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EC.70-841

North Central
Regional Publication No. 28

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BACKGROUND DATA:

IMPORTANCE OF THE North Central Region in the U.S. & World Marketing of Agricultural Products

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E. C. 70-841



Cooperative Extension Service, University of Nebraska
College of Agriculture and Home Economics,
and U.S. Department of Agriculture Cooperating
E. F. Frolik, Dean J. L. Adams, Director

BACKGROUND DATA: IMPORTANCE OF THE NORTH CENTRAL REGION IN THE U. S. & WORLD MARKETING OF AGRICULTURAL PRODUCTS

By Luc S. Muermans^{1/}

Introduction

The United States is the world's leading exporter of agricultural products. In fiscal 1968 (ending June 30), nearly one-fifth of the world's agricultural exports were provided by the United States.

The United States farmer has an important stake in foreign markets. In recent years about one-sixth of U.S. farm income has been from sales of agricultural products in foreign markets. Two-thirds of U.S. wheat production was exported in fiscal 1968 (Figure 1), accounting for 38% of the world's wheat and flour exports. Moreover, soybean (including soybean oil) exports accounted for 33% of total U.S. production (Figure 1).

This report shows:

The relationship of the North Central Region's agricultural exports to total United States agricultural exports.

The distribution of agricultural exports among the North Central Region States.

In this report five major products are considered:

Meat products.

Feed grains.

Dairy products.

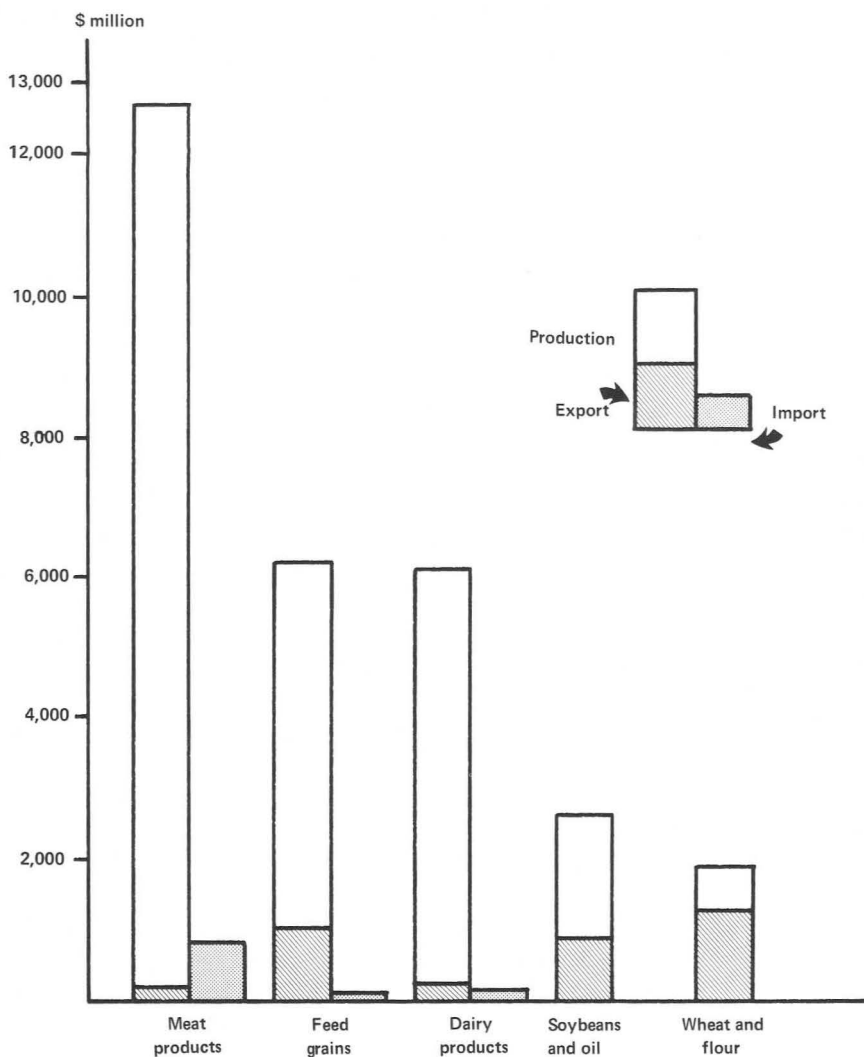
Soybeans and soybean oil.

