

Prepared by the Bureau of Business Research
College of Business Administration
University of Nebraska-Lincoln

UNITED STATES WHEAT EXPORTS: PAST AND PROSPECTS

In 1972, the Russian wheat crop failed. The USSR purchased large amounts of American grain. U.S. wheat exports doubled from 1971 to 1972, primarily because of the Russian sales.

World population growth and crop failures in the 1970s, particularly in the less developed countries (LDCs), led to speculation that famine would occur in the 1970s and 1980s.

Crop failures and population growth presented a very rosy picture for America's breadbasket. The demand for wheat and coarse grains was expected to raise prosperity to new levels in America's grain producing areas. Government, another impediment to growth, also seemed to be loosening its hold on agriculture.

This optimistic outlook for the grain producing areas of America failed to materialize—dire predictions of inadequate food supplies and global famine were not fulfilled.

This article reviews American wheat exports from 1971 to 1983. World trade in wheat has expanded since the early 1970s. American exports are well above 1972 levels. However, Canada, Argentina, Australia, and Western Europe have entered the market and are aggressively claiming an increased share of the world wheat trade.

U.S. WHEAT EXPORTS

An analysis of United States wheat exports in the 1970s and 1980s reveals two trends. First, U.S. wheat exports have increased sharply following the Russian crop disaster, from 18.1 million metric tons in 1971/72 to 39.4 million metric tons in 1982/83. American trade in wheat has increased 117.7 percent since 1971 (Table 1).

A second important trend is an alteration in the destination of American wheat exports. Western Europe took nearly 10 percent of U.S. wheat exports in the early 1970s (1.8 million metric tons), but only 2.7 percent of total American exports in 1982/83 (1.1 million metric tons).

Less developed countries (LDCs) are the most important customer for U.S. wheat. Exports to LDCs increased from 11.6 million metric tons in 1971/72 to 28.9 million metric tons in 1982/83. Nearly three quarters of America's wheat exports go to less developed countries.

OPEC countries have also increased their purchases of American wheat dramatically since the mid-1970s. At the beginning of the 1970s, OPEC countries imported 2.5 million metric tons of wheat. By 1982/83, this figure had increased to 5.5 million metric tons.

Russian purchases of American wheat have been rather erratic. At the beginning of the decade, Russia imported 830,000 metric tons of U.S. wheat. This increased sharply in 1972/73 to 10.0 million metric tons. Russian imports then dropped to between 1.3 and 2.2 million metric tons per year, until climbing to nearly 6.0 million metric tons in 1981/82.

Eastern Europe was the destination of 2.0 percent of American wheat exports in 1971/72, and 1.0 percent in 1982/83. Eastern Europe also has a history of erratic changes in its requirements for wheat imports. In 1971/72, Eastern Europe imported 351,000 metric tons of American wheat, compared with 407,000 metric tons in 1982/83. Exports to Eastern Europe from the U.S. have been as high as 2.6 million metric tons in 1979/80. Incidentally, the large surge in exports to Eastern Europe in 1979/80 coincided with the embargo placed on shipments to Russia.

Japan is one of America's more stable buyers of wheat. Japanese purchases have ranged around 3.0 million metric tons throughout the 1970s and early 1980s.

The shift in distribution of American wheat exports offers an opportunity and a threat to U.S. wheat production. The opportunity is the promise of greater exports since population and income are expanding rapidly in the less developed countries. Competition from other suppliers is a threat to American exports. Subsidies from European producers will compete directly with American exports. The desire of the LDCs to improve domestic wheat production will also challenge American grain exports.

WORLD WHEAT PRODUCTION, USAGE, AND INVENTORIES

World wheat production has increased sharply since the early 1970s. Information in Table 2 indicates world production has increased by about 140 million metric tons from 1972 to 1983.

