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The Minnesota Rural Real Estate Market in 1982

Matthew G. Smith

Philip M. Raup

**Department of Agricultural
and Applied Economics**

**Institute of Agriculture,
Forestry, and Home Economics**

**University of Minnesota
St. Paul, Minnesota 55108**

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Including Special Studies of:
The Use of Contracts for Deed
The Red River Valley
The Twin Cities Metropolitan Area
Values of Farms of Different
Quality, 1963-1982

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SUMMARY

The Minnesota Rural Real Estate Market in 1982

The value of Minnesota farmland dropped sharply in 1982, the first decline in rural land values since 1960 and the largest drop in percentage terms since the early 1920's. The weakness in the market was pervasive across virtually all of the state's important agricultural areas, with both estimated values and reported sales prices down consistently by 8 to 12 percent from 1981 levels. The July 1982 statewide average estimated value of farmland was \$1179 per acre, down 10 percent from the July 1981 figure. The East Central and Southeast districts suffered the greatest declines in estimated values in percentage terms, falling by 14 and 12 percent, respectively. The three western cash-grain districts experienced declines in value of 8 to 10 percent. The Southwest district continues to have the state's most valuable farmland, averaging \$1875 per acre in 1982, after having exceeded the \$2000 level for the first time in 1981.

Prices received in actual sales of farmland reveal a decline of similar proportions. When adjusted to account for shifts in the geographic distribution of sales reported in 1982 versus 1981, the average price paid for Minnesota farmland fell 8 percent in 1982, to a statewide average of \$1360 per acre. This statewide average price per acre is higher than the average estimated value due to the relative concentration of farmland sales in higher-valued areas of Minnesota as well as a greater frequency of transfers of smaller tracts of land, which can be expected to increase prices per acre above those that would be paid for entire farm units.

At the district level reported sales prices generally followed the pattern set by the estimated values, with only two significant departures. In the East Central district, which had the largest percentage drop in estimated values in 1982, the average adjusted sales price per acre actually increased. This development appears to be identified with the continuing increase in the value of rural property in the southeastern part of the district, adjacent to the Twin Cities. The Northwestern district, on the other hand, experienced a decline in reported sales prices of 14 percent. This is in large part the result of the sharp drop in prices paid in the lower-valued area east of the Red River Valley.

The Minnesota rural real estate market was extremely thin in 1982. Although data on the rate of farmland transfers are no longer provided by the U.S. Department of Agriculture, sales reported by survey respondents in 1982 amounted to less than half the number reported in 1973. The main actors in the land market continue to be farm expansion buyers, who purchased 75 percent of all tracts sold statewide and as many as 94 percent of the tracts in south central Minnesota. Retirement was mentioned most frequently as the reason for selling farmland, figuring in nearly one-third of the transfers reported. Reducing the size of the operation was cited as the reason for 23 percent of the sales statewide. While this possible response was included on the survey questionnaire for the first time in 1982 and thus cannot be compared with the levels of earlier years, it does suggest that debt reduction was a significant motive for putting land on the market in 1982.

The market was also very local in nature in 1982. Statewide, 75 percent of buyers lived within 10 miles of the tract purchased, and this proportion climbed as high as 86 percent in the Southwest district where farm expansion buyers predominate. In the Northeast and East Central districts, where recreational and residential uses are more important and where sole-tract operator buyers are more numerous, the proportion of nearby purchasers is lower. Overall, however, only three percent of buyers resided more than 300 miles away from the property they purchased.

The contract for deed remains the most popular means of financing Minnesota farmland transfers, occurring in 60 percent of reported sales in 1982. Mortgages were used to finance only 19 percent of sales, the lowest share ever recorded by this survey. This is likely the result of the high mortgage interest rates that prevailed during 1982, as buyers sought the more attractive terms of finance that are often available under a contract for deed. Data collected from land contracts recorded in southern and northwestern Minnesota counties confirms that the terms offered were indeed more favorable on average than those available from institutional credit sources in 1982. During the first six months of 1982, the average effective interest rate on new Federal Land Bank mortgages in Minnesota (including loan fees and stock purchase requirements), ranged from 14.55 to 15.13 percent. A sample of contracts for deed from the same period carried an average interest rate (weighted on a per-acre basis) of 10.21 percent. All other things being equal, lower interest rates on contracts for deed would be expected to result in higher prices for property transferred under this arrangement than under conventional mortgages, and survey data do appear to lend support to this notion. In five of the state's six districts, prices paid for land on contracts for deed averaged higher than prices paid for mortgage-financed property. Only in the Northwest district did contract for deed prices average less than those under mortgages, due in part to the above-average incidence of mortgage financing in the higher-valued Red River Valley.

It should be noted that the 1982 Minnesota Rural Real Estate Market Survey was conducted during July and August 1982. Since survey respondents were asked to report on sales occurring between January 1 and July 1, 1982, this report reflects the condition of the market in the first half of 1982. Developments over the second half of 1982 and the first half of 1983 will be reflected in data collected in the summer of 1983.

PROCEDURE

Data for this study were collected during July and August, 1982 through questionnaires mailed to over 1400 real estate brokers, agricultural loan specialists, county officials and others well informed on farmland values in their part of Minnesota. Two types of information are collected: reporters' estimates of farmland values and data on actual sales of which the reporters have knowledge.

In the estimated values section of the questionnaire, respondents were asked to estimate the average value of farmland in their area, including separate estimates of the per acre value of high, medium and low quality land. Percentage changes in estimated land values were then calculated in the following manner: (1) estimates were weighted by the acres of farmland in their county, as reported by the most recent U.S. Census of Agriculture; (2) these values were added county by county for each district; and (3) this total for all counties in a district was divided by the total acres of farmland in the district. The resulting weighted average was then compared with a similar weighted average estimate of value for 1981 in order to arrive at the percentage change in estimated land values for the district. A similar procedure is used to arrive at the overall statewide rate of change. In making comparisons between 1982 and 1981, only estimates of respondents who replied in both years were used. Using this quite restrictive procedure, 405 estimates were usable.

There are distinct advantages in measuring land value changes by the estimate method rather than by reported sales. Sales prices are influenced by a variety of factors that vary markedly from sale to sale and from year to year, such as the quality of land and buildings or the particular drainage or location attributes of a given tract. Estimates of value are less influenced by the variability of individual sales, and this attribute is enhanced by the requirement that respondents report for at least two consecutive years before their contributions are used in constructing estimates of value.

The actual sales section of the questionnaire seeks data on the location, sale price, tract size, characteristics of buyer and seller, quality of land and buildings and method of financing of farmland sold during the first six months of the year. Reporters were instructed to exclude transfers between close relatives. Reports were obtained on 969 sales in 1982.

Respondents are asked to distinguish these types of buyers of agricultural land:

- (1) Sole-tract operating farmers: Those buying complete farm units for operation as individual farms which they intend to run themselves.
- (2) Expansion buyers: Those who already own some farmland either as farmers or landlords and are adding to their existing holdings.
- (3) Agricultural investor buyers: Those who buy farmland to be rented out or managed for farming purposes.

Improved land refers to land with buildings. Reports on the quality of land and buildings reflect the judgment of individual respondents relative to the standards in their local area.

The analysis presented in this publication is possible only because of the prompt and conscientious replies of the reporters, some of whom have provided information annually for several decades.

PART I.

The Minnesota Farmland Market in 1982

A. Land Market Trends

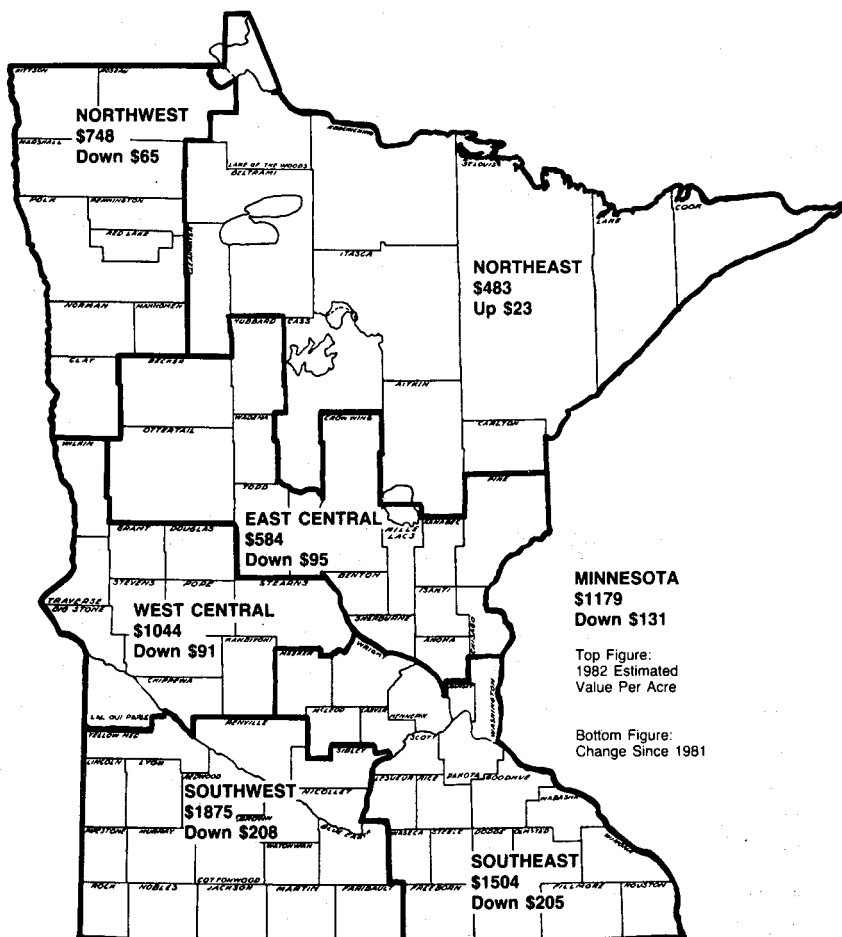
Reporters' Estimates

The estimated statewide average value of Minnesota farmland in July, 1982 was \$1179 per acre (Table 1). This represents a decline of 10 percent, or \$131 per acre, from the average value in 1981, and is the first such decline in estimated value recorded by this survey since 1960, when the statewide average value of farmland dropped one percent to \$155 per acre. Prior to that, estimated values had also declined slightly in 1952. The greatest previous decline in Minnesota farmland values, however, began in the early 1920's and did not bottom out until the mid-1930's. Land values had increased rapidly in the decade leading up to 1921, spurred by the high grain prices that resulted from the strong export demand from war-torn Europe. As grain prices slid from their post-war high land values fell with them during the 1920's and then slid further in the 1930's as the country endured the Great Depression. From a high of \$104 per acre in 1920-21, the value of Minnesota farmland fell to \$40 per acre by 1934-35, and did not exceed the 1921 level again until 1952. The Southeast and East Central districts recovered even more slowly, not regaining the earlier levels until 1955.

The 1982 decline in land values was spread consistently among the cash grain districts of western Minnesota, where estimated values declined by 8 to 10 percent from 1981 (Table 2). In eastern Minnesota, where livestock agriculture is more important and where the influence of urban and recreational uses is more strongly felt, the estimates showed more variability. The East Central district reported the greatest decline in estimated value, a loss of 14 percent, and the Southeast had the next largest drop in 1982, 12 percent. This marks the third consecutive year that Southeastern and East Central Minnesota have lagged behind the rest of the state in terms of relative change in estimated farmland values. In 1979 and 1980 these two districts showed the smallest percentage increase in value of the six districts, and in 1982 they experienced the greatest relative decline. The Northeast district, on the other hand, reported an increase of 5 percent in estimated land values. In recent years, reports from this largely non-agricultural district have quite consistently coupled increases in estimated values with declines in reported sales prices.