Wheat and flour.

The world export price (official basis for valuation of U.S. exports), rather than the domestic price, is used to reflect regional and state shares in the total value of the agricultural export market. These values are the basis for Figures 1-13.

^{1/} Graduate Research Assistant, Department of Agricultural Economics, University of Nebraska. The author acknowledges the helpful suggestions of his adviser, Professor James Kendrick, and Herman Delvo, Department of Agricultural Economics, University of Nebraska.

Figure 1. U.S. production, exports and imports of five agricultural products, fiscal 1968.



Source: Appendix Tables 1 and 2. U.S. Department of Agriculture, *U.S. Agricultural Exports by Commodity Group, 1968*, Economic Research Service 2906-68(g).

United States Production: Exports and Imports

The 1968 value of production for the five agricultural products was \$29.6 billion. Meat production led all categories with a value of \$12.7 billion. The value of feed grain production was \$6.2 billion, followed by dairy products at \$6.1 billion. Soybeans and wheat amounted to \$2.6 billion and \$1.9 billion, respectively (Figure 1).

The export market is particularly important for wheat, feed grains and soybeans. In the U.S. each of the three categories has reached the exclusive "Billion Dollar Export Club."

In fiscal 1968 (ending June 30) U.S. wheat and flour exports totaled \$1.2 billion or 66% of total U.S. production. Top recipient countries were Japan, EEC (European Economic Community), India and the United Kingdom.

Exports of feed grains, excluding processed products, were valued at \$1.0 billion in 1968. Principal markets for feed grains included Japan and the EEC countries, especially the Netherlands, Germany and Italy.

Soybean and soybean oil exports totaled \$867.9 million, accounting for 33% of total U.S. production. Foreign demand for U.S. soybeans has increased sharply in recent years because of the rapid expansion of the livestock industry in Western Europe and Japan.

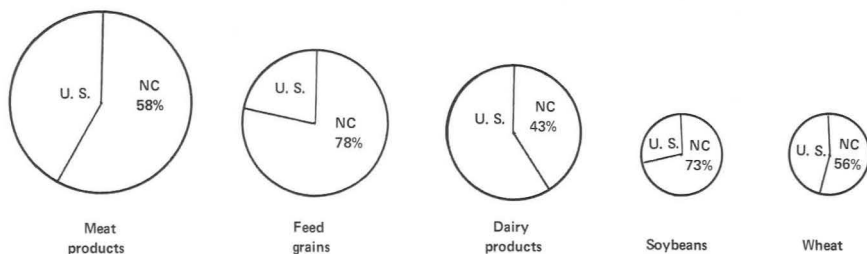
In addition to being a large exporter, the United States is also the third largest importer of agricultural products. Annual per capita imports of agricultural commodities were about \$23 in fiscal 1968. Meat products, at \$828.2 million, accounted for most of the agricultural imports.

The North Central Region: Share of United States Production

The North Central Region's share of the nation's production for the five major agricultural products was about \$17.8 billion.

The percentage of total U.S. production provided by the North Central Region varied considerably by class of product (Figure 2).

Figure 2. Production shares in percent, North Central and U.S. by principal types of production, 1968.



Source: Appendix Table 1.

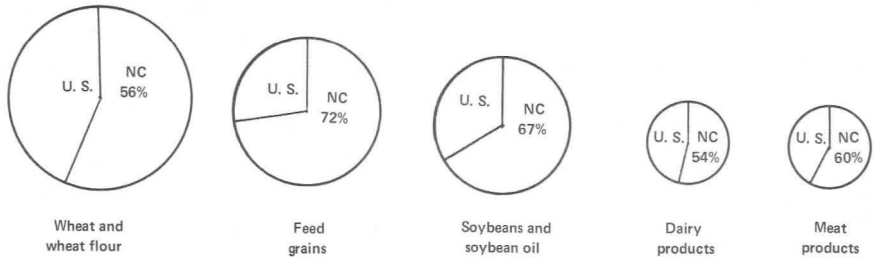
The North Central Region accounted for more than 75% of the feed grains produced in the United States in fiscal 1968, compared to only 43% for dairy products. About 73% of the U.S. soybean production was grown in the North Central Region, followed by meat production at 58% of the U.S. total. The North Central Region accounted for 56% of total U.S. wheat production.