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TABLE 1

U.S. WHEAT EXPORTS TO SELECTED MARKETS
(in thousand metric tons)

Crop Year	World	EC-10	Eastern Europe	USSR	Japan	OPEC	LDC'S
1971/72	18,089.6	1,778.0	350.9	830.1	2,655.8	2,470.4	11,616.6
1972/73	36,880.3	2,609.6	960.4	10,035.1	3,480.3	2,866.6	16,265.5
1973/74	27,495.5	1,138.4	867.7	1,329.1	2,969.4	3,196.7	18,238.9
1974/75	30,137.8	2,301.4	219.5	2,246.1	3,114.3	3,966.7	21,594.2
1975/76	30,818.6	2,248.6	1,288.3	3,046.1	3,264.6	3,305.4	20,593.8
1976/77	24,940.8	1,119.8	913.2	3,008.2	3,365.6	4,063.4	15,869.7
1977/78	33,649.9	2,329.2	913.6	3,413.9	3,178.7	5,020.2	22,183.8
1978/79	33,431.5	2,335.1	791.0	3,840.7	3,342.0	4,297.6	19,668.4
1979/80	38,334.8	2,889.2	2,624.0	2,262.0	3,275.6	4,106.4	21,963.7
1980/81	43,678.1	1,873.2	733.0	3,693.1	3,420.1	4,943.6	25,243.4
1981/82	45,818.9	1,893.8	431.2	5,974.8	3,319.1	4,543.7	24,897.5
1982/83	39,361.2	1,072.5	406.6	2,980.0	3,390.9	5,545.0	28,885.7

PERCENTAGE OF U.S. WHEAT EXPORTS
by Crop Year
for Selected Markets

Crop Year	World	EC-10	Eastern Europe	USSR	Japan	OPEC	LDC'S
1971/72	100.0%	9.8%	1.9%	4.6%	14.7%	13.7%	64.2%
1972/73	100.0%	7.1%	2.6%	27.2%	9.4%	7.8%	44.1%
1973/74	100.0%	4.1%	3.2%	4.8%	10.8%	11.6%	66.3%
1974/75	100.0%	7.6%	0.7%	7.5%	10.3%	13.2%	71.7%
1975/76	100.0%	7.3%	4.2%	9.9%	10.6%	10.7%	66.8%
1976/77	100.0%	4.5%	3.7%	12.1%	13.5%	16.3%	63.6%
1977/78	100.0%	6.9%	2.7%	10.2%	9.5%	14.9%	65.9%
1978/79	100.0%	7.0%	2.4%	11.5%	10.0%	12.9%	58.8%
1979/80	100.0%	7.5%	6.9%	5.9%	8.5%	10.7%	57.3%
1980/81	100.0%	4.3%	1.7%	8.5%	7.8%	11.1%	57.8%
1981/82	100.0%	4.1%	0.9%	13.4%	7.2%	9.9%	54.3%
1982/83	100.0%	2.7%	1.0%	7.6%	8.6%	14.1%	73.4%

"Wheat" includes wheat flour and products. EC-10 = essentially the nations of Western Europe. OPEC = Organization of Petroleum Exporting Countries (major oil exporters except Mexico and the Soviet Union). LDCs = Less developed countries (Latin America, most of Asia, and Africa, excluding OPEC nations). Totals do not add because of double counting. Source = USDA Foreign Agricultural Service, *Foreign Agriculture Circular: Grains* (Washington, D.C.: GPO, 1984), January 17, 1984, p. 3.

(continued from page 1)

Production increases slowed following the 1978 crop year. Wheat production increased 4.5 percent per year between 1972 and 1978, but slowed to an annual 1.7 percent growth rate from 1978 to 1983.

U.S. production of wheat has increased by nearly 56.0 percent since 1972. Non-U.S. production has grown by nearly 39.0 percent in the same period. Production increases have outstripped consumption increases. During the interval from 1972 to 1983, production rose 41.0 percent and consumption grew 31.2 percent. The result is rising inventories. Inventories have nearly doubled—they have increased from 59.8 million metric tons in 1972 to 105.6 million metric tons in 1983. (See Table 2.) In 1972, one-quarter of the world's wheat inventory was in the United States: in 1983, approximately 40 percent was in the hands of Americans. The U.S. remains the world grain storehouse.

America's main wheat competitors are Canada, Australia, Argentina, and Western Europe. Canadian exports have increased from 15.6 million metric tons in 1972 to 21.5 million metric tons in 1983. Australia has more than doubled exports, from 5.6 million metric tons to 11.5 million metric tons. Argentina has

experienced similar strides, growing from 3.4 million metric tons to 8.0 million metric tons. Western Europe has expanded their exports from 6.8 million metric tons in 1972 to 15.5 million metric tons in 1983. American exports continue to dominate wheat trade, but they are losing ground. American exports grew from 31.8 million metric tons in 1972 to 38.1 in 1983. The growth of other countries in the wheat export trade is visible in Table 2.

