

## FARMLAND PRICE TRENDS: WHERE ARE THEY NOW AND WHERE ARE THEY HEADED?

The farm real estate market and the associated price trends are topics of considerable interest. There are many participants in this market—a market where individual fortunes have been made as well as lost over time. Members of financial institutions serving agriculture are closely attuned, since the land base represents more than three-fourths of the total production assets of the agricultural sector. But virtually everyone has some vested interest in farm real estate trends, since the ownership and control of farmland colors the very structure and economic viability of the agricultural industry. Dr. Harold Breimyer, an agricultural economist at the University of Missouri, said it this way: "Much of the economics of agriculture is the economics of how future returns are capitalized into land values."

It is obvious that the degree of interest in the farmland market has intensified as of late. Why? Perhaps in large measure because we have recently experienced "land boom" conditions and now appear to be entering into a period of greater economic uncertainty.

The following discussion includes some information and implications which, it is hoped, will broaden our perspective of the current situation and give us some perception of what lies ahead. Historical price trends are reviewed first, followed by an appraisal of the current situation for the various areas of the state based upon preliminary findings of the first annual Farm Real Estate Market Survey conducted by the Agricultural Economics Department. Finally considered is what may lie ahead—within the coming twelve months as well as the next several years.

### THE HISTORICAL PICTURE

A look at the historical index of average value per acre of farmland in Nebraska reveals that following the brief land boom after World War I and the lengthy period of decline which continued through the 1930s, a steady upward trend began and has continued for several decades. Since the early 1940s, farmland has increased in value largely uninterrupted. It should be noted, however, that the rate of increase was fairly moderate until the 1970s. Most likely, this reflected a fairly close relationship of farmland values to farm income potential and the gradual increase in average farm size.<sup>1</sup>

Obviously, the most dramatic climb has occurred within the last five to six years. Here in Nebraska, land values were rising at a phenomenal rate. In one period, March, 1975, to March, 1976, Nebraska led the nation with a 26 percent increase. Historically,

there was no precedent for this over recorded time—certainly not in terms of absolute dollar magnitude, but neither in terms of percentage change.

Such increases are explained, in large part, by the farm income bubble of 1973 and 1974. Not only were commodity prices far above previous levels, but there was a hint of permanency to this short-run situation as the world food situation came into focus. A lagged "bullish" response was inevitable from farmer buyers—the major buyer group in the farmland market. Added to this, a heightened interest in center pivot irrigation development and the general prevailing inflationary psychology provided the makings for a classic case of "land boom" conditions.

Over recent months, however, there is evidence of a minor turnabout. Most recently released USDA data for February 1, 1978, indicate a 4 percent decline in the average value of Nebraska farmland over that of a year ago. Relative to the rest of the nation, Nebraska achieved the dubious distinction of being the only state to show a decline in real estate value over that time period.

On surface, the recent decline appears as quite a contrast, but it must be placed in proper perspective. Even with this decline over the last twelve to fifteen months, the average value of Nebraska farmland is still more than *double* what it was just five years ago.

A brief look at the three major classes of land for which USDA data are available may be helpful in perceiving the trends more clearly (see Table 1, p. 2). Note that irrigated land experienced the largest percent increases in recent periods, even though the relatively high absolute value of that land may have been a factor in pricing some potential buyers out of the market. Several summers of drouth conditions may have placed a short-run premium on irrigated land. The most recent twelve-month period showed a 6 percent decline as drouth conditions broke and cash grain prices remained depressed. Grazing land also was off 6 percent as the cattle market situation remained unfavorable. Dryland cropland appears to have remained the most stable.

But even this further breakdown of price trends gives only a general viewpoint of the state. Nebraska is amazingly diverse in terms of its agriculture and its land base. For this reason, it is necessary to focus more specifically on the different areas and types of land to appraise the current situation.

### NEBRASKA FARM REAL ESTATE MARKET SURVEY

To provide more detailed and refined data regarding land values across Nebraska, a Nebraska Farm Real Estate Market Survey was developed and conducted by (Continued on page 2)

<sup>1</sup>See Bruce B. Johnson and Larry Janssen, "Farm Real Estate Wealth Appreciation in Nebraska 1950-1975," *Business in Nebraska* 56, No. 27, (June, 1977).