In dollar terms, the Southwest district again led the state in average value of farmland, at \$1875 per acre (Table 1). In 1981 the Southwest had averaged \$2005 per acre, the first time in the history of this survey that any district's average value per acre had exceeded \$2000. The next-highest valued district was the Southeast, averaging \$1504 per acre in 1982. These two districts have maintained their relative positions for the past 50 years, but over time the ratio of their land values has varied considerably. Beginning in 1930-31, when the two districts were tied at \$88 per acre, land values in the Southeast slipped relative to those in the Southwest until the mid-1950's. The low point came in 1957, when values in the Southeast equalled only 72 percent of those in the Southwest district. Then land values began to catch up again in the Southeast, due at least in part to the urbanizing influences then being felt in the northeastern part of the district. By 1972, land

Figure 1: Estimated Land Values Per Acre
(Excluding Hennepin and Ramsey Counties)*



*Based on reported estimates of average value per acre of farmland for the first six months of 1982.

Table 1: Estimated Average Value Per Acre of Farmland,
by District, Minnesota, 1972-82.

Years	South- east	South- west	West Central	East Central	North- west	North- east	Minn.
dollars per acre							
1972	370	379	208	163	117	76	248
1973	433	459	247	194	146	115	298
1974	576	675	378	279	199	144	423
1975	674	844	503	296	295	163	525
1976	856	1106	624	349	378	210	667
1977	1027	1316	730	415	427	279	794
1978	1191	1421	803	498	483	304	889
1979	1453	1620	883	573	599	368	1040
1980	1526	1750	962	596	683	390	1120
1981	1709	2083	1135	679	813	460	1310
1982	1504	1875	1044	584	748	483	1179

Table 2: Annual Percentage Changes in Estimated Farmland
Value Per Acre, By Districts, Minnesota, 1972-82.

Years July to July	South east	South west	West Central	East Central	North west	North east	Minn.
1972-73	17	21	19	19	25	51	20
1973-74	33	47	53	44	36	25	42
1974-75	17	25	33	6	48	13	24
1975-76	27	31	24	18	28	29	27
1976-77	20	19	17	19	13	33	19
1977-78	16	8	10	20	13	9	12
1978-79	22	14	10	15	24	21	17
1979-80	5	8	9	4	14	6	8
1980-81	12	19	18	14	19	18	17
1981-82	-12	-10	- 8	-14	- 8	5	-10

values in Southeastern Minnesota had reached 98 percent of the level in the Southwest. This trend was interrupted by the explosion in state farmland values that commenced in 1973 on the heels of the large Soviet grain purchases and the heating up of inflation. By 1976 the ratio of relative land values had fallen back to 77 percent, as the Southwest's greater suitability for large-scale cash grain farming caused land values there to increase more rapidly. Since then, the pattern has become less clear, with values in the Southeast increasing faster from 1976 to 1979, and the Southwest growing faster until 1981.

Over the years, the Southeast and Southwest districts provide a good illustration of the two competing factors that influence the state's rural land market as a whole: one is the agricultural value of the land, resting on physical characteristics such as soil type and drainage, economic factors such as crop and livestock prices and interest rates, and on technological developments such as the introduction of large machinery, which makes large, level fields relatively more valuable. The other element influencing the market is the value of land in alternative uses for residential or commercial sites or for recreation. These values are influenced more strongly by population, personal income, and tastes, and often result in a premium on characteristics that an agricultural user might discount, for example, rolling wooded hillsides.

Actual Sales

Based on reports of 969 sales between January and July, the average price of Minnesota farmland sold in 1982 was \$1360 per acre (Table 3). This decline of only 1 percent from 1981 reported sales prices is due to a proportionate shift in land market activity back toward higher valued land areas, which occurred in four of the state's six districts, and a shift statewide to proportionately more activity in the higher-valued areas of southern and western Minnesota.

In order to compensate for the effects of this shift in land market activity, adjusted average sales prices for Minnesota and each of the six districts were computed by weighting the 1982 reported prices by the 1981 acreage distribution of sales. This eliminates the effects of shifts in market activity from one year to the next, and results in a 1982 state-wide average adjusted price of \$1263 per acre, a decrease of 8 percent from 1981 (Table 4).

Adjusted sales prices followed the trend of estimated values quite closely in the three western districts, where agricultural use is the primary determinant of rural land values. Of the three, the Northwest suffered the greatest percentage loss in price, down 14 percent from 1981. This is a reversal from the three previous years, in which the Northwest posted the greatest rate of increase in sales prices of the three cash grain producing districts. Of the three eastern districts, the greatest decline in prices came in the Northeast, a drop of 18 percent. Prices in the Southeast were off 8 percent from the 1981 level, as the land market there closely followed the trend in the western districts. This marks a departure from the recent pattern, when the Southeast lagged behind while land values were increasing. The East Central district actually showed a 4 percent increase in adjusted sales prices, a phenomenon that is discussed in more detail in Part IV of this report.

Table 3: Average Reported Sales Price Per Acre of Farmland,
By District, Minnesota, 1972-82 (Unadjusted).

Years	South east	South west	West Central	East Central	North west	North east	Minn.
1972	389	366	222	145	107	76	293
1973	444	410	223	178	120	122	298
1974	598	630	340	243	204	144	450
1975	792	844	493	299	353	159	607
1976	937	1116	664	321	377	210	735
1977	1216	1340	709	446	432	198	859
1978	1352	1321	908	554	504	256	980
1979	1675	1680	949	618	612	411	1140
1980	1837	1868	1095	603	759	394	1318
1981	1965	2005	1171	680	919	483	1367
1982	1749	2022	1168	746	887	406	1360
% Change 1981-1982	- 11	1	0	10	- 3	- 16	- 1

When the 7.2 percent increase in the Consumer Price Index (CPI) between the first six months of 1981 and the same period in 1982 is considered, it is apparent that the combined effect of lower sales prices and inflation has resulted in a decline in the real value of Minnesota farmland of approximately 15 percent. This follows on the heels of the two previous years, in which adjusted sales prices failed to keep pace with the increase in the CPI in 1980 and only approximately equalled it in 1981. It thus appears that, from the perspective of 1982, the boom in Minnesota farmland values that characterized the mid-1970's had essentially played itself out by 1980. Since 1979, the average adjusted price of state farmland sold has increased approximately 11 percent, statewide. Over the same period, the CPI has increased by 35 percent, and a more conservative measure of inflation, the GNP Implicit Price Deflator, has increased 26 percent. By whichever yardstick one chooses, it is evident that, in real terms, Minnesota farmland never brought as high a price as it did in 1979.

The surge in state land values during the 1970's was based in large part on three factors. The first of these was the jump in export demand in 1973-74 and the resulting rapid increase in farm commodity prices. Expectations of future increases in demand for U.S. farm products and thus in the prices offered for them were raised further by widely publicized world food "crises", which served to buoy land values even as grain prices receded from the heights of 1973 and 1974. The second important factor was the availability of credit at very

low or even negative real rates of interest (the real interest rate is the nominal interest rate minus the inflation rate, and thus reflects the real cost of money to the borrower). Cheap credit and the prospect of future increases in land values made investment in farmland an attractive option for both farmers and outside investors, and added to the market's momentum. The third factor propelling land values was inflation itself, both in the general price level, which served to draw investors looking for a safe haven for their funds into the land market, and an inflation in land values that, once established, seemed to validate earlier expectations and thus created still more.

That the bull market should have ended under the weight of developments in the 1980's is not surprising. Inflation slowed, interest rates rose, farm commodity prices declined, and the threat of imminent food

Table 4: Annual Percentage Changes in Adjusted Sales Price Per Acre, By District, Minnesota, and CPI and GNP Implicit Price Deflator, 1974-1982.

District	1974 -75	1975 -76	1976 -77	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82
Percentage Change in Adjusted Sales Price								
Southeast	30	23	23	13	13	6	6	- 8
Southwest	34	33	20	2	22	12	15	- 8
West Central	43	32	8	18	4	9	13	- 9
East Central	24	6	32	37	16	0	19	4
Northwest	61	10	10	12	44	18	18	-14
Northeast	10	21	8	-24	47	-27	- 4	-18
Minnesota	35	26	18	10	17	9	11	- 8
CPI ¹	10.4	6.2	6.4	6.8	10.3	14.3	10.5	7.2
GNP Implicit ^{1,2}								
Price Deflator	10.9	5.6	5.5	6.7	8.8	9.1	8.6	6.4

¹ The changes in price indexes were calculated by comparing the average prices for the first 6 months of the year with the average prices for the first 6 months of the previous year.

² Economists often contend that the gross national product (GNP) implicit price deflator is a better indicator of price changes than the consumer price index (CPI). The CPI measures prices for a specified collection of goods and services which are typically purchased by urban consumers. The GNP implicit price deflator indicates the price changes of all goods and services measured by the GNP. The widening gap between the two measures in recent years is due largely to the influence of mortgage costs on the CPI.

disaster faded from the front pages. The slowdown did not appear concurrently in all parts of the state, however. The market remained strong through 1981 in the Northwest, largely on the strength of farm expansion buying in the lower-valued area east of the Red River Valley, and in South Central Minnesota, where expansion buyers bid up the value of relatively small tracts of land.

In 1967 the State of Minnesota designated 13 economic development regions. These regions, each consisting of from 4 to 11 counties, were designed in order to aid in the coordination of government planning and administrative activities and are shown in Figure 2. Sales data from these regions allow a more detailed look at the state farmland market in 1982.

Table 5 shows average reported sales prices by region from 1973 through 1982. Prior to 1975 the seven counties of the Twin Cities metropolitan area, which make up Region 11, contained the highest-priced farmland in Minnesota. Since that time, however, Region 9 in south central Minnesota has consistently averaged the highest in sales prices, and in recent years has been the only region to average over \$2000 per acre. The 1982 average price in Region 9 was \$2484, a decline of 13 percent from 1981 (Table 6).

Table 5: Average Reported Sales Price Per Acre of Farmland,
by Economic Development Regions, Minnesota, 1973-1982.

Economic Development Region	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Dollars Per Acre										
1	114	199	344	330	367	433	560	732	888	806
2	108	141	206	250	277	321	520	452	645	459
3	126	148	157	162	179	280	310	271	386	325
4	192	317	446	542	558	853	828	868	973	987
5	164	197	259	235	297	478	483	506	695	556
6W	233	341	537	696	746	906	960	1051	1303	1259
6E	374	569	691	923	1027	1171	1528	1735	1949	1876
7W	291	430	472	596	778	927	1112	1056	1300	1240
7E	203	254	316	455	473	575	768	741	790	873
8	354	534	710	906	1058	1199	1574	1674	1646	1701
9	534	829	1115	1464	1835	1682	2111	2320	2865	2484
10	411	565	753	915	1197	1373	1645	1864	1941	1713
11	698	882	1035	1150	1437	1396	1799	1778	1830	1711
Minnesota	298	450	607	735	859	980	1140	1318	1367	1360

In percentage terms, the greatest drop in reported prices came in the three northeastern regions (2, 3 and 5) that have traditionally contained the state's lowest-valued farmland. These three regions had enjoyed the largest annual percentage increases in prices in the state in 1981 (all up by 37 percent or more), and the 1982 sales data reflect an approximate return to the price level of 1980. Since 1975 Region 3 in the extreme northeastern tip of Minnesota has reported the state's lowest average price of farmland, with a 1982 level of \$325 per acre. The market in this part of the state is heavily influenced by residential and recreational demands for rural land.

Among the predominantly cash grain agricultural regions, the greatest percentage decline in prices came in the highest-priced Region 9, one which had also experienced a 24 percent increase in 1981. Land prices in Region 1, which contains the Red River Valley and had experienced strong increases in 1981, fell by 9 percent in 1982, to an average of \$806 per acre. Region 6W in West Central Minnesota, which had increased by 24 percent in 1981 after two previous years of small increases,

Table 6: Annual Percentage Changes in Sales Price Per Acre,
By Economic Development Regions, Minnesota, and the
CPI and GNP Implicit Price Deflator, 1973-82.