Figure 3 shows the North Central Region's export share of total U.S. exports for the same commodities in fiscal 1968.

The North Central Region accounted for about 64% of total U.S. exports for the five major categories of agricultural products.

The North Central Region supplied nearly three-fourths (72%) of the feed grains, two-thirds (67%) of soybeans (including soybean oil) and 60% of meat products. Moreover, it provided over half (56%) of the U.S. wheat and wheat flour exports, accounting for about 20% of world wheat and wheat flour exports in fiscal 1968.

Figure 3. North Central's export share of U.S. agricultural export by commodity, in percent, 1967-68.



Source: Appendix Table 2.

North Central Region: Production and Exports by Commodity and State

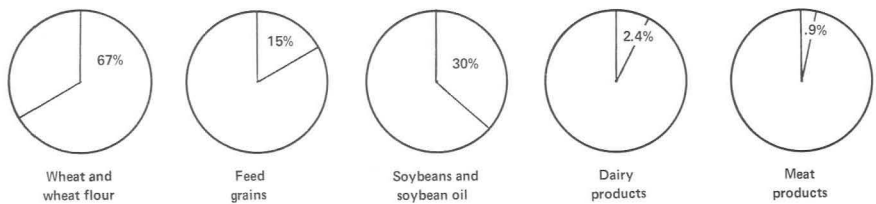
Figure 4 shows the North Central Region's agricultural exports as a share of its production by commodity group.

The North Central Region's exports in relation to its production are rather small for all except one category. In fiscal 1968, 67% of the North Central Regional wheat production was exported, followed by soybean and soybean oil at 30%.

Figures 3 and 4 show the North Central Region's important stake in the foreign market but also the relatively small export share of its farm output which is exported.

Production of selected commodities for the North Central Region is shown by state in Figure 5.

Figure 4. North Central's agricultural exports as share of its production by commodity group, in percent, 1968.



Sources: Appendix Tables 1 and 2.

Iowa led in value of agricultural production at \$3.3 billion, followed by Illinois at \$2.5 billion.

Seven states (Minnesota, Nebraska, Missouri, Wisconsin, Kansas, Indiana and Ohio) had production valued at between \$1.7 billion and 1.0 billion in fiscal 1968.

North Dakota and Michigan had production valued at \$682 million and \$562 million, respectively.

Exports for the North Central Region are shown by commodity and state in Figure 6 for fiscal year 1968.

Exports attributable to the North Central Region were valued at \$2.14 billion.

Illinois, with its export share of \$465.7 million (21.7%), was the North Central Region's chief export supplier.

Other major exporting states included Iowa (\$279.3 million) and Kansas (\$258.8 million). Many other states hold significant shares of the export market, particularly for certain products.