(Continued from page 1) the Department of Agricultural Economics at the University of Nebraska-Lincoln. This survey will attempt each year to collect and report data measuring current market values of Nebraska farmland and ranchland by Crop Reporting Districts and by major land use. Over time this survey will build a land value data basis to analyze better the differences and trends in land values across Nebraska.

Reporters or participants in this survey included rural appraisers, real estate brokers, farm managers, and farm mortgage lenders. More than 600 survey questionnaires were mailed in early January. A response rate of nearly 50 percent was received.

### 1978 SURVEY RESULTS

Survey reporters were asked to estimate farmland or ranchland values in their respective counties (or surrounding counties) for February 1, 1978, by major land use typical for their area. Preliminary results of their estimates are presented in Table 2 (p. 3). These averages presented a wide range (as expected) in farmland and ranchland values, both by land use and by area across the state. Figure 1 delineates the regions noted in Table 2.

Reporters were also asked to describe the farm real estate market activity in their area during the past year. Thirteen percent of the survey respondents indicated that during the past year the number of land tracts sold in their area had risen an average of 12 percent, while another 43 percent said fewer tracts had been sold (down an average of 24 percent). The remaining 44 percent of the respondents indicated that the number of land tracts sold in their area had remained the same.

When projecting for the next year, 1978 to 1979, 57 percent of all survey respondents expected no change in the number of land tracts to be offered for sale in their area. Another 25 percent expected more land tracts to be offered for sale (up an average of 14 percent more sales), while 18 percent said fewer tracts would be offered for sale (down an average of 19 percent fewer sales). This would suggest that most reporters feel that land in Nebraska will continue to be held in relatively tight hands.

The two reasons most frequently cited by reporters for purchasing land in 1977 were: (1) expansion of the present farming

operation, and (2) as an investment or hedge against inflation. These reasons are quite consistent with results from other national or state land-value studies.

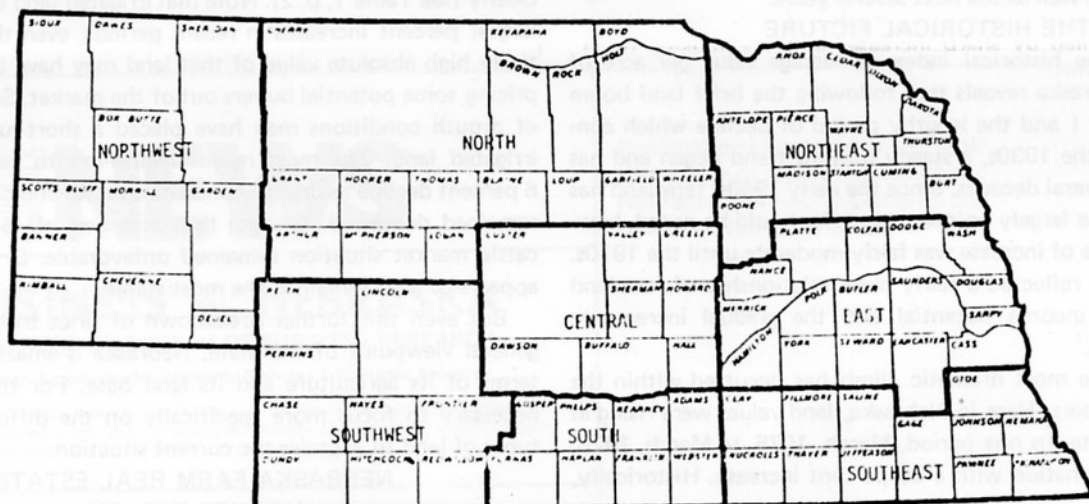
The most frequently given reasons for offering farmland or ranchland for sale during 1977 were: (1) estate settlements, (2) retirement or health, (3) financial problems or debt repayment problems, and (4) investment profit-taking due to expected land price declines. The findings again suggest that land across Nebraska is held in tight hands. Present landowners for the most part are not offering land for sale unless forced to do so by death, age, or financial problems.