	% CHANGE IN SALES PRICE								
Economic Development Region	1973 -74	1974 -75	1975 -76	1976 -77	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82
1	75	73	- 4	11	18	29	31	21	- 9
2	31	46	21	11	16	62	-13	43	-29
3	17	6	3	10	56	11	-13	42	-16
4	65	41	22	3	53	- 3	5	12	1
5	20	31	- 9	26	61	1	5	37	-20
6W	46	57	30	7	21	6	9	24	- 3
6E	52	21	34	11	14	30	14	12	- 4
7W	48	10	26	31	19	20	- 5	23	- 5
7E	25	24	44	4	22	34	- 4	7	11
8	51	33	28	17	13	31	6	- 2	3
9	55	35	31	25	- 8	26	10	24	-13
10	37	33	22	31	15	20	13	4	-12
11	26	17	11	25	- 3	29	- 1	3	- 7
Minnesota	51	35	21	17	14	16	16	4	- 1
CPI	10.2	10.4	6.2	6.4	6.8	10.3	14.3	10.5	7.2
GNP Implicit Price Deflator	9.4	10.9	5.6	5.5	6.7	8.8	9.1	8.6	6.4

dropped to \$1259 per acre in 1982, a decline of 3 percent. In the other three western regions (4, 6E and 8), which had posted more modest increases or even declines in 1981, prices changed less dramatically in 1982. Regions 4 and 8 actually reported slight increases in average prices paid for land. These results appear to confirm the belief that the most drastic declines in land values in 1982 tended to occur in those parts of the state that had enjoyed the greatest increases in 1981.

In southeastern Minnesota, where livestock agriculture is more important and where nonfarm influences on the land market are more significant, the pattern was mixed. Regions 10 and 11, two relatively high-priced areas that had seen their rate of increase in sales prices lag behind that of the rest of Minnesota in 1980 and 1981, were down by 12 and 7 percent, respectively, in 1982. Region 7E, on the other hand, showed the largest increase in prices in the state, up 11 percent from the 1981 level, to an average of \$873 per acre. The farmland market in this area, which lies directly north of the Twin Cities, is analyzed in more detail in Part IV of this report.

Activity in the Land Market

On the basis of sales reported by survey respondents, the 1982 Minnesota farm real estate market was the thinnest in many years. A statewide total of only 969 sales were reported in 1982, less than half the number reported in 1973. And due to the gradually declining average size of land parcels sold over the years (a phenomenon related to the rising share of purchases by farm expansion buyers), the number of acres reported transferred in 1982 amounted to less than 40 percent of the total reported in 1973. The impression that sales activity was reduced in 1982 was shared by survey participants: a majority in each district estimated that the number of farm sales in 1982 was lower than the year before. Reported sales, acres transferred, and average tract sizes by district are summarized in Table 7.

The number of reported sales declined in five of the state's six districts in 1982. The only exception was the Northeast, which registered a slight increase. The average size of the tracts transferred also declined, to a statewide average of 154 acres per sale. At the district level average tract sizes ranged from just over 125 acres in the Southeast and Southwest, where land prices are high and farm expansion buyers predominate, to 282 acres in the Northeast, where a greater proportion of sole-tract operator buyers and much lower per-acre land prices combine to increase the size of parcels sold.

In past years the U.S. Department of Agriculture has provided data on the overall rate of farm title transfers in Minnesota. The level reported in 1981 had slipped to 26.5 per 1000 farms, and the rate of voluntary sales (as opposed to forced sales, inheritances, gifts and other transfers) had reached an all-time low of 15.9 per thousand. The overall rate of farm transfers reported in 1981 was less than half that of 1973 and 1974. Due to a recent decision by the Department to discontinue the collection of data on farm title transfers, information from this source about the 1982 farm transfer rate is not available.

The rate of participation by brokers and dealers in Minnesota farm real estate transactions, as estimated by survey respondents, has increased each year since 1979 (Table 8). This is undoubtedly a reflection of the thinning out of the market in recent years, as sellers

Table 7: Number of Reported Sales, Acreage of Land Sold and Average Acres Per Sale, by District, Minnesota, January-July 1, 1980-1982.

District	No. of Sales*			Acres Sold			Acres/Sale		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
Southeast	333	336	275	46894	47236	34978	141	141	127
Southwest	300	337	287	43867	44975	36283	146	133	126
West Central	165	232	165	29789	45439	25718	181	196	156
East Central	176	207	111	27089	27463	19662	154	133	177
Northwest	116	131	92	31929	36679	21527	275	280	234
Northeast	37	35	39	4908	12456	10994	133	356	282
Minnesota	1127	1278	969	184476	214247	149162	164	168	154

* These sales should not be interpreted as a record of total farm land transactions for the years indicated. The majority of farm land sales occur in the first half of the calendar year, which explains the choice of the Jan. 1-July 1 reporting period. Some sales do occur in the latter half of the year, but they are not included in the data reported above.

turned more frequently to brokers to help them find buyers for their property.

Although the statewide rate of broker participation climbed to 58 percent in 1982, there is distinct variation in this rate at the district level. The Northwest district, dominated by farm expansion buyers, has long had the lowest rate of broker participation in the state (45 percent in 1982). Since add-on buyers typically purchase close-by property with which they are already familiar, they have less need for the services that a broker can provide. Consequently, the three western districts, in which expansion buyers predominate, have rates of broker participation below those of the three eastern districts. The rate of broker participation is higher in areas that experience more demand from sole-tract farm buyers and those seeking land for recreational and residential uses, classes of purchasers who tend to come greater distances to buy land. In 1982 the East Central and Northeast districts reported the highest rates of broker participation, at 65 and 64 percent, respectively.

Table 8: Estimated Proportion of Farm Land Sales in which
Brokers or Dealers Participate, Minnesota, by
District, 1972-1982.

District	<u>Sales with Brokers' Services</u>										
	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Southeast	59	58	61	58	58	57	60	55	57	60	61
Southwest	52	51	54	47	48	48	48	44	48	51	55
W. Central	56	54	53	52	50	50	51	52	50	56	59
E. Central	54	58	55	60	56	59	60	59	60	63	65
Northwest	40	40	40	34	37	42	43	40	41	44	45
Northeast	50	46	58	54	57	57	61	55	56	58	64
Minnesota	52	51	54	51	51	52	54	51	52	55	58

B. Analysis of Reported Sales

Reason for Sale

Retirement is the single most frequent reason for the sale of farmland, accounting for 32 percent of all sales in 1982 (Table 9). The second most frequent reason given was to "reduce the size of the operation," figuring in 23 percent of the sales statewide. Since this reason for sale was included as a possible response on the survey questionnaire for the first time in 1982, no comparison with the levels of earlier years is possible. It is interesting to note, however, that the proportion of farm reduction sales was highest in the Southeast and Southwest districts, areas that are characterized by the state's highest land values and by a very high proportion of sales to expansion buyers. The rate of farm reduction sales was lowest in the East Central and Northeast districts, areas with the state's lowest land values and a much lower frequency of sales to expansion buyers. Those selling land in order to leave farming completely, on the other hand, made up 21 percent of the sellers in the Northeast and only 8 percent in the Southwest. Yet in both of these districts the sum of the two reasons for sale (reduce size of operations or leaving farming) are virtually equal (34 and 33 percent).

These figures suggest that two very distinct phenomena may be occurring in the state's regional farmland markets. In the northeastern part of the state, where the agricultural value of land is more marginal and where sales to expansion buyers are uncommon, there is little opportunity for farm operators in financial difficulty to sell off a part of their holdings to a nearby neighbor, so they frequently choose to leave farming entirely. In the Southwest, where farmland is very productive and a ready market exists for smaller tracts of land, a farmer is much more easily able to reduce his debt burden by selling a parcel of land (perhaps purchased at the high prices of the late seventies) to a neighboring farmer.

Table 9: Reason For Selling Land, By District,
Minnesota, 1982.

Reason for Sales	South East	South West	West Central	East Central	North West	North East	Minn.
----- percent -----							
Death	16	25	8	14	18	13	17
Retirement	34	28	34	38	24	36	32
Left Farming	11	8	8	15	13	21	11
Moved, Still Farming	2	3	4	5	3	5	3
Divorce	2	1	5	4	1	0	2
Reduce Size of Operation	27	25	23	15	19	13	23
Other	7	10	17	10	21	13	11

The data on exit from farming in the East Central (15 percent) and Northeast (21 percent) districts also suggest that one result of the farmland price inflation of the seventies has been to channel the bulk of sole-tract operator buyers into marginal areas where the long-term viability of a new farm operation is more open to question.

Improved vs. Unimproved Land

The statewide average price of land with buildings (termed improved land) in 1982 was \$1306 per acre (Table 10). Unimproved land (without buildings) averaged \$1428 per acre. This premium for bare land reflects the dominance of farm expansion buyers, who typically already own structures sufficient to service an expanded acreage and thus have no need for additional buildings. In fact, for many such buyers, buildings constitute an obstacle that must be razed or plowed around. Accordingly, only 48 percent of the transfers reported by survey respondents in 1982 included any buildings. This is the lowest proportion of improved land sales ever recorded since data on this subject were first collected in 1953, and the first time that the share of improved land sales has slipped below the 50 percent mark.

Although statewide average prices are heavily influenced by the distribution of improved and unimproved land sales between high and low-valued regions of the state, data at the district level confirm the influence of expansion buyers on the value of farm buildings. In the Northwest and West Central districts, where add-on buyers are predominant, unimproved land sold for more than improved land in 1982. In the Northeast and East Central districts, on the other hand, where sole-tract operator buyers still exert significant influence on property values, the proportion of improved land sales is much greater and prices paid for farms with buildings averaged higher than those paid for bare land.

Table 10: Proportion of Sales and Average Sales Price
Per Acre of Improved and Unimproved Farmland,
By District, Minnesota, 1981 and 1982.

District	Improved Land				Unimproved Land				Price of Unimproved Land as a Percentage of Price of Improved Land	
	1981		1982		1981		1982		1981	1982
	%	\$	%	\$	%	\$	%	\$		
Southeast	57	1954	50	1786	43	1959	50	1693	100	95
Southwest	44	2082	38	2061	56	1929	62	1989	93	97
West Central	52	1164	41	1133	48	1182	59	1199	102	106
East Central	69	711	75	782	31	568	25	635	73	90
Northwest	36	964	34	870	64	865	66	901	90	104
Northeast	66	501	90	418	34	368	10	299	73	72
Minnesota	53	1337	48	1306	47	1417	52	1428	106	109

Type of Buyer

One of the most significant trends recorded by this survey over the past three decades has been the dramatic transformation in the type of buyer predominating in the Minnesota farmland market. In the mid-1950's, sole-tract operators, those purchasing intact farms to be their only farm acreage, accounted for approximately 60 percent of all purchases of farmland in the state (Figure 3). Expansion buyers, those farmers or investors who buy land to add to an existing farm, figured in only 25 percent of all transfers. Over the years the relative market shares of these two types of buyers have gradually been reversed, and in 1982 farm expansion buyers purchased 75 percent of the tracts transferred in Minnesota. This is the highest proportion of sales to expansion buyers ever recorded by this survey. Sole-tract operators, on the other hand, were involved in only 16 percent of purchases, a new all-time low. Investor buyers, those purchasing farmland to be rented out or otherwise managed for agricultural purposes but not to enlarge an existing farm, accounted for the remaining 9 percent of purchases. Investors' share of the market has remained relatively constant over the past 30 years, although the rate of investor buying has declined since 1980 as the boom in land values subsided.