American inventories of wheat have grown more rapidly than other countries. U.S. stockpiles in 1972 were 16.3 million metric tons, compared with 41.6 million metric tons in 1983, an increase of 155 percent. World stockpiles increased from 59.8 million metric tons in 1972 to 105.6 million metric tons in 1983.

Why haven't American exports fared as well as those of other nations? Several answers have been suggested. One factor is the changing relative currency values. The U.S. dollar has appreciated during the past four or five years, making other wheat relatively cheaper. Subsidies from producing nations to nations with limited capacity to pay have enhanced their exports. The quality of U.S. grain may also be a factor.

CONCLUSIONS

Wheat consumption during the past few years has expanded more rapidly than production. American producers have been successful in expanding wheat exports to fill this need, but American exports have not increased as fast as the combined exports of Canada, Australia, Argentina, and Western Europe. American wheat exports were greater than the combined exports of these competitors in 1972 (31.8 million metric tons compared to 31.4 million metric tons). In 1983, however, Canada, Western Europe, Australia, and Argentina exported more than the U.S.—56.5 million metric tons compared to 38.1 million metric tons. Any expansion of the world wheat trade due to poor crops in

major importing nations will likely benefit non-U.S. exporters as much as American exporters.

The destination of American wheat exports has changed during the past few years. Western Europe and Eastern Europe import less today than five or ten years ago. Russian trade remains erratic, but American exports to Japan and less developed countries show a consistent pattern of expansion over the past decade. America's most important wheat customers are the less developed countries, which receive nearly three-quarters of America's exports. The rising value of the U.S. dollar plus increased subsidies to wheat exports by certain creditors represent a threat to U.S. export interests.

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TABLE 2
World Wheat and Flour Trade
Years beginning July 1
(in millions of metric tons)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983*
EXPORTS												
Canada	15.6	11.5	11.2	12.1	12.9	15.9	13.5	15.0	17.0	17.6	21.2	21.5
Australia	5.6	5.4	8.2	7.9	8.5	11.1	6.7	14.9	10.6	11.0	8.5	11.5
Argentina	3.4	1.1	2.2	3.2	5.6	2.6	3.3	4.8	3.9	4.3	7.4	8.0
W. Europe**	6.8	5.8	8.3	9.5	6.3	6.3	8.8	10.4	14.7	15.5	15.5	15.5
Others	4.1	7.7	6.0	2.2	3.8	5.5	7.5	3.7	6.0	4.1	5.8	4.8
Subtotal	35.6	31.5	35.9	35.0	37.1	41.3	39.7	48.8	52.2	52.5	58.5	61.3
U.S.	31.8	31.1	28.0	31.7	26.1	31.5	32.3	37.2	41.9	48.8	39.9	38.1
World Total	67.3	62.6	63.9	66.7	63.1	72.9	72.0	86.0	94.1	101.2	98.4	99.4
U.S./World %	47.3	49.7	43.8	47.5	41.4	43.2	44.9	43.3	44.5	48.2	40.5	38.3
Canada/World %	23.2	18.4	17.5	18.1	20.4	21.8	18.8	17.4	18.1	17.4	21.5	21.6
Australia/World %	8.3	8.6	12.8	11.8	13.5	15.2	9.3	17.3	11.3	10.9	8.6	11.6
Argentina/World %	5.1	1.8	3.4	4.8	8.9	3.6	4.6	5.6	4.1	4.2	7.5	8.0
W. Europe/World %	10.1	9.3	13.0	14.2	10.0	8.6	12.2	12.1	15.6	15.3	15.8	15.6
PRODUCTION												
Canada	14.5	16.2	13.3	17.1	23.6	19.9	21.1	17.2	19.2	24.8	26.8	26.6
Australia	6.6	12.0	11.4	12.0	11.7	9.4	18.1	16.2	10.9	16.4	8.8	19.0
Argentina	6.9	6.6	6.0	8.6	11.0	5.7	8.1	8.1	7.8	8.3	14.5	11.5
W. Europe	51.3	50.8	56.7	48.5	50.7	47.7	50.3	48.8	55.1	54.4	59.6	58.2
Others	222.1	239.6	220.1	206.2	259.9	244.4	300.8	275.0	284.4	269.1	293.4	303.4
Subtotal	301.4	325.2	307.5	292.4	356.9	327.1	398.4	365.3	377.4	373.0	403.1	418.7
U.S.	42.0	46.4	48.9	57.8	58.3	55.4	48.3	58.1	64.6	76.2	76.4	65.5
World Total	343.4	371.6	356.4	350.2	415.3	382.5	446.7	423.4	442.1	449.2	479.5	484.2
U.S./World %	12.2	12.5	13.7	16.5	14.0	14.5	10.8	13.7	14.6	17.0	15.9	13.5
Canada/World %	4.2	4.4	3.7	4.9	5.7	5.2	4.7	4.1	4.3	5.5	5.6	5.5
Australia/World %	1.9	3.2	3.2	3.4	2.8	2.5	4.1	3.8	2.5	3.7	1.8	3.9
Argentina/World %	2.0	1.8	1.7	2.5	2.6	1.5	1.8	1.9	1.8	1.8	3.0	2.4
W. Europe/World %	14.9	13.7	15.9	13.8	12.2	12.5	11.3	11.5	12.5	12.1	12.4	12.0
CONSUMPTION												
U.S.	21.7	20.4	18.8	19.6	20.4	23.1	22.8	21.3	21.1	23.2	25.2	27.9
World Total	363.2	367.5	359.7	351.7	378.2	399.5	430.1	443.4	444.0	442.2	467.6	476.6
U.S./World %	6.0	5.6	5.2	5.6	5.4	5.8	5.3	4.8	4.8	5.2	5.4	5.9
ENDING STOCKS												
U.S.	16.3	9.2	11.7	18.1	30.3	32.0	25.1	24.5	26.9	31.7	41.9	41.6
World Total	59.8	66.0	62.7	62.2	99.3	82.3	100.9	81.0	79.0	86.1	98.0	105.6
U.S./World %	27.3	13.9	18.7	29.1	30.5	38.9	24.9	30.2	34.1	36.8	42.8	39.4

