic phenomena at time of purchase, may be as important as is the question of whether or not to buy. A host of interrelated questions must be answered. As indicated previously, some of these questions do not necessarily arise as decisions to make. A man has farmed for a number of years as a tenant; his lease is terminated; there are no other farms to rent; in his opinion, and in order to do what he wants to do and is best qualified to do by reason of training and experience, there is no alternative but to buy a farm.

This decision of when to buy, quite aside from the questions of what kind of land, location, and how to arrange for payment, is part of a much larger problem in the general operation of the economy. The larger question is that of where to invest capital. Much more needs to be known about the investment practices of farmers and others before it is possible to suggest alternative investment programs for farmers (and others), but a few pertinent observations may be in order, as related to the present study of farm land buying practices in Story County.

As a part of the interview with buyers, each was asked to express an opinion as to what would be done with the net farm income, supposing farm incomes remained decidedly favorable for a few more years. The reply for farmers almost invariably was: pay off the mortgage; improve the buildings, especially the home; improve the land; and then, buy more land. There were a few exceptions. Informants seldom mentioned other forms of investment. Government bonds were looked upon as a safe and convenient form to hold money because the conversion could be made rapidly—a saving, rather than as an investment. Not enough information was obtained for a careful analysis of investment outlook, but the replies emphasize the tendency of farmers to invest only in farming.

All purchasers also were asked if any particular consideration had been given at time of purchase to other possibilities for investment. Almost invariably, the reply of farmers was *NO*. No other form or type of investment had been considered, in anything more than passing fancy, except in 4 out of 39 cases. And three of the exceptions had some nonfarm experience. Two considered some form of retail business, and one considered city real estate.

The replies to the question of *"what other investment opportunities were considered at the time of purchase?"* must be separated entirely from the question of *"what would be done with net farm income if that income remains favorable for a number of years?"* The difference in situation at time of purchase and at some later date constitutes an entirely new environment within which decisions are made.

The explanation of the difference can be made by illustration. A tenant farmer has leased for 10 years; for one reason or another his lease is uncertain. He has $20,000 in a form which can quickly be converted into cash, plus equipment and sufficient livestock for a 160-acre farm. What shall he do with the $20,000? The purchase of a farm, rather than any other form of investment receives first and maybe the only consideration. The possession and control of a farm unit is the essential requirement for this person to do what he wants to do—operate a farm. So he buys the farm. And he buys it in a period in which land prices are increasing because it is only during the period of rising land prices that he has the necessary funds for a down-payment.

Take this same case 5 years after purchase. The farm is free of debt. The operator again has $20,000 in liquid assets—maybe largely in government bonds. His investment outlook is then quite a different matter, because he is established. He has a farm. He may make further improvements on his present farm, buy more land, or make some form of nonfarm investment. The probabilities lie in favor of investment in farming, because that is the business with which he is familiar.

When to buy is thus quite often determined for the buyer by forces quite largely outside his control. The buyer has to be in a position in which he can make choices. The operating farmer with enough land to furnish a comfortable living in ordinary periods has a reasonably wide area of choice. It is possible in such cases to make decision with regard to time for purchase of more land. But even in these cases, there still remains the desirability of looking around for alternative opportunities for investment; and from the data available it appears that alternative investments have received scant attention.

SHOPPING FOR THE MORTGAGE

In the last few decades there have been a number of improvements in the content of mortgage contracts. Reference is made to such items as privilege of prepayments; applying prepayments to a reserve fund which can be used if a payment cannot be made in any one subsequent year; variable payments; and amortization features. The experience of the 1920's has shown the weakness of a short-term mortgage which falls due when the economic situation is unfavorable. The history of the 1930's demonstrates that the amortization of mortgages does not automatically cure all the faults of mortgages, for even the 40-year mortgage became delinquent. But comparatively, even in good times, the amortized mortgage over a long term represents a safer finance method than does the 5-year mortgage with a renewal clause.