The proportion of sales to expansion buyers increased in five of the state's six districts in 1982 (Table 11). In the three cash-grain districts, the Southwest, West Central and Northwest, the percentage of sales to expansion buyers was over 80 percent, and in the most highly valued counties of South Central Minnesota it was 94 percent. In the East Central and Northeast districts, by contrast, the percentage of sales to expansion buyers is much less, and it is in these two districts that operator buyers have their greatest share of the market. In 1982 they made 62 percent of the purchases in the Northeast and 41 percent in the East Central district.

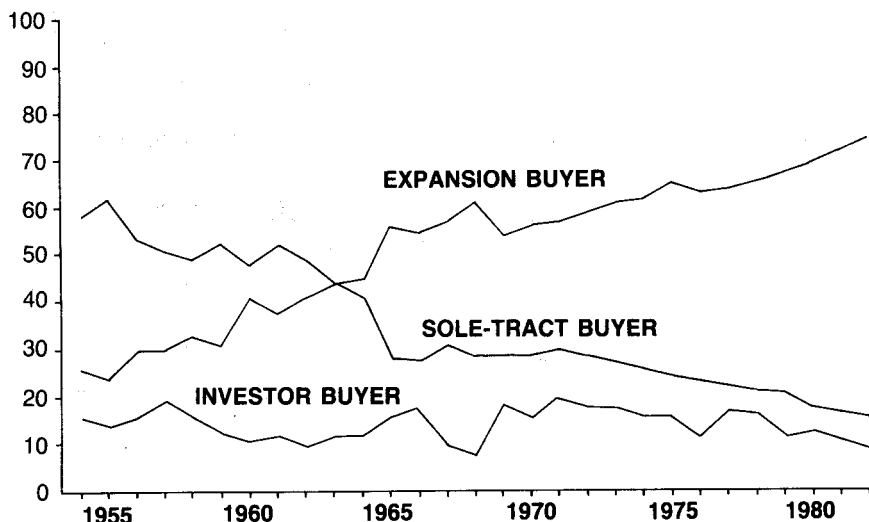
Expansion buyers paid the highest prices in the Southwest, East Central and Northeast districts, while operator buyers paid the most

Table 11: Proportion of Tracts Purchased and Average Sales Price Per Acre by Type of Buyer, By District, Minnesota, 1981 and 1982.

District	Sole-Tract Operator				Expansion Buyer				Investor Buyer (AG)			
	1981		1982		1981		1982		1981		1982	
	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$
Southeast	18	1748	13	1868	70	2051	74	1739	12	1751	13	1628
Southwest	7	1924	5	1716	85	2062	88	2107	8	1547	7	1277
West Central	11	1200	11	1331	80	1199	83	1196	9	1053	6	1055
East Central	42	792	41	770	42	634	48	870	16	864	11	488
Northwest	12	968	13	627	80	922	82	901	7	688	4	973
Northeast	45	421	62	418	33	561	18	429	21	445	21	282
Minnesota	17	1149	16	1059	72	1495	75	1490	11	1135	9	1065

in the Southeast and West Central districts and investors bid the most in the Northwest. Investors have generally paid less than expansion buyers in the three western districts in recent years, and the fact that investors paid the highest prices in the Northwest in 1982 is another illustration of the sharp drop in sales prices there.

Figure 3: Minnesota: Percent of Farmland Sales by Type of Buyer, 1954-1982



Land and Building Quality

Statewide, land judged by survey respondents as "good" quality sold for an average price of \$1656 per acre in 1982, while "poor" land sold for a statewide average price of \$976 per acre (Table 12). As has been the case in previous years, investor buyers bought a greater proportion of "poor" tracts (20 percent of their total purchases) than did either sole-tract operators (10 percent) or expansion buyers (12 percent). Conversely, expansion buyers made the highest percentage of purchases of "good" land (46 percent). It should be noted that estimates of land quality are made in relation to the average quality of farmland in the respondent's home area, and thus land rated "good" in different parts of Minnesota may vary considerably in agricultural productivity. Nevertheless, the data do suggest that investors tend to purchase lower-quality land more frequently than do other classes of buyers, and that expansion purchasers more often seek higher-quality land.

Table 13 relates data concerning types of buyers and the quality of the buildings they purchase. Not surprisingly, in nearly 80 percent of the sales reported, expansion buyers purchased property with either no buildings or structures described as of poor quality by survey respondents. Sole-tract operators, in contrast, directed nearly 70 percent of their purchases to land with buildings of good or average

quality. This is another reflection of the different real estate needs of these two classes of buyers.

Table 12: Proportion of Purchases and Price Paid Per Acre by Type of Buyer for Land of Various Quality, Minnesota 1981 and 1982.

Type of Buyer	Land Quality											
	Good				Average				Poor			
	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982
	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$
Sole-Tract Operator	36	1446	33	1414	53	956	56	916	11	987	10	769
Expansion Buyer	43	1789	46	1740	45	1390	43	1359	12	874	12	1094
Agricultural Investor	27	1727	31	1323	53	1143	49	1049	20	620	20	654
All	40	1716	42	1656	47	1261	45	1224	13	849	12	976

Table 13: Proportion of Purchases and Price Paid Per Acre by Type of Buyer for Land with Various Quality of Buildings, Minnesota, 1982.

Type of Buyer	Building Quality							
	Good		Average		Poor		None	
	%	\$	%	\$	%	\$	%	\$
Sole-tract Operator	34	1185	34	1019	14	720	18	1068
Expansion Buyer	8	1779	13	1327	16	1396	63	1503
Agricultural Investor	15	1202	16	1187	21	909	47	1006
All	13	1435	16	1223	16	1248	54	1424

Methods of Finance

Contracts-for-deed were used in 60 percent of the sales reported in 1982 (Table 14). Over the years there has been a gradual increase in the popularity of this instrument for financing farm real estate sales in Minnesota, and a corresponding decline in the use of mortgages. In 1982 mortgages were used in only 19 percent of reported sales, an all time low since data of this sort have been collected. Cash sales have made up a fairly stable share of transactions over time, and in 1982 actually exceeded mortgages in frequency of reported use. At the district level, while the contract for deed (or land contract) was clearly the preferred instrument in all areas, its level of use fluctuated from district to district. It was most common in the Northeast and East Central districts, and least frequently used in the Northwest district, where a relatively high proportion (28 percent) of sales were reported as cash transactions in 1982. The use of contracts for deed and the complications they pose for an accurate assessment of farm real estate values is discussed in more detail in Part II of this report.

Table 14: Proportion of Farm Sales by Method of Financing,
By District, Minnesota, 1965, 1970, 1975, 1980-82.

Method of Financing	South East	South West	West Central	East Central	North West	North East	Minn.
----- percent -----							
<u>Cash</u>							
1965	17	15	22	21	29	29	19
1970	15	13	14	19	20	31	16
1975	12	16	13	15	18	30	15
1980	14	22	11	16	31	33	18
1981	17	20	17	9	16	10	16
1982	20	24	20	15	28	9	21
<u>Mortgage</u>							
1965	33	39	41	30	27	3	35
1970	19	23	28	28	40	26	25
1975	28	27	24	36	30	25	28
1980	21	24	25	12	19	12	20
1981	20	22	19	28	27	32	23
1982	17	22	17	13	22	23	19
<u>Contract For Deed</u>							
1965	50	45	37	49	44	68	46
1970	66	64	58	53	40	43	59
1975	60	58	63	49	52	45	57
1980	65	54	63	72	50	55	61
1981	63	58	63	63	57	58	61
1982	63	54	62	72	50	69	60

Sales data reveal no clear tendency for any one type of financing to be closely associated with a given quality of land (Table 15). Land rated by survey participants as of good quality figured in approximately equal portions of the cash, mortgage, and land contract sales in 1982.

Table 15: Price Paid Per Acre and Proportion of Sales,
by Method of Financing and Quality of Land,
Minnesota, 1981 and 1982.

Land Quality Class	----- Method of Financing -----							
	Cash		Mortgage		Contract For Deed		All Sales	
	1981	1982	1981	1982	1981	1982	1981	1982
<u>Good</u>								
\$ per Acre	1909	1754	1712	1621	1660	1639	1723	1651
% of Sales	39	42	39	45	38	42	39	42
<u>Average</u>								
\$ per Acre	1524	1141	1181	1354	1189	1212	1241	1217
% of Sales	49	39	45	45	48	47	47	46
<u>Poor</u>								
\$ per Acre	1054	794	804	887	781	1063	813	967
% of Sales	12	19	16	10	14	12	14	13
<u>All Grades</u>								
\$ per Acre	1613	1326	1295	1416	1318	1358	1367	1360
% of Sales	100	100	100	100	100	100	100	100

Table 16 relates average prices paid at the district level to the method of financing used. Prices paid for land bought under contracts for deed averaged the highest in the Southeast, Southwest, West Central, and Northeast districts in 1982, with cash prices averaging the highest in the East Central district and mortgage-financed sales led the way in the Northwest. Average prices paid for mortgaged property in the Northwest increased dramatically in 1982 (19 percent), partially offsetting a steep 29 percent decline in cash prices. The Southeast district also reported a 29 percent drop in cash prices, and the West Central district reported a decline of 19 percent. The East Central and Northeast districts actually showed modest increases in cash prices paid in 1982 - 4 and 3 percent, respectively.

Table 16: Average Sales Price Per Acre of Farm Land By Method of Financing, By District, Minnesota, 1980-1982.

Method of Financing	South-east	South-west	West Central	East Central	North west	North east	Minn.
----- dollars per acre -----							
<u>Cash</u>							
1980	1774	1945	1109	694	877	319	1346
1981	2091	2058	1251	758	1084	397	1613
1982	1490	1992	1014	792	772	407	1326
<u>Mortgage</u>							
1980	1798	2066	914	610	720	443	1470
1981	1900	2021	1115	494	1039	514	1295
1982	1553	1909	1119	772	1240	379	1416
<u>Contract for Deed</u>							
1980	1883	1746	1144	594	717	415	1290
1981	1947	1910	1174	843	851	478	1318
1982	1879	2008	1223	790	834	413	1358

Distance of Buyer from Tract Purchased

The Minnesota rural real estate market has traditionally been extremely local in nature, and 1982 was no exception. Statewide, 75 percent of buyers lived within 10 miles of the tract purchased, and only 11 percent lived more than 50 miles away (Table 17). In the cash grain districts where expansion buyers predominate the proportion of buyers living within 10 miles was even higher - 86 percent in the Southwest, 80 percent in the West Central, and 78 percent in the Northwest. In the Northeast and East Central districts, where recreational and residential uses are more important and where sole-tract farm buyers are more numerous, the proportion of nearby purchasers is much lower (23 and 45 percent, respectively, within 10 miles of the tract). The median distance of the buyer's residence from the tract purchased ranged from three miles in the Northwest and Southeast districts to 10 miles in the East Central and 70 miles in the Northeast district.

Table 17: Classification of Farm Land Sales by Distance of Buyer's Residence from Tract, by District, Minnesota, 1980 1981 and 1982

Distance of Buyer's Residence From Tract Purchased	South East	South West	West Central	East Central	North West	North East	Minn.
-percent-							
<u>Less than 2 Miles</u>							
1980	26	27	22	18	19	21	23
1981	24	27	17	13	15	13	21
1982	23	17	25	17	24	14	21
<u>2-4 Miles</u>							
1980	29	35	26	13	35	3	27
1981	31	37	29	18	27	13	30
1982	40	42	36	11	41	6	35
<u>5-9 Miles</u>							
1980	22	20	22	14	16	0	19
1981	20	18	24	8	26	10	19
1982	16	27	19	17	13	3	19
<u>10-49 Miles</u>							
1980	16	10	21	23	17	55	17
1981	18	12	16	25	17	10	17
1982	15	9	13	25	13	19	14
<u>50-299 Miles</u>							
1980	6	8	8	26	5	7	10
1981	6	4	14	26	8	32	10
1982	5	5	6	21	5	33	8
<u>300 Miles and Over</u>							
1980	1	1	1	5	7	14	3
1981	1	3	1	9	8	23	4
1982	1	0	1	8	6	25	3
<u>Median distance in Miles</u>							
1980	4	3	5	10	3	15	4
1981	4	3	5	15	5	55	4
1982	3	4	4	10	3	70	4

PART II

The Use of Contracts for Deed in Transferring Minnesota Farmland

The contract for deed (or land contract) is the instrument most frequently used to transfer control of agricultural property in Minnesota, appearing in 60 percent of the sales reported by survey respondents in 1982. Under a contract for deed arrangement, a buyer promises to pay the seller an agreed-upon price for the property in installments stretching over a period of time (varying from a few months to many years), and in return the seller promises to give the buyer title to the property (generally a warranty deed) when the contract has been fulfilled. The contract thus represents a loan from the seller to the buyer of the portion of the property's price not covered by the down payment, and contracts generally require the payment of interest in addition to the principal owed.