Table 1  
PERCENT INCREASE IN AVERAGE VALUE  
OF NEBRASKA FARM REAL ESTATE  
BY TYPE OF LAND, 1968-1978

Period	Irrigated Land	Dry Cropland	Grazing Land	All Land
	(Percent)			
March, 1968-March, 1969	6.4	3.7	3.7	3.7
March, 1969-March, 1970	4.3	1.8	0.8	2.7
March, 1970-March, 1971	0.8	1.8	2.6	1.7
March, 1971-March, 1972	7.3	9.5	6.8	8.6
March, 1972-March, 1973	10.6	13.4	17.6	14.2
March, 1973-March, 1974	31.5	27.8	21.1	26.2
March, 1974-March, 1975	24.0	16.3	16.3	17.5
March, 1975-March, 1976	23.1	27.6	23.4	26.0
Feb., 1976-Feb., 1977	17.8	12.3	12.8	13.3
Feb., 1977-Feb., 1978	-6.0	-2.0	-6.0	-4.0
10-Year Annual Average	11.4	10.8	9.6	10.5

Source: Based on index of average value per acre (1967 = 100) as reported by Economic Research Service, U.S. Department of Agriculture.

Figure 1  
CROP REPORTING DISTRICTS



LAND PRICE OUTLOOK FOR 1978

Overall analysis of these survey results from the Nebraska Farm Real Estate Market Survey reflects a "softening" of farmland and rangeland values in most areas of Nebraska. Possibly there may be somewhat fewer potential buyers as a more cautious attitude toward purchasing land prevails. It is clearly evident, however, that Nebraska farmland and rangeland are still being held in tight hands and are still regarded as an excellent hedge against inflation.

The inflationary psychology behind rising land prices in recent years has been dampened. The current farm real estate market

in Nebraska appears to be taking a "momentary pause" as many buyers and sellers have adopted a "wait and see" attitude. The length of this pause in the market depends largely on the price expectations for farm commodities, particularly among cash grains, in the months ahead.

Some forced sales appear likely in the next year as repayment problems persist for those who became heavily indebted in recent years. Although adequate financing appears available at present, much will depend on the ability of these recent land purchasers to refinance or restructure their debt load as they experience cash flow or repayability problems.

(Continued on page 6)

Table 2  
AVERAGE REPORTED VALUE PER ACRE OF NEBRASKA FARMLAND  
FOR DIFFERENT TYPES OF LAND AND GRADE  
BY CROP REPORTING DISTRICT, FEBRUARY 1, 1978

Type of Land and Quality <sup>1</sup>	Crop Reporting Districts							State <sup>2</sup>	
	Northwest	North	Northeast	Central	East	Southwest	South		Southeast
<i>Dollars per Acre</i>									
<u>Dryland Cropland (no irrigation potential)</u>									
Average	289	253	648	319	817	360	468	660	549
High Grade	347	295	787	390	964	374	586	759	
Low Grade	227	222	496	234	581	269	374	468	
<u>Dryland Cropland (irrigation potential)</u>									
Average	409	387	741	590	1,128	471	873	953	784
High Grade	490	442	866	726	1,323	493	1,012	1,093	
Low Grade	319	316	578	411	850	349	664	694	
<u>Grazing Land (tillable)</u>									
Average	177	191	433	299	549	215	465	433	382
High Grade	202	207	446	361	653	264	543	481	
Low Grade	136	160	339	238	454	205	366	333	
<u>Grazing Land (nontillable)</u>									
Average	115	126	308	216	384	119	268	315	250
High Grade	136	145	313	234	455	135	312	373	
Low Grade	91	106	226	164	311	94	211	250	
<u>Hay Land</u>									
Average	232	266	370	372	477	231	298	371	1,365
High Grade	298	301	444	480	544	310	431	396	
Low Grade	197	207	299	303	363	225	267	286	
<u>Gravity Irrigated</u>									
Average	1,246	796	1,030	1,545	1,624	1,134	1,412	1,404	1,066
High Grade	1,523	939	1,109	1,747	1,843	1,247	1,562	1,592	
Low Grade	794	740	809	1,090	1,253	938	1,146	1,076	
<u>Center Pivot Irrigated<sup>3</sup></u>									
Average	771	678	956	877	1,484	813	1,023	1,286	
High Grade	902	761	1,064	1,062	1,666	838	1,235	1,415	
Low Grade	565	560	737	638	1,104	671	829	953	