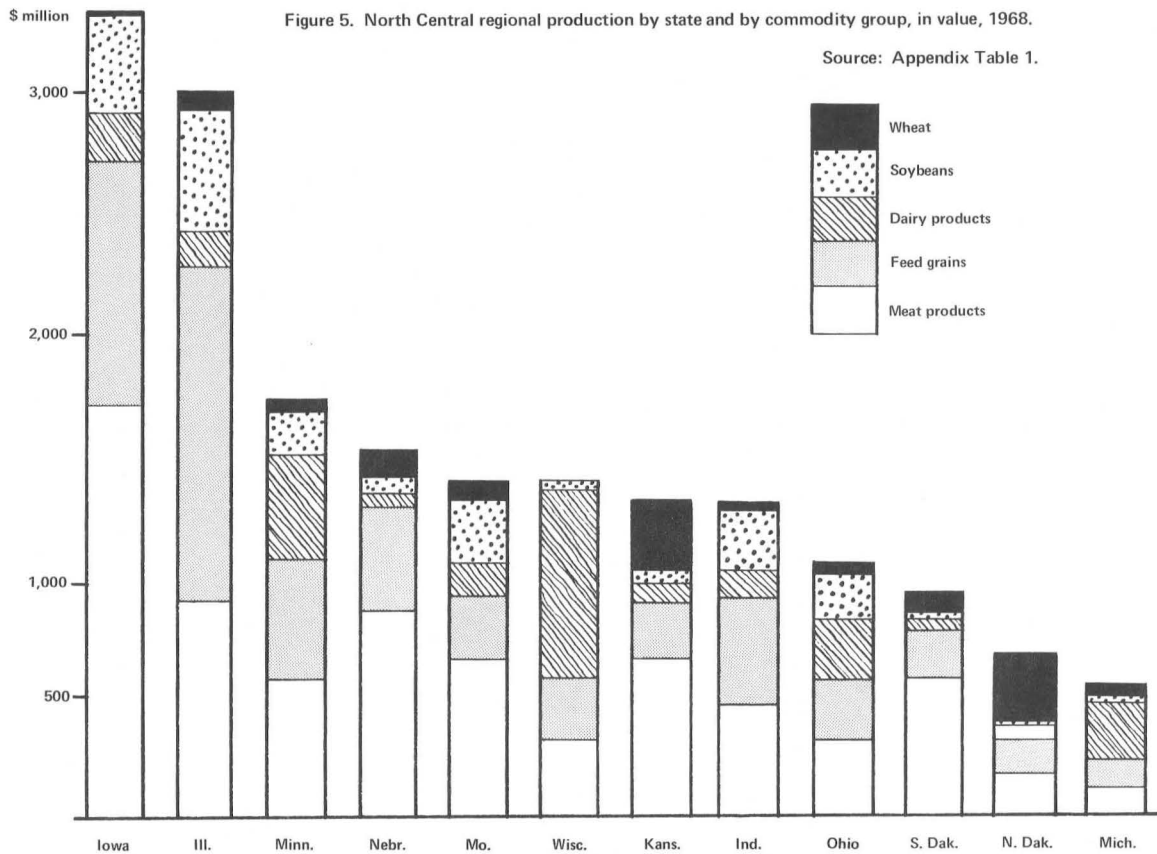
Figures 7 to 11 show North Central Region exports for specific commodities and by state in percent for fiscal 1968.

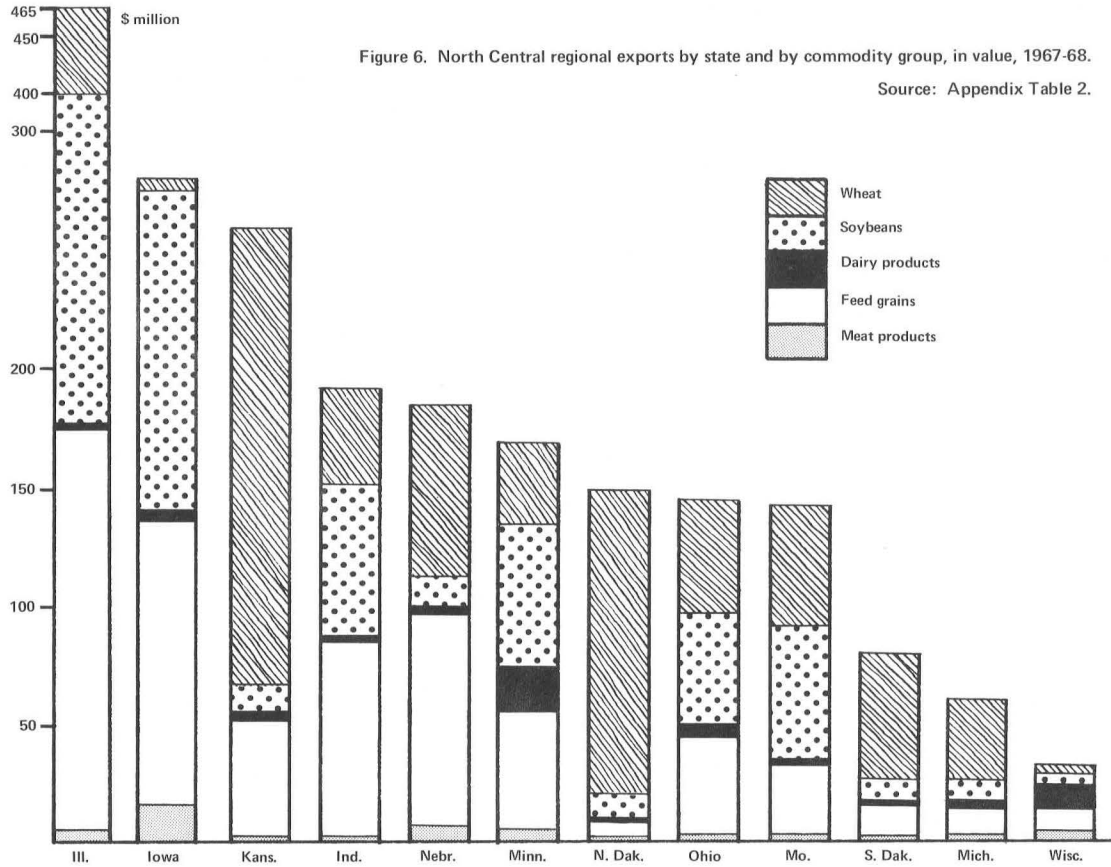
The largest exporters of wheat and wheat flour in 1967-68 were Kansas (26.4%), North Dakota (17.8%), Nebraska (10.1%) and Illinois (9.2%) (Figure 7). The smallest suppliers were Iowa (.4%) and Wisconsin (.2%).