The flexibility offered by the contract for deed appeals to both buyers and sellers of farm real estate. For sellers, the land contract can make disposal of their property much easier, particularly during periods of tight or expensive credit when potential buyers might find financing from institutional sources difficult to arrange. In addition, periodic payments from a land contract can serve as a stable source of income for a retired farmer. Most importantly, however, sellers facing large potential capital gains tax liabilities can substantially reduce them by selling their property on a contract for deed which spreads the proceeds from the sale over a number of years. This effect is especially important coming after the past period of inflation in farmland values. The recent liberalization of rules affecting the tax treatment of installment sales should make the land contract even more attractive to sellers in the future. In addition, due to the preferential treatment afforded to capital gains as opposed to interest income by U.S. tax laws, sellers face incentives to lower their tax liabilities still further by taking a larger share of the total sale proceeds in the form of capital gains and a smaller share as interest income. This can be accomplished by increasing the sale price specified in the contract and lowering the interest rate charged on the amount outstanding.

Buyers of farmland gain advantages from the contract for deed as well. Because sellers frequently will allow a lower down payment than would an institutional lender such as a life insurance company or the Federal Land Bank (and, in fact, until 1981 a seller could receive tax advantages by keeping the down payment below 30 percent), buyers with limited resources are often able to bid for property that they could not compete for under other circumstances. Payment schedules can often be devised to fit the cash flow of a beginning farm operation as well, and the land contract has traditionally been looked upon as a bridge both to farm ownership and to financing from institutional sources after sufficient equity has been built up in the contract.

The flexibility that the contract for deed offers to buyers and sellers raises some special problems in the evaluation of Minnesota farm real estate values. Because of the potential it holds for reducing the tax liabilities of sellers and making repayment more feasible for buyers, the terms of finance written into each contract should be expected to reflect elements of the personal, financial, and

tax-management needs of each of the parties in accordance with the bargaining power exercised by each. In theory, at least, this means that a tract of land with single "market value" could sell for a variety of combinations of stated price, interest rate, and repayment schedule, according to the characteristics of the parties to the transaction.

This poses difficulties in evaluating the true value of property transferred under a land contract. If one accepts the notion that a dollar received today is worth more than a dollar received one year from now, that is, that a stream of future payments must be discounted at a rate representing the lost opportunity to have funds immediately and invest them, then contracts discounted at a standard rate of interest should yield present (discounted) values that can be compared with one another.

If the discount rate selected is also an alternative rate available to borrowers from institutional sources, then discounted contract prices should be comparable with prices paid for property financed by mortgages as well. This is under the expectation that buyers facing the prospect of lower interest rates available under a contract for deed will tend to capitalize the more attractive financing into their bid for the property and thus increase its price beyond what it would have been otherwise. In this case the price stated in the land contract will include a component reflecting the value of the financing, not the value of the property, and this component can be removed by appropriate discounting. In the case of contracts written with interest rates equal to the discount rate used, the discounted value will equal the stated price in the contract. If the contract interest rate is greater than the discount rate, then the present value of the property is higher than that stated in the contract.

In order to gain insight into the terms of finance currently prevailing in Minnesota land contracts and to test the assumptions about the effect of contract finance terms on prices paid that were described above, contracts for deed from seven Minnesota counties were examined. The contracts selected for study were all dated within the first six months of 1981 and 1982, making them comparable with the sales data collected through the annual market survey. The data described here are based on 76 land contracts transferring a total of 13,395.3 acres in Polk and Red Lake counties in northwestern Minnesota and Blue Earth, Brown, Martin, Nicollet and Watonwan counties in south central Minnesota.

Table 18 presents a summary of the data from the two sample areas. The average discounted prices were calculated using as the discount rate the monthly average effective interest rate on new Federal Land Bank mortgages, including loan fees and stock purchase requirements. This rate was chosen because it represents the cost of borrowing from the main institutional lender in the farm real estate market and is thus a reasonable measure of the alternative interest rate available to buyers. In recent years interest rates charged by the Federal Land Banks have tended to lag behind those charged by other lenders such as commercial banks or life insurance companies. The use of the FLB average rate as a discount rate for land contracts is thus a rather conservative choice that will discount prices less dramatically than if a higher rate were chosen. During the time period studied average monthly effective interest rates on Federal Land Bank loans ranged from 11.58 percent in January 1981 to as high as 15.13 percent in March and April 1982.

Table 18: Summary of Contracts for Deed from South Central and Northwest Sample Areas, Minnesota, 1981 and 1982.

	<u>South Central</u>		<u>Northwest</u>	
	<u>1981</u>	<u>1982</u>	<u>1981</u>	<u>1982</u>
No. of contracts	21	15	23	17
Acres transferred	1755.3	1447.3	8016.0	2176.7
Average contract price/acre*	\$2540.71	\$2230.49	\$779.15	\$688.72
Average discounted price/acre	\$2202.63	\$1942.37	\$678.85	\$588.28
Average discount(%)	13.3%	12.9%	12.9%	14.6%
Average down payment (%)	16.9%	29.3%	12.2%	18.7%
Average interest rate	9.06%	9.48%	9.84%	10.70%
Average contract length(yrs.)	10.70	9.00	12.72	12.92

* All averages were calculated treating one acre as a unit.

The results indicate that interest rates on contracts for deed are indeed well below those available from institutional lenders, and that down payments tend to be relatively low. These data also indicate that interest rates may vary between different parts of the state, with contracts from southern Minnesota featuring lower rates than contracts from the northwest sample area in both 1981 and 1982. Down payments tended to be larger in the southern counties, however, and resulted in an average discount that was approximately equal in both areas and in both years.

Another noteworthy result is that the terms of finance on land contracts became somewhat "stiffer" in 1982, with both interest rates and down payments increasing in both areas studied. The implication of this is that contract terms do respond to changes in the terms available from alternative sources of finance. Another important point suggested by these data is that, despite facing a thinner market with fewer buyers in 1982 than in 1981, sellers of farmland did not soften their terms on land contracts in an effort to attract buyers and thus mask an even larger drop in the value of their land. On the contrary, both down payments and interest rates increased in 1982. This may be related to a relatively high proportion of sellers placing land on the market in order to raise cash, as is suggested by survey data.

Table 19 summarizes the results from the northwest sample area, dividing the contracts into two groups: the Red River Valley refers to those contracts transferring land located within the Red River Valley Lake Plain, while the Non-Valley Comparison Area includes those tracts lying outside the lake plain in the lower-valued area to the east. These data indicate that interest rates and down payments are higher in the valley than the comparison area, and thus contracts from the valley proper carried lower average discounts than those from the comparison area.

Table 19: Summary of Contracts for Deed from Red River Valley and Non-Valley Comparison Area Components of Northwest Sample Area, Minnesota, 1981 and 1982.

	<u>Red River Valley</u>		<u>Non-Valley Comparison Area</u>	
	<u>1981</u>	<u>1982</u>	<u>1981</u>	<u>1982</u>
No. of contracts	7	5	16	12
Acres transferred	1478.6	686.8	6537.4	1489.9
Average contract price/acre	\$832.69	\$945.90	\$767.04	\$570.16
Average discounted price/acre	\$866.96*	\$871.11	\$636.30	\$457.90
Average discount(%)	(4.1%)	7.9%	17.0%	19.7%
Average down payment(%)	23.8%	25.8%	9.9%	10.3%
Average interest rate	13.71%	11.85%	8.96%	10.17%
Average contract length(yrs.)	8.04	13.79	13.77	12.64

* due to some contracts carrying interest rates above the discount rate used.

Although theory suggests that the lower interest rates prevailing on land contracts should be accompanied by somewhat higher sale prices, the evidence from the survey data is somewhat ambiguous on this point. In five of the state's six districts, prices paid for land on contracts for deed averaged higher than prices paid for mortgage-financed property. On the other hand, in only three of the five counties sampled in southern Minnesota did contract for deed-financed sales average higher in price than cash or mortgage-financed sales. The larger average size of tracts sold under contracts in these counties (which normally would tend to lower average per acre prices), as well as the influence of land and building quality on prices paid, makes it difficult to identify precisely the relationship between price and type of finance. Similarly, 1982 survey results from Polk and Red Lake counties in the northwest reveal that in these two counties prices paid for land purchased with cash or mortgages averaged well above those paid for land bought on contracts. These averages are heavily influenced by the distribution of sales between the valley and non-valley areas, however, and when the sales are divided in this way a different pattern emerges. While contract sales in the valley did average lower in price than cash and mortgage sales in 1982, in the non-valley area prices paid for land on contracts averaged 11 percent higher than those paid for land financed by cash or mortgage. In the entire Non-Valley Comparison Area, land contract prices averaged 21 percent higher than mortgage-financed prices in 1981 and 3 percent higher in 1982.

These data suggest the conclusion that, while the expected premium for land sold on contracts is not always evident in all parts of the state, the phenomenon is more prominent in areas where contracts carry lower down payments and interest rates than is common in the state as a whole. The evidence from the Non-Valley Comparison Area

implies that soft land contract terms combined with greater than average use of the instrument were factors contributing to the rapid increase in land values in the area that continued through 1981.

The clearest conclusion that emerges, however, is that an acquaintance with the terms of finance written into a land contract is essential for evaluating the worth of the property it conveys. Down payments, interest rates, and repayment schedules can and do vary widely from one contract to the next, and some type of discounting is necessary in order to compare them with each other on an equal basis, as well as with mortgage and cash sales.

PART III.