<sup>1</sup>The terms, High Grade and Low Grade Lands, were interpreted by the individual reporter to represent an approximation of range in average values for each particular type of land in his area. No specific designation as to particular soil type or other quality classification was made.

<sup>2</sup>A simple unweighted average.

<sup>3</sup>Pivot not included in per acre value.



### Review and Outlook

Real output in Nebraska increased in April, with the state physical volume index recording a level which was 42.2 percent above its 1967 base-period level (see Table 2). This marked the second consecutive monthly rise in the index following a three-month drop due mainly to a decline in the index for state agricultural output. Despite these recent improvements, the Nebraska physical volume index in April was still significantly below its peak level of 148.9 recorded in November of 1977.

The 0.3 percent April increase in state economic activity was broadly based, with three of the five sectors in the state economy registering gains for the month. Those sectors, and their March-to-April increases, were agriculture (+5.0 percent), construction

(+1.5 percent), and manufacturing (+0.4 percent). The index for government sector output was unchanged for the month, and distributive sector output fell 0.8 percent.

April marked the beginning of the fourth year of the current economic expansion for both the national and state economies. Since peacetime expansions in the United States have averaged 34 months in duration in the post-World War II period, activity levels in both the state and national economies warrant close monitoring throughout the remainder of the year.

The data indicate softness in the Nebraska and national economies early in the year, followed by a resumption of economic growth. Since the effects of the coal strike and harsh winter weather depressed measures of

(Continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

#### ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR				
April, 1978	Current Month as Percent of Same Month Previous Year		1978 Year to Date as Percent of 1977 Year to Date	
	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	110.4	110.9	109.8	110.5
Agricultural	117.9	113.3	116.7	107.5
Nonagricultural	109.3	110.8	108.8	110.6
Construction	103.3	114.7	105.4	114.3
Manufacturing	114.0	109.3	111.8	110.5
Distributive	108.2	112.1	107.9	111.1
Government	109.1	107.5	109.6	107.7
Physical Volume	101.9	104.1	102.1	103.9
Agricultural	101.3	104.2	106.3	102.8
Nonagricultural	102.0	104.1	101.5	103.9
Construction	92.0	102.1	94.6	102.5
Manufacturing	107.1	102.7	104.8	103.8
Distributive	101.5	105.1	101.2	104.2
Government	100.5	103.7	100.8	103.2

2. CHANGE FROM 1967		
Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	284.1	259.1
Agricultural	270.5	256.4
Nonagricultural	286.4	259.2
Construction	321.9	239.5
Manufacturing	312.1	242.3
Distributive	274.8	272.0
Government	286.9	253.5
Physical Volume	142.2	133.3
Agricultural	127.0	120.9
Nonagricultural	144.8	133.8
Construction	141.2	105.0
Manufacturing	152.8	120.6
Distributive	143.5	142.0
Government	140.4	141.3