* Through October 14, 1983 "Wheat" includes wheat flour and products.

** Western Europe = essentially the European Community (EC)

Source = USDA Foreign Agricultural Service, *Foreign Agriculture Circular: Grains* (Washington, D.C.: GPO, 1983), various issues.

Review and Outlook

After some hesitation, Nebraska's economy joined the national recovery—net physical volume increased 1.0 percent on a month-to-month basis. Agriculture led the monthly improvement in the Nebraska economy.

Cash farm marketing receipts in January were \$637 million, up \$86 million from December (unadjusted for seasonal variations). Receipts were \$335 million below January 1983 levels. Nationally, cash farm marketings were \$11.9 billion in January, down slightly from December 1983 levels, and down \$2.5 billion January to January.

The Nebraska economy benefits from higher prices for agriculture commodities. On a month-to-month basis, prices received by Nebraska producers increased 1.5 percent, while on a year-to-year basis prices received by agriculture producers are up 9.1 percent.

Liquidation within the agriculture sector reflects the effects of high interest rates and the payment-in-kind (PIK) program. Continued high interest rates make it difficult for some producers to receive credit. In 1983, the PIK program provided

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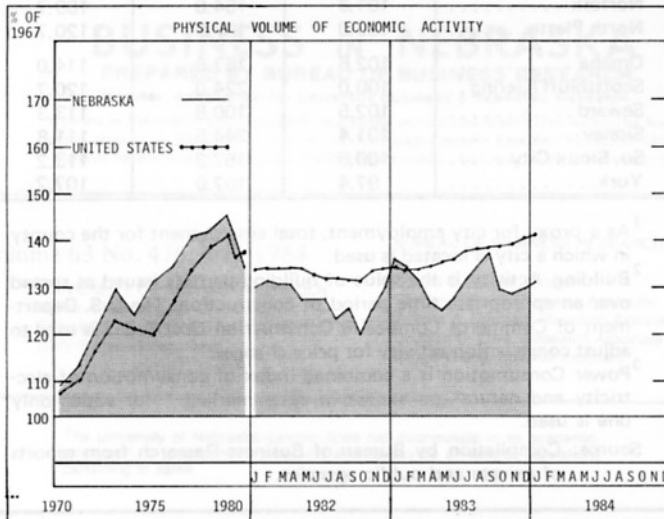
Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume 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				
January 1984	Current Month as Percent of Same Month Previous Year		1984 Year to Date as Percent of 1983 Year to Date	
	Nebraska	U.S.	Nebraska	U.S.
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	101.7	109.8	101.7	109.8
Agricultural	57.8	82.9	57.8	82.9
Nonagricultural	110.1	110.6	110.1	110.6
Construction	132.0	113.4	132.0	113.4
Manufacturing	117.2	113.9	117.2	113.9
Distributive	106.8	110.2	106.8	110.2
Government	112.6	106.2	112.6	106.2
Physical Volume	96.2	105.3	96.2	105.3
Agricultural	53.0	73.5	53.0	73.5
Nonagricultural	105.7	106.6	105.7	106.6
Construction	128.9	110.7	128.9	110.7
Manufacturing	114.1	111.4	114.1	111.4
Distributive	102.6	105.8	102.6	105.8
Government	103.8	99.7	103.8	99.7