In spite of these improvements, and in spite of the general satisfaction that borrowers expressed concerning the terms of their mortgages, there are weaknesses in the financing practices. Some of these weaknesses can be corrected if the mortgagors will make use of the facilities that are available.[17]

Six mortgagors did some specific shopping to obtain the kind of mortgage terms that were to their satisfaction. Most of the remaining mortgagors made only general inquiry as to mortgage terms available. Two had personal friendships with an agent of the lending company and looked no further. Four asked friends or neighbors about provisions of mortgages. Six acted on the advice of the real estate agent or a banker. Three did business where they had done business before, without a thought to looking around for terms more to their advantage. Eight assumed mortgages already existing, and there were eight purchase-money mortgages to sellers.

The farm mortgage market is a competitive one. In recent years mortgage institutions have been actively soliciting farm mortgage business. The competition tends to force these agencies to make much the same types of agreements. But there are differences which can be made to work to the advantage of the individual borrower.

If more borrowers insisted upon certain specific provisions of mortgages, over a period of years more of these provisions would be included in the mortgages that are written. By way of example, the unfavorable reaction to limitation clauses in the mortgage as to how much of the principal could be retired in any one year led to the elimination of some of these limitations.

Within reasonable limits it is possible for the mortgagor to obtain the kind of terms he wants and needs. The nine borrowers who did some shopping were looking for one or more provisions to fit their particular cases.

[17]Larsen, Harald C. and Neil W. Johnson. Managing farm finances. U. S. Dept. Agr. Misc. Pub. 652. 1948.

MORTGAGE PREPAYMENTS

The general practice during the recent period of favorable farm incomes has been to retire the mortgage indebtedness as rapidly as possible. Borrowers were extremely conscious of the mortgage debt. Too few looked upon long-term credit as a tool for maximizing farm income. Not enough purchasers considered the possibility of other uses of the funds that were used to retire the mortgage.

For example, one individual had a debt of $30 per acre on a productive farm unit. The $3000 used to retire the remaining debt on his 100-acre farm might have given returns higher than the 4 percent interest cost, if invested in more land, more machinery, more livestock, or in some other income-earning activity.

DEBT BURDEN vs. TOTAL PRICE

Some of the buyers were more concerned with the amount of the debt per acre than they were with the significance of total price. Their comments were often made in terms of "if the mortgage is safe, the whole thing is safe." Granted, if the mortgage is safe, the purchaser has little to fear from his debt situation. But a closely related point is of importance.

What about total price? What about the investment as a whole? Is it debt as such, or debt related to something else that constitutes the danger?

So long as the farm income situation remains favorable and large annual payments on the mortgage can be met, no harm results. The difficulty arises when expectations are not realized. Buyers are still buying farms with the expectation of continued favorable levels of farm income. And the longer the favorable farm income situation continues, the greater is the potential danger for the persons who make the arrangements towards the end of the favorable income period. The possibility of being caught with a heavy mortgage debt which must be retired with a lower level of farm income was greater in 1948 than it was a few years earlier. All the cautions to buyers that have been stated and printed by lending and educational agencies are even more important today than a year or two ago, *in spite of the fact that during recent years thousands of persons have bought farms and paid for them with farm income.* The significant relationship is between the ratio of reasonable expectations in land income and land prices, rather than only in the amount of debt per acre or the total price per acre.

In view of unpredictable changes in farm income, there are two observations which can be drawn from the mortgage debt experiences of the past, primarily the circumstances of distress adjustments in the 1930's (1) Continuing attention must be given to land appraisal as such, in order that the buyer does the best possible job in estimating the income-earning and debt-carrying capacity of the farm. This means the exercise of careful judgment in comparing different farms and choosing the one best suited to the purpose. Responsibility here rests with both the individual buyer and with the mortgagee. (2) There is need for protection against contingencies. The borrowers, the lenders and the community have a responsibility in developing provisions for deferment and for variable payments—to spread the risk from factors and forces beyond individual control. The evidence available from the bankruptcy, foreclosure and assignment experiences of the 1930's points strongly to the conclusion that much of the distress could have been prevented if there had been greater flexibility in the operation of the land credit system. Neither borrowers nor lenders benefited from those foreclosures which resulted, not from errors in management, but from general depression.