#### 3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

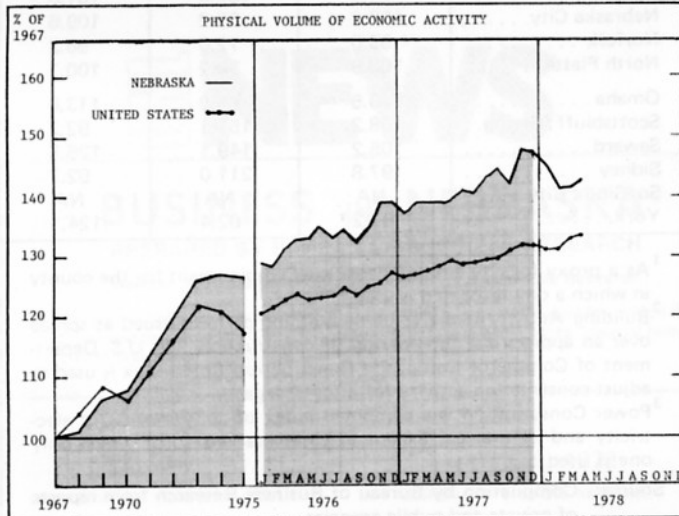
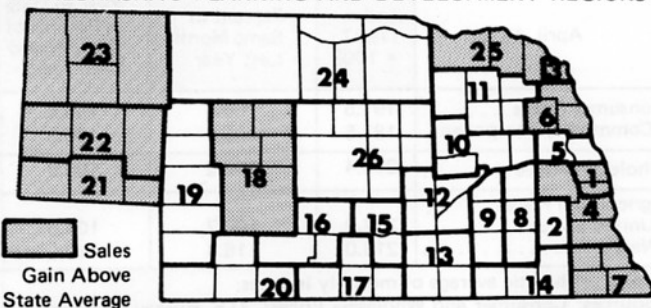
Region Number <sup>1</sup> and City	City Sales <sup>2</sup>		Sales in Region <sup>2</sup>	
	Apr. 1978 as percent of Apr. 1977	Apr. 1978 as percent of Apr. 1977	Year to date '78 as percent of Year to date '77	Year to date '78 as percent of Year to date '77
<i>The State</i>	100.7	102.1		99.4
1 Omaha	104.2	104.8		105.3
Bellevue	98.2			
2 Lincoln	98.4	98.9		94.6
So. Sioux City	96.3	106.4		104.8
4 Nebraska City	98.9	103.7		102.9
5 Fremont	92.9	98.8		97.4
Blair	98.7			
6 West Point	128.6	119.7		102.8
7 Falls City	98.7	106.4		101.2
8 Seward	108.7	95.6		94.0
9 York	84.1	91.0		86.8
10 Columbus	91.0	103.1		97.7
11 Norfolk	95.5	96.8		95.1
12 Grand Island	94.5	93.9		92.5
13 Hastings	92.5	100.7		93.8
14 Beatrice	94.4	101.7		96.7
Fairbury	113.1			
15 Kearney	101.4	102.1		94.2
16 Lexington	102.0	94.6		92.4
17 Holdrege	96.3	106.4		97.6
18 North Platte	109.1	111.3		102.8
19 Ogallala	104.4	103.8		97.2
20 McCook	103.9	102.2		99.2
21 Sidney	119.5	112.2		106.9
Kimball	113.0			
22 Scottsbluff/Gering	103.5	106.7		102.7
23 Alliance	123.2	113.3		111.4
Chadron	116.8			
24 O'Neill	99.1	89.2		87.0
25 Hartington	107.7	107.0		104.8
26 Broken Bow	96.2	93.7		92.8

<sup>1</sup> See region map below.

<sup>2</sup> Sales on which sales taxes are collected by retailers located in the state. Region totals include motor vehicle sales; city totals exclude motor vehicle sales.

Compiled from data provided by Nebraska Department of Revenue.

#### 1978 YEAR TO DATE AS PERCENT OF 1977 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(Continued from page 4)

economic performance early in 1978, and since a portion of the resumed economic expansion is, no doubt, "catch-up" growth, there may be some merit in averaging activity levels for the first two quarters of 1978. While most second-quarter figures have not yet been published, it appears that the growth rates for both the Nebraska and U.S. economies in the first half of 1978 will be below those recorded in 1977.

The rise in the index of state agricultural output was in sharp contrast to declines registered in recent months. Seasonally adjusted Nebraska cash farm marketings in April were \$393.6 million and, with the exception of marketings in November of last year, reached their highest level since January, 1974. Cumulative marketings in the state for the first four months of the year were 16.7 percent above 1977 levels. Prices received by Nebraska farmers increased for the seventh consecutive month and, on a seasonally adjusted basis, were 5.4 percent above their March level.