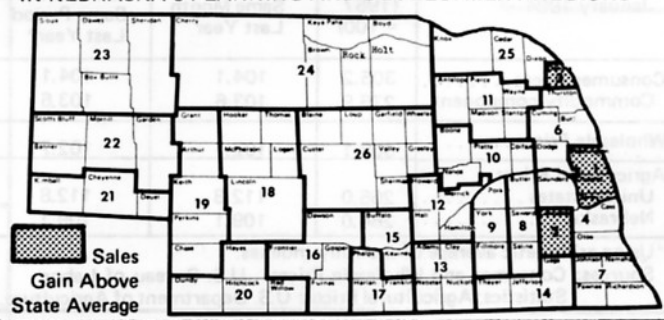
2. CHANGE FROM 1967			
Indicator	Percent of 1967 Average		U.S.
	Nebraska	U.S.	
Dollar Volume	375.8	407.9	
Agricultural	260.8	303.7	
Nonagricultural	393.1	411.2	
Construction	260.8	374.3	
Manufacturing	359.3	316.1	
Distributive	417.0	467.1	
Government	408.3	413.7	
Physical Volume	131.2	141.1	
Agricultural	98.8	114.6	
Nonagricultural	136.1	142.0	
Construction	76.7	110.1	
Manufacturing	145.7	125.7	
Distributive	136.6	153.1	
Government	150.7	146.2	

3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES			
Region Number and City	City Sales	Sales in Region	
	Jan. '84 as percent of Jan. '83	Jan. '84 as percent of Jan. '83	Year to date '84 as percent of year to date '83
<i>The State</i>	108.9	110.1	110.1
1 Omaha	120.4	120.3	120.3
Bellevue	124.4		
Blair	104.1		
2 Lincoln	109.6	110.6	110.6
3 So. Sioux City	106.5	110.8	110.8
4 Nebraska City	105.6	103.2	103.2
6 Fremont	104.8	107.5	107.5
West Point	104.5		
7 Falls City	93.4	98.3	98.3
8 Seward	113.5	108.4	108.4
9 York	98.5	103.9	103.9
10 Columbus	98.4	98.7	98.7
11 Norfolk	99.8	92.3	92.3
Wayne	98.3		
12 Grand Island	102.1	104.6	104.6
13 Hastings	106.4	108.4	108.4
14 Beatrice	98.2	97.5	97.5
Fairbury	87.7		
15 Kearney	103.6	105.6	105.6
16 Lexington	102.5	99.2	99.2
17 Holdrege	103.4	100.9	100.9
18 North Platte	104.9	104.4	104.4
19 Ogallala	108.9	101.6	101.6
20 McCook	104.2	101.1	101.1
21 Sidney	110.9	105.0	105.0
Kimball	92.8		
22 Scottsbluff/Gering	101.2	103.7	103.7
23 Alliance	98.9	98.4	98.4
Chadron	99.5		
24 O'Neill	99.8	104.6	104.6
25 Hartington	107.5	100.4	100.4
26 Broken Bow	102.0	99.8	99.8

State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.



1984 YEAR TO DATE AS PERCENT OF 1983 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

cash flow and reduced input costs, thereby decreasing the need to borrow. With the end of PIK and a slight rise in interest rates, some producers have been forced to liquidate. The impact of two years of liquidation are now being felt, because the PIK program limited liquidation in 1983.

The nonagriculture component of the Nebraska economy was unchanged according to the Bureau of Business Research's net physical volume index. Construction recorded a small increase, as did the government sector. These gains were offset by declines in manufacturing and distributive trade.

Construction recorded a 9.8 percent increase on a month-to-month basis. Output from the construction sector is above January 1983 levels, but is still depressed from 1970s levels.