The largest exporters of feed grains were Illinois (30.7%), Iowa (16.4%), Nebraska (12.3%) and Indiana (11.3%) (Figure 8).

Iowa dominated the region's meat export with over one-fourth (27.7%) of the region's total (Figure 9). Nebraska (14.3%) and Minnesota (10.5%) were followed by Illinois (8.4%) and Ohio (7.0%).

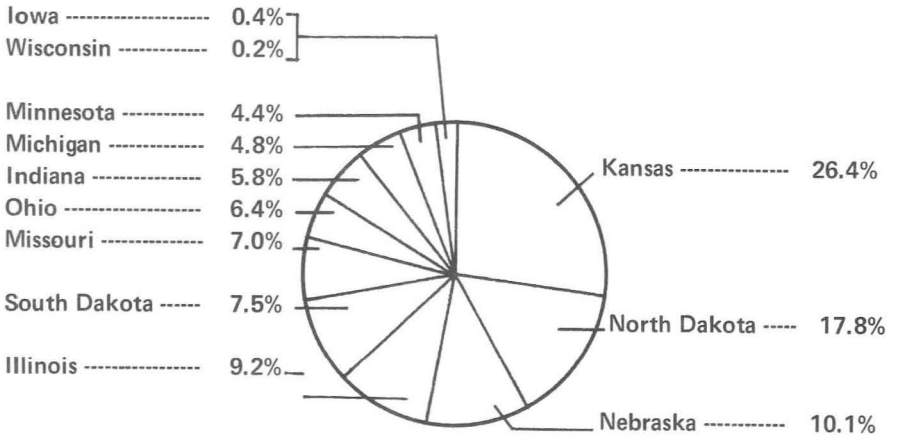
Minnesota, with its export share of 31.2%, was the region's leading exporter of dairy products (Figure 10). Wisconsin ranked second with 24.4%. Iowa and Ohio accounted for 11.0% and 10.4%, respectively. The remaining eight states accounted for 23.0% of dairy product exports.





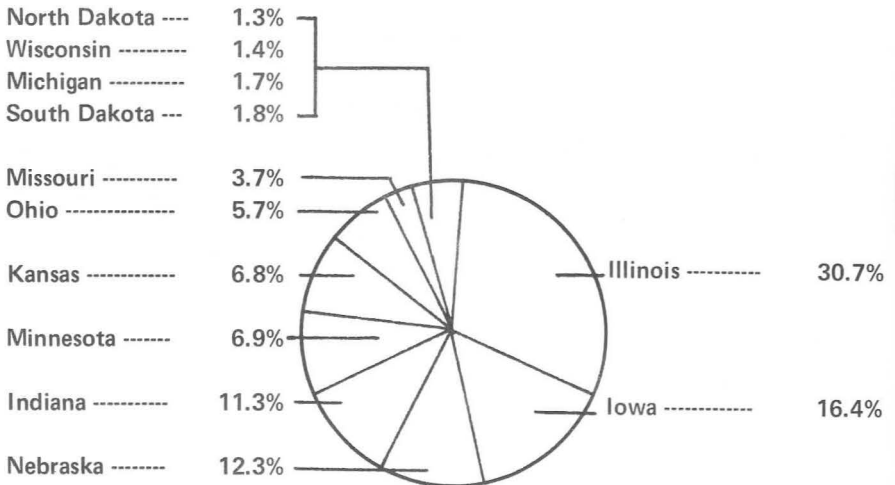
Illinois (29.5%) was the region's chief export supplier of soybeans and soybean oil (Figure 11). Iowa ranked second with 23.0%. Indiana, Minnesota and Missouri each accounted for about 10.0% of soybean and soybean oil exported from the region. The remaining seven states accounted for about 16.0%.