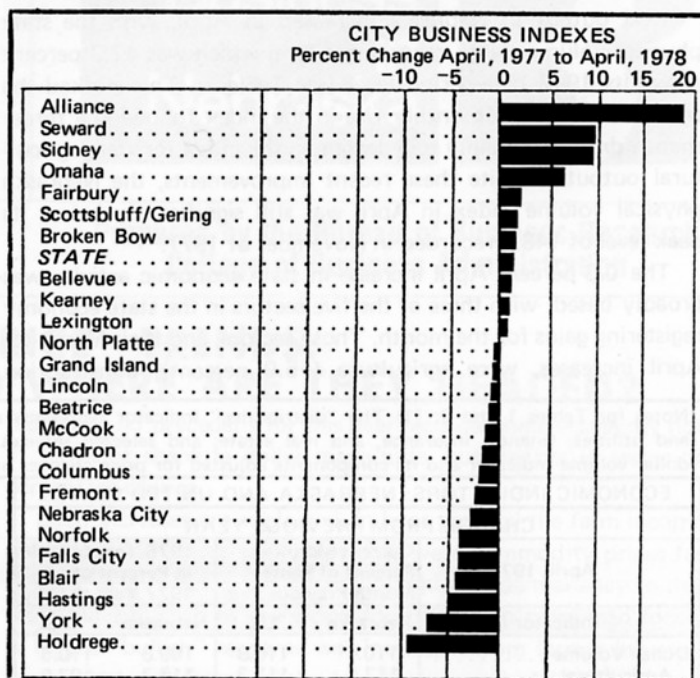
While the index of construction for the state remains significantly below its peak level recorded in April, 1977, output in this sector has increased in three of the first four months of 1978. This is somewhat surprising, given the performance of this sector in the last eight months of 1977 and recent increases in mortgage rates. A sharp jump in seasonally adjusted residential construction was responsible for the growth of Nebraska construction activity in April.

The manufacturing sector continues to be a source of strength in the Nebraska economy. The index of activity for this sector has increased for six consecutive months, and in April was 52.8 percent above its 1967 base-period level (refer to Table 2). This represents a new peak level for the Nebraska manufacturing index.

Distributive sector output, which grew 6.0 percent last year, fell for the third time in four months in April. On a year-to-date basis, retail sales in the state (adjusted for price changes) were slightly lower than in 1977. Only ten of the state's twenty-six planning and development regions experienced growth in price-adjusted sales relative to sales in the first four months of 1977.

The city business indexes for April reveal that only ten of twenty-five reporting cities registered increases in economic activity relative to April, 1977. Alliance, with a 19.1 percent increase, once again posted the largest gain. Heavy construction activity accompanied by sharp increases in price-adjusted retail sales and employment testify to the rapid growth occurring in this Panhandle city. Other Nebraska cities with significant April-to-April growth were Seward (+9.8 percent), Sidney (+9.4 percent), and Omaha (+6.5 percent).

W. D. G.



Source: Table 4 below.

4. APRIL CITY BUSINESS INDICATORS			
The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment <sup>1</sup>	Building Activity <sup>2</sup>	Power Consumption <sup>3</sup>
<i>The State</i> .....	101.3	100.6	105.7
Alliance .....	108.7	449.2	98.2
Beatrice .....	97.0	130.9	113.1
Bellevue .....	110.5	63.1	98.1*
Blair .....	99.1	42.4	104.1
Broken Bow .....	98.3	221.1	103.4
Chadron .....	88.2	51.7	89.2
Columbus .....	101.9	68.2	124.0
Fairbury .....	97.2	60.2	101.2*
Falls City .....	94.4	69.7	102.8
Fremont .....	98.1	157.7	92.3*
Grand Island .....	98.5	125.2	113.4
Hastings .....	96.6	93.7	96.7
Holdrege .....	100.2	27.5	72.3
Kearney .....	95.5	170.1	101.6
Lexington .....	108.8	46.1	97.9
Lincoln .....	101.1	83.1	101.6
McCook .....	91.3	102.3	101.6
Nebraska City .....	103.6	35.2	109.6
Norfolk .....	99.0	72.0	96.2
North Platte .....	102.9	30.2	100.7
Omaha .....	110.5	85.2	113.0
Scottsbluff/Gering ..	98.2	151.1	92.2
Seward .....	105.2	149.1	125.5
Sidney .....	97.8	211.0	92.7
So. Sioux City .....	NA	NA	NA
York .....	97.2	62.4	124.1

<sup>1</sup> As a proxy for city employment, total employment for the county in which a city is located is used.