The Farmland Market in the Red River Valley

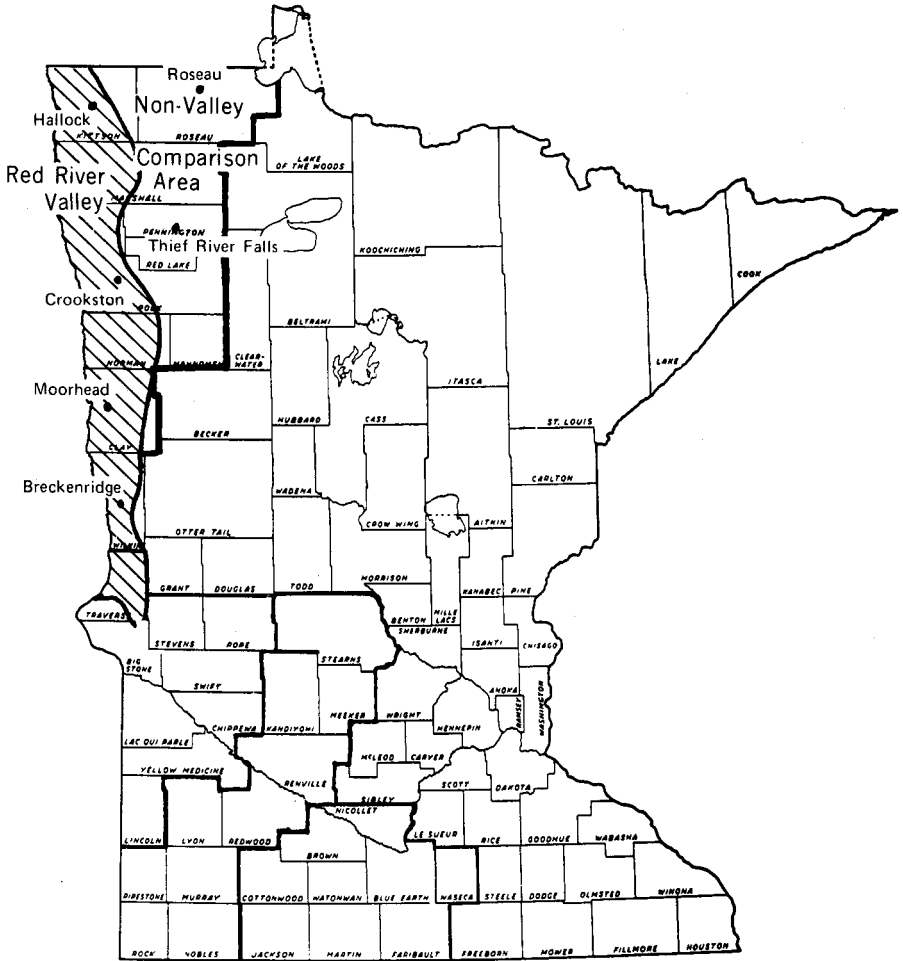
In recent years the market for farm real estate in Northwestern Minnesota has shown two sharply differing patterns. In the Red River Valley, narrowly defined here as the highly productive land within the Red River Valley Lake Plain, average reported sales prices increased at a compound annual rate of 12 percent from 1978 to 1981, increasing from \$839 per acre to \$1195 in 1981. During the same period, average reported prices in the Non-Valley Comparison Area, the lower-valued region lying east of the Red River Valley, increased at a compound annual rate of 24 percent, to \$788 per acre. Land prices in the comparison area remained far lower than those of the Valley, however. In 1981 the average price in the Non-Valley Comparison Area of \$788 per acre was less than two-thirds the level in the Valley proper. The boundaries of both the Valley and comparison areas are shown in Figure 4.

The distinction between the Valley and comparison areas was again evident in 1982, although the relative strength in the market shifted west to the Red River Valley. Average reported farmland prices in the Non-Valley Comparison Area declined 20 percent in 1982, to \$629 per acre (Table 20). The number of sales reported from this area dropped sharply as well. In the Valley, on the other hand, average prices actually increased 4 percent, to \$1239 per acre. This slight increase may be due in part to a dramatic decrease in the average size of tracts sold in the Valley in 1982, from 281 acres per

Table 20: Analysis of Reported Sales in the Red River Valley
and Non-Valley Areas, Northwest District

Item	Red River Valley				Non-valley Area			
	1979	1980	1981	1982	1979	1980	1981	1982
Number of Sales (Jan-June)	56	56	55	56	84	64	82	40
Average Size of Tract (Acres)	257	204	281	164	321	317	284	287
Average Sales Price Per Acre (dollars)	993	1112	1195	1239	461	638	788	629
Change in Sales Price over Preceding Year (percent)	17	12	7	4	20	38	24	-20

Figure 4: The Red River Valley and Comparison Area



sale in 1981 to 164 acres in 1982, which could be expected to increase per acre prices somewhat. Nevertheless, these data clearly suggest that Northwestern Minnesota experienced the same phenomenon observed elsewhere in the state in 1982: those areas which had experienced more dramatic increases in farmland prices in 1981 suffered the sharpest declines in 1982, while areas enjoying more modest gains or even slight losses in 1981 saw values drop less in 1982.

There are other important distinctions between the Valley and comparison areas in addition to land values. As might be expected in an area of relatively high land prices, farm expansion buyers dominate the market in the Red River Valley. In 1982, they made 95 percent of all reported purchases in the Valley (Table 21). In the comparison area expansion buyers are somewhat less dominant, accounting for 69 percent of the tracts purchased in 1982. Sole-tract operator buyers figured in 26 percent of the purchases in the comparison area in 1982, and for the second consecutive year paid the highest average prices of the three types of buyers (Table 22), signifying their greater influence on the market there. The proportion of sales to investors has historically been higher in the Non-Valley Comparison Area than in the Valley itself, and this pattern again held true in 1982. Investors have also tended to pay

Table 21: Proportion of Sales By Type of Buyer, Red River Valley and Non-Valley Comparison Area

Type of Buyer	Red River Valley				Non-Valley Area			
	1979	1980	1981	1982	1979	1980	1981	1982
	Percent							
Sole-Tract Operator	11	2	4	3	14	25	15	26
Expansion Buyer	85	95	90	95	77	65	77	69
Investor	4	3	6	2	9	10	8	5

Table 22: Average Sales Price Per Acre By Type of Buyer in the Red River Valley and Non-Valley Comparison Areas

Type of Buyer	Red River Valley				Non-valley Area			
	1979	1980	1981	1982	1979	1980	1981	1982
	dollars							
Sole-Tract Operator	738	900	1126	579	347	628	814	638
Expansion Buyer	1036	1138	1276	1254	557	653	792	625
Investor	688	735	669	1400	300	624	703	613

lower average prices than other buyers in both the Valley and comparison areas. One apparent exception to this occurred in 1982 in the Valley, when investors paid a very high average price per acre. This was due to a very limited number of sales to investors, however, and represents the exception rather than the rule.

The greater prominence of sole-tract buyers in the Non-Valley Comparison Area is also reflected in the proportion of sales and prices paid for improved land (meaning with buildings). Land with buildings is generally more often sought by sole-tract buyers than by expansion buyers, who may have little use for additional buildings. Accordingly, the percentage of sales of improved land is higher in the comparison area than the Valley, and land prices in the comparison area reflect a more consistent premium for improved land. In 1982 only 25 percent of the tracts sold in the Valley contained buildings, while 42 percent did so in the comparison area (Table 23). In a departure from the more usual pattern, prices for improved land averaged higher than for unimproved land in the Valley in 1982. Frequently the opposite has been the case, as it was in 1980 and 1981 and in eight of the years since 1970, as the majority of purchasers have been expansion buyers seeking additional land but not necessarily more buildings.

Table 23: Proportion of Sales and Average Sales Price
Per Acre of Improved and Unimproved Land in
the Red River Valley and Non-Valley Comparison
Area

Area and Year	Percent of Sales		Price Per Acre		Price of Unimproved Land as a Percentage of Price of Improved Land %
	Improved %	Unimproved %	Improved \$	Unimproved \$	
Red River Valley					
1979	25	75	1025	977	95
1980	29	71	951	1204	127
1981	25	75	1083	1293	119
1982	29	71	1358	1187	87
Non-Valley Comparison Area					
1979	35	65	524	421	80
1980	52	48	670	584	87
1981	39	61	886	677	76
1982	42	57	663	596	90

Seller financing of farm real estate sales (by use of contracts for deed) in recent years has been more popular in the Non-Valley Comparison Area than the Valley itself. In 1982, these instruments were used in 60 percent of the sales in the comparison area but in only 41 percent of the transfers in the Valley (Table 24). Each year since 1980, average prices for land sold on contracts for deed in the comparison area have averaged the highest of the three types of finance used. As noted earlier in this report, the trade-off between a high selling price and "soft" terms on contracts for deed may have been a factor in the sharp increases in average prices in the comparison area in recent years. Cash sales tend to be more frequent in the Valley, on the other hand, accounting for one-third of the sales there in 1982 as compared to less than one-quarter of the sales in the comparison area. The proportion of sales financed by mortgages declined in both areas in 1982, perhaps in reaction to the high interest rates that prevailed during the year.

Table 24: Proportion of Sales and Price Paid Per Acre By Method of Finance, Red River Valley and Non-Valley Comparison Area

Method of Finance	Red River Valley				Non-valley Area			
	1981		1982		1981		1982	
	%	\$	%	\$	%	\$	%	\$
Cash	31	1373	33	1179	10	705	23	380
Mortgage	33	1231	26	1492	22	674	17	670
Contract For Deed	36	1069	41	1146	68	813	60	692

PART IV.

The Farmland Market in the Greater Twin Cities Metropolitan Area

The Greater Twin Cities Metropolitan Area is defined here as the seven metropolitan "core" counties (Hennepin, Ramsey, Anoka, Washington, Dakota, Scott, and Carver) plus the next ring of Minnesota counties that surround them: Chisago, Isanti, Sherburne, Wright, McLeod, Sibley, LeSueur, Rice and Goodhue. These 16 counties are now within the "orbit" of the Twin Cities, and rural land markets there are influenced to some extent by demands for nonfarm uses of rural land for residential or commercial sites. At the same time, agricultural uses remain very significant in all of these counties, with the exception of Ramsey.

The 16 county area has been further divided into three subareas, based on differences in population, recent rates of population growth, agricultural productivity, and historical land values. These subdivisions help to explain recent trends in metropolitan area farmland prices.

The seven county Metro area in 1980 contained nearly half of the state's total population (49 percent), but its population grew quite slowly from 1970 to 1980, increasing only 5.7 percent in the ten years. As noted previously, until the mid-1970's farmland prices were higher in this part of the state than in any other.

The South Metro Fringe Area contains the five counties to the south of the "core" counties: Goodhue, Rice, LeSueur, Sibley and McLeod. This area is more valuable agriculturally than the rest of the Metropolitan area, and also experienced a somewhat greater rate of population growth in the 1970's, (8.6 percent) than did the seven inner counties.

The North Metro Fringe is made up of the four northern counties: Wright, Sherburne, Isanti and Chisago. Farmland in this area is less productive than that in the counties to the south, and land values there have historically been below those of the other two subareas. The North Metro area experienced a great increase in population during the 1970's, rising by over 50 percent in 10 years.

Table 25 gives average reported sales prices of farmland from 1973 to 1982 for each of the three subareas, the greater Twin Cities Metropolitan Area as a whole and the state as a whole (including the Twin Cities). These data indicate that farmland prices in the Greater Twin Cities Area increased at a slower rate than those in the state as a whole from 1973 to 1982 (241 percent vs. 356 percent). They also indicate that within the Greater Twin Cities Area, farmland prices rose even more slowly in the subarea that was most highly-valued at the beginning of the period, the Seven-County core (145 percent). Prices increased most rapidly in the lowest-valued area, the North Metro Fringe (310 percent), and in 1982 this was the only one of the three subareas to show an increase in prices (8 percent). These data suggest that a phenomenon of "compression", or a narrowing of the range of values of farmland, is occurring within the Greater Twin Cities Metro Area. At the start of the recent inflation of land values in 1973, average sale prices in the South Metro Fringe Counties equalled 68 percent of the average in the Seven County Metro core. By 1982, average sale prices in the South Metro Fringe actually exceeded those in

Table 25: Average Reported Sales Price Per Acre,
Greater Twin Cities Metro Area and
Subareas. 1973-1982.

Year	Seven-County Metro ¹	South Metro Fringe ²	North Metro Fringe ³	Greater T.C. Metro ⁴ (16 counties)	Minn.
1973	698	475	353	516	298
1974	896	647	556	689	450
1975	1023	808	599	839	607
1976	1164	1086	718	1045	735
1977	1442	1285	752	1198	859
1978	1423	1313	892	1185	980
1979	1799	1799	1309	1694	1140
1980	1778	2097	1170	1781	1318
1981	1830	1955	1334	1791	1367
1982	1711	1867	1446	1759	1360

¹ Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington Counties

² Goodhue, McLeod, LeSueur, Rice and Sibley Counties

³ Chisago, Isanti, Sherburne, and Wright Counties

⁴ All sixteen counties named above.

the core counties by 9 percent. Similarly, in 1973 average sale prices in the four North Metro Fringe counties equalled 51 percent of the average price in the core counties. The North Metro average increased to 85 percent of the core average by 1982.