Output from Nebraska's manufacturing sector declined 0.1 percent December-January. This decrease is too small to reflect any real trend. Output in the manufacturing sector has grown steadily in recent months, with employment up 8,000 from the recession low.

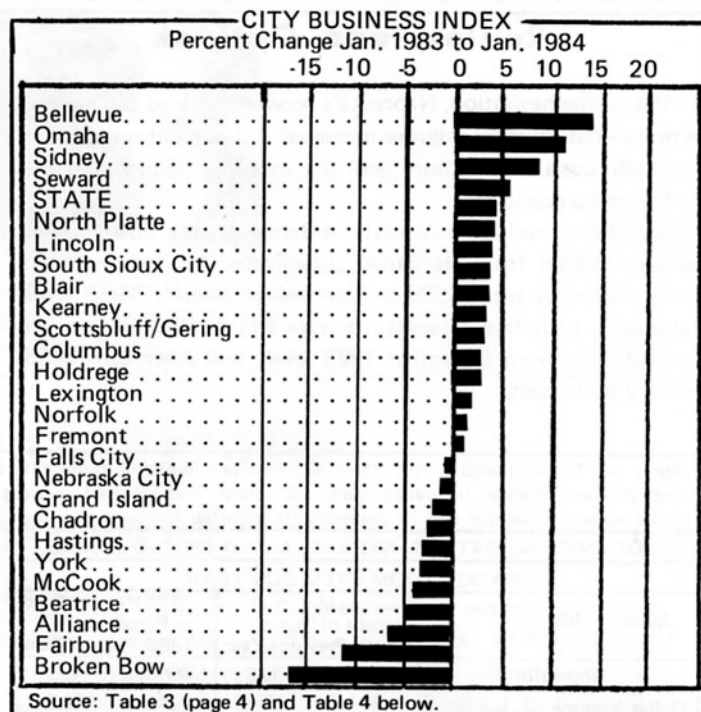
The distributive trade sector recorded a 0.3 percent decline on a month-to-month basis. This sector has shown little variation in the past 18 months.

Nebraska retail sales were \$670 million in January 1984, up from \$608 million in January 1983. Motor vehicle sales were \$80 million in January 1984, up more than 20 percent from January 1983's \$67 million. When adjusted for price changes, motor vehicle sales rose 7.6 percent on a year-to-year basis.

Nonmotor vehicle sales were up—\$590 million in January 1984 compared with \$542 million one year ago. Unadjusted nonmotor vehicle sales rose 8.9 percent, 5.1 percent when adjusted for price changes. The commodity component of the consumer price index increased 3.6 percent on a year-to-year basis. Inflation remains under control, although the strength of the national economy causes some concern about price increases later in 1984 and 1985.

Bellevue lead all Nebraska cities with a 13.9 percent increase in its city business index. Omaha recorded a 10.8 percent increase and Sidney an 8.0 percent increase. These three communities have consistently ranked near the top in the Bureau of Business Research's city business index. Seward recorded a 5.4 percent increase in its city business index, which placed it above the state average gain of 4.2 percent.

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4. January 1984 **CITY BUSINESS INDICATORS**

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment ¹	Building Activity ²	Power Consumption ³
<i>The State</i>	101.4	132.5	115.9
Alliance	99.5	38.2	110.1
Beatrice	102.4	45.6	115.8
Bellevue	102.6	222.4	96.3
Blair	99.3	215.0	110.6
Broken Bow	88.4	11.1	117.4
Chadron	102.8	66.5	NA
Columbus	109.9	111.8	114.3
Fairbury	103.4	26.0	169.0
Falls City	102.5	181.8	116.0
Fremont	100.8	98.8	114.5
Grand Island	103.1	59.0	119.1
Hastings	99.7	43.4	123.5
Holdrege	94.6	292.5	127.5
Kearney	102.8	146.3	126.1
Lexington	101.4	135.0	116.2
Lincoln	100.6	120.7	117.3
McCook	92.5	77.9	124.3
Nebraska City	104.5	46.4	125.8
Norfolk	101.3	154.0	109.7
North Platte	103.0	157.9	120.7
Omaha	102.6	167.6	114.0
Scottsbluff/Gering	100.0	224.0	120.7
Seward	102.5	100.8	113.3
Sidney	101.4	244.5	111.8
So. Sioux City	100.6	157.2	113.2
York	97.4	107.0	107.2

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

²Building 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.