Figure 7. Export shares of wheat and wheat flour by state in percent.



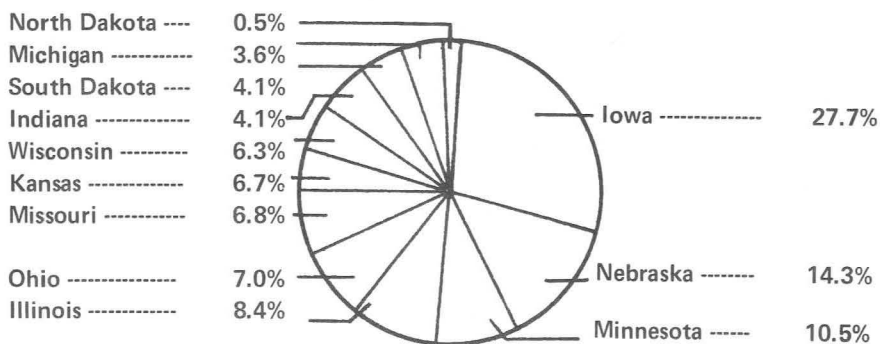
Source: Appendix Table 2.

Figure 8. Export shares of feed grains by state in percent.



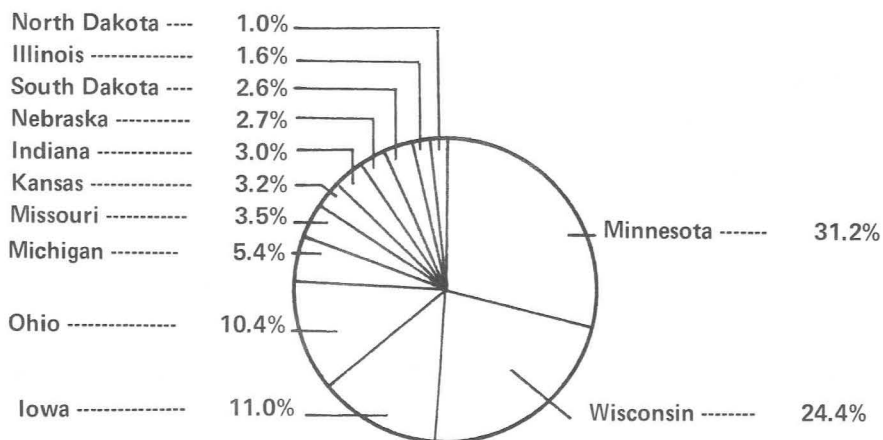
Source: Appendix Table 2.

Figure 9. Export shares of meat products by state in percent.



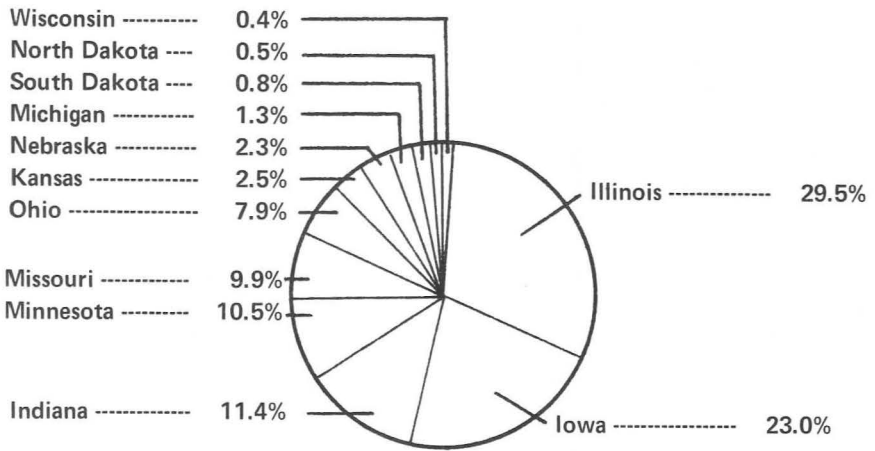
Source: Appendix Table 2.