These data help to explain the 11 percent increase in sales prices in Region 7E that was noted earlier. Recent large population growth in the area has increased the demand for farmland for residential and other nonfarm uses, and as nonagricultural demand for rural land has grown there has been a corresponding decline in price differentials based on agricultural value.

Two other characteristics of the Greater Twin Cities Metropolitan Area farmland market are worth noting. The first is that, contrary to the case in predominantly cash grain agricultural districts, land with buildings commands a consistently higher price than land without. This is likely due to the demand for rural residences within commuting distance of the Twin Cities.

The other notable feature of the Twin Cities area market is the increasing dominance of farm expansion buyers. In the total 16 county area, they made up only 34 percent of the purchasers in 1973. Since then they have gradually increased their share of the market to 72 percent by 1982. Expansion buyers have thus increased their share of purchases more rapidly in the Twin Cities area than in the more purely agricultural regions. Two reasons for this suggest themselves: First, it can be assumed that in non-metro areas farmers make decisions to expand or not based mainly on considerations of the future of the farm operation itself. Farmers in the Metropolitan area, in contrast, can base their expansion decision on the additional prospect of a capital gain resulting from ultimate conversion to non-farm use, thus adding to the incentive to expand. Second, due to the increase in the value of their existing property since the early 1970's, farmers in the Twin Cities area have found themselves in a stronger position from which to compete with nonfarm users for additional tracts of land. Farmers in the Greater Twin Cities Metropolitan Area have thus had both short-term and long-term incentives to increase their farm size and an improved capital base from which to achieve it.

PART V

Estimated Values of Different Quality Minnesota Farms, 1963-1982.

Since the early 1960's the Minnesota Rural Real Estate Market Survey questionnaire has included questions asking respondents to estimate the current value of high-, medium- and low-grade farms in their area. These data are presented in Table 26 for the years 1963 to 1982, and the statewide average estimated values for the three grades of farms are depicted in Figure 5. Data from the Northeast district have not been included. Nonagricultural factors such as recreational and residential demand have a substantial effect on rural land values in this part of Minnesota. This often results in agricultural worth having a relatively smaller influence on land values, and a premium being placed instead on scenic and recreational attributes unrelated to productive capability. Estimates of value based upon farm quality in the Northeast district thus have less relevance in this context and have therefore been omitted from this discussion.

Figure 5 illustrates the sharp increase in values of all grades of farms that began around 1973 and continued until 1982. As discussed earlier in this report, this boom in farmland values was based in large part on expectations of future increases in farm commodity prices and thus in the income-producing value of land. This inflation of land values did not affect all qualities of farms equally, however. Figure 6 graphs the ratio of the estimated value of low-grade farms to the estimated value of high-grade farms for the five Minnesota districts considered here. If the values of different grades of farms increase at the same rate then the ratio of those values will remain constant and show up as a horizontal line on the graph. If the value of poorer farms increases faster than the value of better farms the ratio will trend upward; if the poorer farms increase in value more slowly the ratio will turn downward.

The graph of land value ratios indicates that the initial effect of the post-1973 land market boom was to increase the value of the best farms proportionately more than the value of poorer farms in the three western cash grain districts (shown by solid lines on the graph). The ratio lines in all three districts turn downward in 1973 and bottom out in 1975 and 1976. Then, since the mid-seventies, the ratio trended upward again as the value of low-grade farms increased relative to the value of the best farms. This suggests that the post-1973 farmland boom occurred in two phases: as the first effects of the crop price and export demand increases were felt, the value of the best income-producing farms was bid up as farm expansion buyers sought to add productive assets to their enterprises, and less productive farms lagged further behind in value. After the inflation of land prices had been established, however, the value of poorer farms began to increase more rapidly and the ratio of values of low- to high-grade farms began to approach the pre-inflationary level.

Three related developments are possible explanations for this phenomenon: First, as farm values increased they quickly lost any direct connection to current income opportunities from holding agricultural property. Instead the emphasis of participants in the land market shifted to future expected earnings from farmland, and this

FIGURE 5: ESTIMATED AVERAGE VALUE PER ACRE FOR FARMS OF DIFFERENT QUALITY, MINNESOTA, 1963-1982.

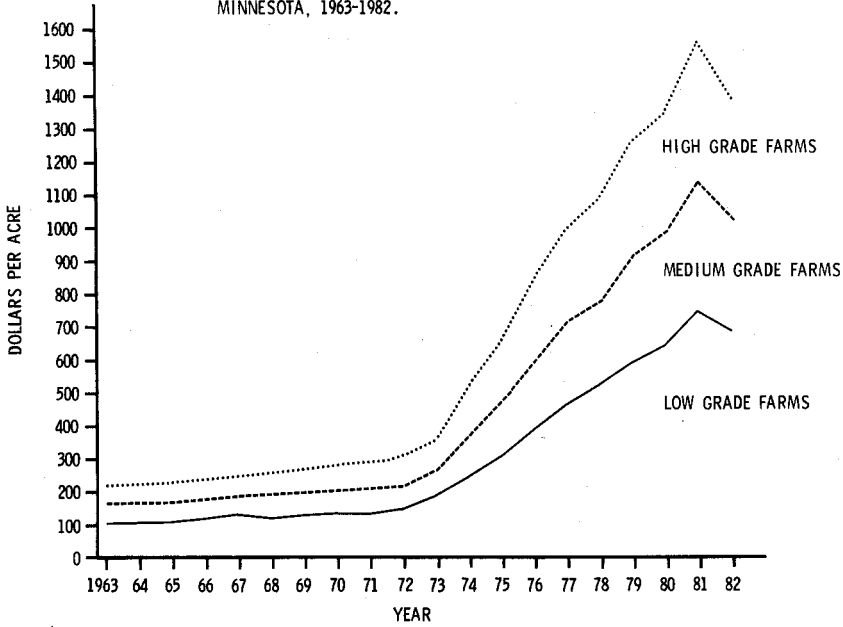
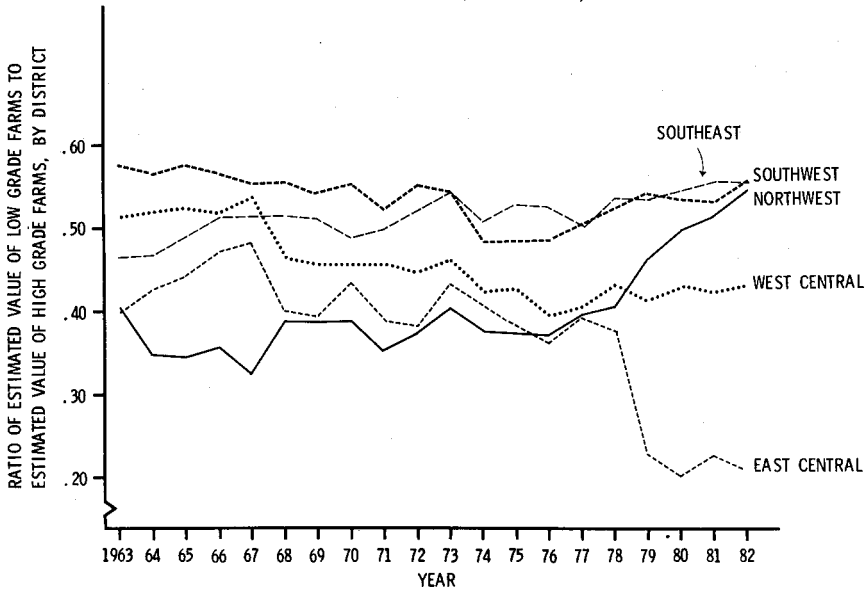


FIGURE 6: RATIO OF ESTIMATED VALUE OF LOW GRADE FARMS TO ESTIMATED VALUE OF HIGH GRADE FARMS, BY DISTRICT, 1963-1982.



left the pre-inflationary relative worth as the only available standard for evaluating property values. Thus the value of the poorer farms tended to increase relative to the best farms. A second development was a shift in emphasis among market participants away from the income-producing attributes of farmland and toward its potential for providing capital gains sometime in the future. If the value of all grades of property is increasing rapidly and is expected to continue to do so in the future, then buyers (both farmers and investors) can be expected to place less emphasis on the productive capability of the tracts they purchase. Evidence of this effect can be observed by noting that over the years investor buyers have consistently made a much higher proportion of purchases of land rated as "poor" by survey respondents than have other classes of buyers. A third factor contributing to the accelerating increase in the value of poor farms in the late seventies was that many potential buyers, particularly sole-tract operators, found themselves increasingly priced out of the market for the best farms and turned instead to the purchase of lower-quality properties. At the statewide level this trend is typified by the increasing concentration of purchases by sole-tract operators in the two lowest-valued districts, the Northeast and East Central.

Figure 6 reveals some specific long-term regional trends as well. In the East Central district, which is perhaps the state's most heterogeneous as far as the range of quality of its farmland is concerned, there has been a steady drift downward in the ratio of values of low- to high-grade farms. Since the quality of the best farms in this transitional area is well below that of the best farms in southern and western Minnesota, this reflects a bidding up of the value of farms that would be considered lower-grade on a statewide basis and is thus consistent with the phenomenon observed in the three western cash grain districts. The Northwest district, on the other hand, has experienced a sharp increase in the relative value of its poorest farms in recent years, a trend that is consistent with the sales activity reported in the Red River Valley area and discussed earlier in this report. In the Southeast district, which over the past 20 years has experienced increasing urban and rural residential demands for rural land, the long term trend has been an increase in the value of poorer land relative to the value of better land. This has been the result of an increasing emphasis on nonagricultural uses in valuing farmland, and the associated decline in price differentials based on agricultural productivity. Thus the phenomenon of "compression" of land values noted earlier in the greater Twin Cities metropolitan area seems to have characterized the Southeast district as a whole.

Table 26: Estimated Values Per Acre of Different
Grades of Minnesota Farms, By District,
1963-1982.

	<u>District</u>					
<u>Year</u>	South east	South west	West Central	East Central	North west	Minn.
	<u>High Grade Farms</u>					
1963	290	305	195	150	160	220
1964	297	318	200	145	160	224
1965	312	321	200	149	170	229
1966	330	339	212	142	167	237
1967	354	371	219	160	162	250
1968	393	429	269	184	187	255
1969	425	451	291	205	185	271
1970	451	446	294	221	187	279
1971	460	464	303	223	191	286
1972	515	492	312	248	191	307
1973	613	595	371	278	235	360
1974	846	910	579	411	317	524
1975	973	1147	776	456	456	650
1976	1236	1514	993	561	597	837
1977	1520	1771	1142	656	693	992
1978	1718	1877	1268	754	714	1080
1979	2044	2159	1446	875	864	1258
1980	2208	2332	1518	954	890	1345
1981	2429	2752	1852	1059	1050	1555
1982	2138	2422	1648	1006	987	1391
	<u>Medium Grade Farms</u>					
1963	210	240	145	100	110	165
1964	213	246	147	104	104	167
1965	224	249	148	104	106	170
1966	245	260	156	109	104	179
1967	259	279	165	121	104	188

Table 26: Estimated Values Per Acre of Different
Grades of Minnesota Farms, By District,
1963-1982 (cont.)