LAND PRICES AND FARM IMPROVEMENTS

With few exceptions, active farmers who bought land since 1940 have made farm improvements. Three-fourths of all buyers who were interviewed reported expenditures of one kind or another for permanent improvements. In eight cases no specific estimate was given, because no record had been kept of the expenditures. In 16 cases the expenditures amounted to $10 per acre or less. In 14 cases expenditures amounted to between $11 and $25 per acre. In four they were $26 to $50 per acre, and the three others were more than $50 per acre. The cases of over $50 per acre involved new residences.

The relationship between improvements made and the prices per acre is difficult to analyze because of the diversity of purposes for which improvement funds were expended, and also because of the difficulty of distinguishing between improvement costs as such and repair and upkeep. Also, the improvements on some of the farms have been made over a period of years and costs have increased significantly. The point of emphasis here is the amount of cost attached to improvements after the deal has been made. Purchase price itself is not a significant figure if immediate improvements are needed to operate the farm. The additional outlays are as much a part of the cost of land as if all were paid in one amount.

THE RENTAL MARKET AND THE TITLE MARKET

All tenants who bought a farm did so with one or more reasons involving specific dissatisfaction with the leasing arrangement.[18]

[18]No questions were asked in the interviews about the rental market as such, but a number of observations can be made about the relationships between the title market and the rental market. These observations are drawn from the comments of tenants in answer to questions about why they bought, why they bought when they bought, would it have been possible to continue to rent, and why buy instead of rent. The replies do not represent the opinions of all tenants in the county. The tenants who did not buy, and especially those who own some land, might have other ideas.

Whether or not the beliefs of tenants are justified, and whether their grounds for complaint are real or imagined is beside the point, so long as they are dissatisfied with certain specific aspects of tenant-landlord relationships. Among the causes of dissatisfaction are: uncertainty as to continuity of the lease; lack of means of settling disputes, short of going to court; refusal of the landlord to make what are believed to be necessary improvements; interference of the landlord in management decisions; uncertainty as to future ownership of the land.

The most common immediate reason for purchases by tenants was the fact that the farm they were on had been put up for sale, but there were several instances in which tenants bought because of uncertainty as to renewal of the lease. It is not the purpose here to suggest the answers for settlement of landlord-tenant problems, but observations of tenants who have bought farms point to some necessary areas of improvement.

If more landlords become interested in attracting and holding good tenants, here are some of the things that need to be done, from the viewpoints of the tenants who bought:

1. Make more specific arrangements about conditions of renewing leases.
2. Make necessary improvements, which add to the income producing power of the farm and contribute to the enjoyment of life for the tenant, or provide for the making of such improvements by the tenant.
3. Develop new and easier means of deciding how to share expenses which result from technological advancements.

MORE CAREFUL APPRAISAL

Although most buyers made an examination of the farm purchased, there is room for further improvement in the methods used. The person moving from outside the immediate community, whether from another county or another state, could well give more attention to physical characteristics of the farm under consideration. Allowance can then be made for conditions which affect productivity as well as for the immediate cost of land improvements. Even the local buyer might benefit by distinguishing more carefully between characteristics of the land and by giving more attention to factors affecting physical productivity.

In translating these physical characteristics into economic productivity there is need for more careful calculation of costs and returns. Land appraisal is both a physical and an economic estimation. If the physical base is poorly observed, then the best possible estimates of future prices and costs might produce surprising results in terms of debt paying or family supporting ability. Likewise, poorly selected schedules of costs and returns can ruin an accurate physical appraisal.