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

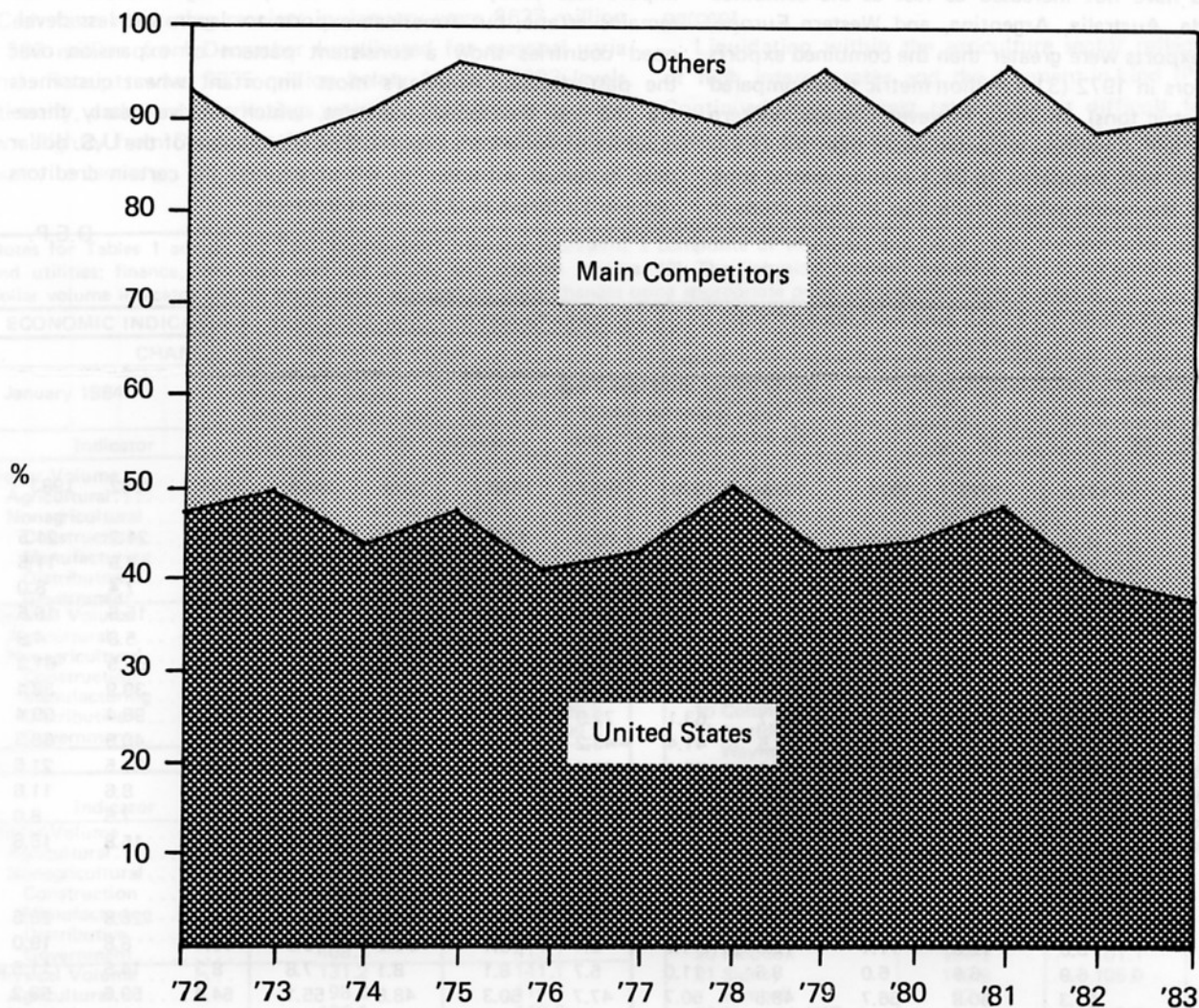
Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES

January 1984	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	305.2	104.1	104.1
Commodity component	276.8	103.6	103.6
Wholesale Prices	308.1	102.7	102.7
Agricultural Prices			
United States	265.0	112.8	112.8
Nebraska	264.0	109.1	109.1

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

World Wheat and Flour Trade
Percent of Total
1972-1983



BUSINESS IN NEBRASKA

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