Year	District					Minn.
	South east	South west	West Central	East Central	North west	
	Medium Grade Farms (cont)					
1968	295	339	186	124	123	186
1969	317	354	202	135	119	196
1970	330	350	204	153	118	201
1971	343	357	212	150	109	204
1972	384	378	216	167	111	220
1973	461	450	257	197	138	263
1974	618	657	391	290	189	374
1975	729	834	512	305	280	465
1976	926	1093	630	363	364	593
1977	1111	1301	737	436	411	704
1978	1278	1379	818	510	436	774
1979	1534	1627	916	587	536	911
1980	1641	1741	989	616	584	977
1981	1838	2037	1187	696	730	1137
1982	1636	1833	1080	654	686	1030
Low Grade Farms						
1963	135	175	100	60	65	110
1964	139	180	104	62	56	111
1965	153	185	105	66	59	116
1966	170	193	110	67	60	123
1967	182	205	118	77	53	129
1968	203	239	126	74	73	123
1969	217	245	133	81	72	128
1970	221	247	134	96	73	131
1971	230	242	139	87	68	131

Table 26: Estimated Values Per Acre of Different
Grades of Minnesota Farms, By District,
1963-1982 (cont)

<u>Year</u>	<u>District</u>					Minn.
	South east	South west	West Central	East Central	North west	
<u>Low Grade Farms (cont)</u>						
1972	271	271	140	95	72	147
1973	333	322	171	121	95	180
1974	430	441	246	167	120	242
1975	516	556	332	175	172	302
1976	650	739	392	203	222	383
1977	767	902	463	258	273	463
1978	920	983	546	286	289	524
1979	1095	1170	595	200	399	594
1980	1205	1252	649	194	443	640
1981	1350	1465	779	239	540	747
1982	1188	1348	709	217	540	683

STATISTICAL APPENDIX

One disadvantage in the use of average prices based upon actual sales is that the averages do not indicate the degree of variation in the data. Quality of land varies greatly in any one county or district, for example, but it is not possible to derive an accurate measure of land quality from this survey. Over time, the quality of land involved in the sales from year to year may also vary.

One measure of this variability in prices is indicated in Table 29. The standard deviation represents the dollar range from the average within which approximately two-thirds of the reported sales fall. For example, in 1982 the West Central District had an average of \$1168 per acre with a standard deviation of \$424. This means that approximately two-thirds of the sales in that district fell between \$744 and \$1592 per acre. The coefficient of variation is the standard deviation divided by the average sales price, and multiplied by 100 to convert it to a percentage form. In the above example, the coefficient of variation is 36.3 percent. Wider variations in sales price above and below the average create larger coefficients of variation.

Table 27; Average Estimated Value Per Acre of Farm Real Estate in Minnesota by Districts, 1910-11 through 1944-45, by Two-Year Periods, and Annually, 1946 through 1982.

Years	South-east	South-west	West Central	East Central	North-west	North-east	Minn.
1910-11	58	54	39	24	24	11	41
1912-13	69	69	46	29	29	13	49
1914-15	82	84	56	34	32	14	58
1916-17	92	100	67	41	37	15	68
1918-19	117	118	78	50	40	18	82
1920-21	141	152	98	68	57	24	104
1922-23	114	119	82	56	44	23	85
1924-25	104	110	74	49	44	22	78
1926-27	106	109	72	49	36	22	76
1928-29	100	102	67	44	33	21	71
1930-31	88	88	51	36	22	18	60
1932-33	64	65	42	27	20	14	45
1934-35	52	58	38	26	22	15	40
1936-37	59	64	38	29	22	24	44
1938-39	60	68	37	28	22	25	45
1940-41	59	68	36	26	22	24	43
1942-43	65	76	40	29	24	25	48
1944-45	78	90	48	35	29	28	56
1946	88	104	56	39	33	32	65
1947	96	116	62	43	37	35	72
1948	104	129	69	47	41	38	79
1949	107	136	73	49	44	39	83
1950	109	141	76	50	46	40	85
1951	125	166	89	59	54	46	99
1952	131	175	96	65	68	42	107
1953	130	175	95	62	64	40	105
1954	139	187	99	66	72	40	113
1955	150	205	103	68	73	45	121
1956	156	214	107	70	76	42	126
1957	165	230	122	77	86	49	138
1958	179	242	123	84	90	65	147
1959	191	255	134	89	103	58	157

Table 27: Average Estimated Value Per Acre of Farm Real Estate in Minnesota by Districts, 1910-11 through 1944-45, by Two-Year Periods, and Annually, 1946 through 1982.(con't).

Year	South-east	South-west	West Central	East Central	North-west	North-east	Minn.
1960	188	248	133	94	99	64	155
1961	189	247	133	95	100	64	156
1962	192	250	138	99	104	69	159
1963	194	246	142	103	114	68	161
1964	206	252	145	111	115	59	166
1965	219	261	146	112	113	51	171
1966	242	277	153	122	112	58	183
1967	262	303	163	128	108	62	194
1968	286	333	181	134	122	57	211
1969	308	350	196	146	120	54	223
1970	317	347	198	161	120	62	227
1971	333	351	204	155	119	63	232
1972	370	379	208	163	117	76	248
1973	433	459	247	194	146	115	298
1974	576	675	378	279	199	144	423
1975	674	844	503	296	295	163	525
1976	856	1106	624	349	378	210	667
1977	1027	1316	730	415	427	279	794
1978	1191	1421	803	498	483	304	889
1979	1453	1620	883	573	599	368	1040
1980	1526	1750	962	596	683	390	1120
1981	1709	2083	1135	679	813	460	1310
1982	1504	1875	1044	584	748	483	1179

Table 28: Annual Percentage Change in Estimated Farm Land
Values Per Acre, Minnesota, 1946-1982.

	%		%
1945-46	16.1	1963-64	3.1
1946-47	10.8	1964-65	3.0
1947-48	9.7	1965-66	7.0
1948-49	5.1	1966-67	6.0
1949-50	2.4	1967-68	8.8
1950-51	16.5	1968-69	5.7
1951-52	8.1	1969-70	1.8
1952-53	- 1.9	1970-71	2.2
1953-54	7.6	1971-72	6.9
1954-55	7.1	1972-73	20.2
1955-56	4.1	1973-74	41.9
1956-57	9.5	1974-75	24.1
1957-58	6.5	1975-76	27.0
1958-59	6.8	1976-77	19.0
1959-60	- 1.3	1977-78	12.0
1960-61	0.6	1978-79	17.0
1961-62	1.9	1979-80	7.7
1962-63	1.3	1980-81	17.0
		1981-82	-10.0

Table 29: Average Price Per Acre of Reported Farm Sales,
Standard Deviation and Coefficient of Variation,
by District, Minnesota, 1961-1982.*

Years	South- east	South- west	West Central	East Central	North- west	North- east	Minn.
Average Price Per Acre (Dollars)							
1961	189.1	255.8	130.3	89.0	92.0	37.9	165.2
1962	195.7	228.5	140.5	76.3	73.9	30.3	161.1
1963	214.1	221.9	136.2	86.2	108.8	47.6	168.1
1964	213.3	234.3	150.3	86.3	103.6	51.6	178.1
1965	202.0	232.7	133.2	95.8	106.2	39.7	178.0
1966	253.4	260.4	164.3	113.0	103.4	30.6	203.4
1967	272.4	306.1	178.6	92.9	116.6	51.2	214.8
1968	316.0	329.0	186.0	104.0	90.0	47.0	232.0
1969	340.7	334.1	193.6	129.7	120.8	50.7	238.3
1970	346.0	340.0	206.0	141.0	113.0	45.0	243.0
1971	343.6	343.0	204.5	150.3	100.1	43.7	259.0
1972	389.4	365.7	221.7	145.1	107.2	76.4	293.3
1973	443.5	410.1	223.0	178.1	119.7	121.7	298.4
1974	598.4	630.1	339.8	242.7	204.0	144.4	450.1
1975	791.8	843.9	492.9	298.5	352.8	159.3	607.0
1976	937.2	1115.7	663.7	321.3	377.0	209.7	735.2
1977	1216.0	1340.4	708.6	445.7	431.7	197.9	858.8
1978	1351.7	1320.7	907.6	554.0	504.4	256.3	979.6
1979	1674.6	1679.5	949.3	618.1	612.2	410.9	1139.9
1980	1837.1	1868.2	1095.3	603.0	758.8	394.5	1318.5
1981	1965.3	2004.6	1170.6	680.1	918.7	482.8	1367.1
1982	1748.5	2022.3	1167.9	745.7	886.8	405.7	1359.5
Standard Deviation (Dollars)							
1961	83.5	71.9	40.0	47.8	54.1	20.1	86.8
1962	80.7	68.6	45.1	39.1	57.2	29.7	88.5
1963	79.4	77.1	50.8	43.7	69.4	26.1	88.6
1964	91.6	77.3	70.1	52.4	89.9	39.0	97.2
1965	96.3	87.0	82.1	63.5	91.1	31.7	98.1

Table 29: Average Price Per Acre of Reported Farm Sales,
Standard Deviation and Coefficient of Variation,
by District, Minnesota, 1961-1982*(con't)

Years	South- east	South- west	West Central	East Central	North- west	North- east	Minn.
1966	142.7	95.3	56.7	66.5	65.7	32.2	199.4
1967	115.3	106.2	62.8	67.6	85.4	29.8	127.6
1968	179.0	124.2	77.5	108.5	70.5	41.6	160.7
1969	228.6	123.4	64.5	104.2	83.9	45.0	174.0
1970	189.7	129.6	75.4	105.6	89.5	29.3	162.5
1971	154.3	128.1	66.6	100.7	66.9	28.9	157.4
1972	154.9	136.4	79.0	96.7	70.0	38.8	164.4
1973	183.3	164.1	94.0	97.2	76.8	86.6	188.9
1974	265.2	290.0	147.2	153.0	127.5	60.6	287.7
1975	291.3	373.8	225.0	142.5	220.8	72.2	360.4
1976	359.0	501.4	243.0	176.2	273.2	100.6	457.8
1977	476.9	606.8	305.2	244.1	294.3	99.4	599.0
1978	454.4	496.9	329.2	304.0	260.9	100.5	539.7
1979	850.3	833.3	361.4	357.2	354.7	228.3	791.6
1980	639.5	746.7	487.2	298.1	337.2	152.9	780.1
1981	675.8	891.3	426.9	624.5	332.2	157.0	826.6
1982	615.9	758.5	423.5	360.8	405.0	127.4	774.3
Coefficient of Variation (Percent)							
1961	44.2	31.8	30.7	53.7	58.7	53.1	52.6
1962	41.2	30.0	32.2	51.2	77.3	98.0	54.9
1963	37.1	34.8	37.3	40.7	63.8	54.8	52.7
1964	42.9	33.0	46.6	60.8	86.7	75.5	54.6
1965	47.6	37.4	61.6	66.2	85.8	79.8	55.1
1966	56.4	36.7	32.6	58.9	63.8	105.4	58.7
1967	42.3	34.7	35.2	72.8	73.2	58.2	59.4
1968	56.6	37.3	41.6	103.8	78.3	88.5	69.2
1969	67.1	36.9	33.3	80.4	69.5	88.9	73.0
1970	54.8	38.1	36.6	74.9	79.2	65.1	66.9

Table 29: Average Price Per Acre of Reported Farm Sales,
Standard Deviation and Coefficient of Variation,
by District, Minnesota, 1961-1982* (con't).

Years	South- east	South- west	West Central	East Central	North- west	North- east	Minn.
1971	44.9	37.4	32.6	67.0	66.8	66.1	60.8
1972	39.8	37.3	35.6	66.6	65.3	50.8	56.1
1973	41.3	40.0	42.2	54.6	64.2	71.2	63.3
1974	44.3	46.0	43.3	63.0	62.5	42.0	63.9
1975	36.8	44.3	45.7	47.7	62.6	45.3	59.4
1976	38.3	44.9	36.6	54.8	72.5	48.0	62.3
1977	39.2	45.3	43.1	54.8	68.2	50.2	69.7
1978	33.6	37.6	36.3	54.9	51.7	39.2	55.1
1979	50.8	49.6	38.1	57.8	57.9	55.6	69.4
1980	34.8	40.0	44.5	49.4	44.4	38.8	59.2
1981	34.4	44.5	36.5	91.8	36.2	32.5	60.5
1982	35.2	37.5	36.3	48.4	45.7	31.4	57.0

* Each acre is treated as a unit in calculating standard deviations and coefficients of variation.