<sup>2</sup> Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

<sup>3</sup> Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked \* for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES			
April, 1978	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices .....	191.5	106.6	106.6
Commodity component .....	183.5	105.9	105.8
Wholesale Prices .....	206.4	106.2	106.3
Agricultural Prices			
United States .....	212.0	108.7	104.6
Nebraska .....	213.0	116.4	110.2

\*Using arithmetic average of monthly indexes.  
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

(Continued from page 3) Farm mortgage lenders can be expected to make closer reviews of loan applications before approving loans and releasing funds. Repayability must be demonstrated by the borrower and documented by the lender as the key element in any land mortgage loan request.

#### WHAT'S AHEAD IN THE LONG RUN?

A purchase of farmland is a purchase of a future income flow. For most investors it represents a purchase of a flow into the more distant future. So the question must be raised: What lies ahead in the long run? And perhaps a more pointed question: Are we now seeing the beginning of a "bust"?

Some danger signals exist which would suggest a rather substantial downward adjustment in farmland values in the coming years. One concern is the relatively low income-producing capacity (annual) in light of current market values. A chronic condition of low farm income with imbalance relative to asset value would inevitably force more liquidation sales. Moreover, there is a second concern: the high level of debt per dollar of farm income. The amount of added debt as a percent of net farm income exceeded 60 percent in 1977. Previous to 1975, that ratio had never exceeded 30 percent. The point is this. While rapid increases in land values have allowed most farmers to maintain a healthy debt to equity position, the farm income required to service that debt often has not kept pace. The heavily indebted owner may, indeed, face some difficult years ahead. If there are several such owners in a local area, a significant downward adjustment of land values in that locality may well occur.

In general, however, there are other factors to consider which would suggest more optimism, implying a modest upward trend in land values rather than a bust. First, consider that the majority of farmer owners are still financially sound. These might be called the established farmers. They have benefited from the land value climb of recent years and now have a favorable asset base. Their debt loads are modest. Even their recent income position and the associated cash-flow potential have not been that bad. Remember, also, that many of today's farmers and their families earn income off the farm. In part, that cushions the years when debt financing must take a bigger share of farm income. This generally strong

financial position of the major buyer group would suggest that substantial liquidation and a severely depressed market are not likely.

A second factor is the impact of the farmer and nonfarmer investor. Interest in farmland investment tends to increase during inflationary periods. The ability of land to maintain its value is a historical fact. Recent reports would indicate that we are moving into higher inflation rates—possibly of double-digit magnitude. Thus, land values may be "bumped" upward in the years ahead.

Third, it is necessary to consider the host of institutional factors which now make farmland a favorable investment alternative and probably will continue to do so. Tax rules tend to treat farmland investment favorably, particularly for investors in the higher income tax brackets. There is no doubt that demand for tax shelters sometimes overrides the annual farm income flow consideration which has been so religiously used to determine what land "ought" to bring in the marketplace.

Financial institutions serving the agricultural sector remain sound. While their lending policies are increasingly more sophisticated and cautious, money is available. There is no reason to believe this will not continue.

Agricultural policy developments in the form of price supports would also suggest some guarded optimism in the land market. To the extent that such efforts reduce income uncertainty, there will be a tendency to capitalize this into the value of the land. Moreover, long-run export potential for U.S. farm products appears favorable.

To sum up, a "bust" is a possibility in the longer run, but it does not appear likely. Several factors suggest stability or strength in farmland values, even in an otherwise unstable general economy. Land will probably continue to climb in value. However, the expected rate of increase must be considerably more modest than that of the "boom era" just ended.

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# UNIVERSITY OF NEBRASKA NEWS

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