Figure 10. Export share of dairy products in percent and by state, fiscal 1968.



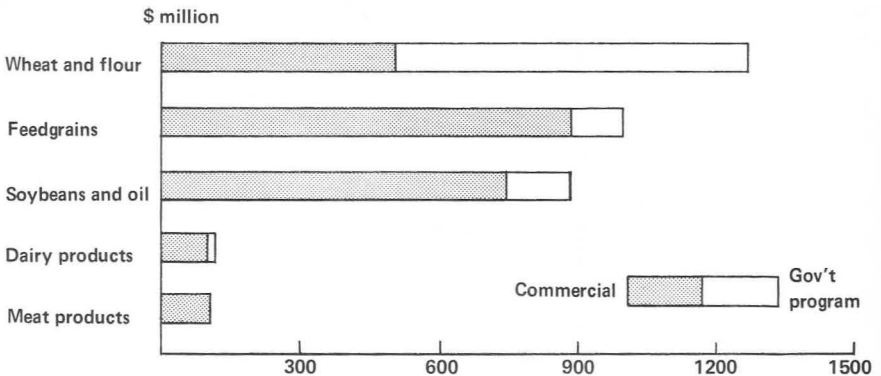
Source: Appendix Table 2.

Figure 11. Export share of soybeans and soybean oil in percent and by state.



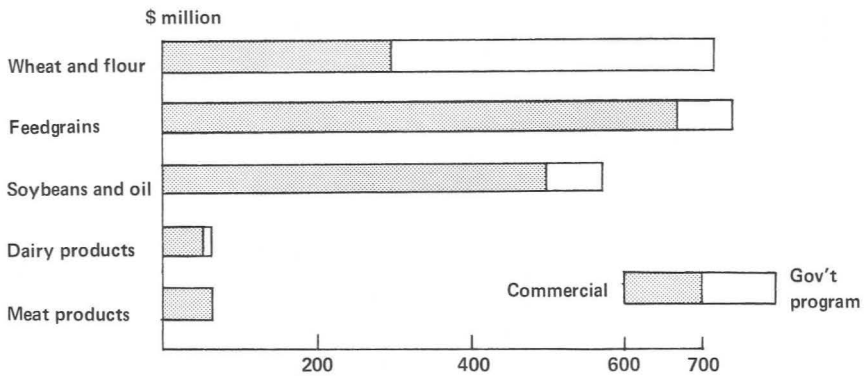
Source: Appendix Table 2.

Figure 12. U.S. agricultural exports, by commodity group, fiscal 1968.



Source: Rahe, Dewain H. and Issac E. Lemon, *U.S. Agricultural Export Shares by Region and State, Fiscal Year 1968*, Trade Statistics and Analysis Branch, Foreign Development and Trade Division, Economic Research Service, U.S.D.A., ERS-Foreign-241, November 1968.

Figure 13. North Central regional exports, by commodity group, fiscal 1968.



Source: Rahe, Dewain H. and Issac E. Lemon, *U.S. Agricultural Export Shares by Region and State, Fiscal Year 1968*, Trade Statistics and Analysis Branch, Foreign Development and Trade Division, Economic Research Service, U.S.D.A., ERS-Foreign-241, November 1968.

Commercial vs. Government Financed Exports

Agricultural products are financed by commercial sales for dollars and government-financed programs. About 67% of U.S. agricultural exports are sold through commercial channels (Figure 12).

However, the proportion moving through commercial channels varies by commodity groups. All of the meat products exported from the United States move through commercial channels, while only about 40% of wheat and wheat flour exports move through these channels.

Exports from the North Central Region by type of sale follow the same pattern as for the United States (Figure 13).

Commercial sales constituted over 70.3% of the total value of products exported from the North Central Region. The North Central Region exported \$719.1 million of wheat and flour, of which only slightly more than 39% was sold through commercial channels. Feed grains, which constituted the region's highest commodity export, amounted to \$735.2 million, almost entirely commercial sales.

Summary

The United States is the world's leading exporter of agricultural products. In fiscal 1968, nearly one-fifth of the world's agricultural exports was provided by the U.S.

In recent years about one-sixth of U.S. farm income has been from sales of agricultural products in foreign markets.

The North Central Region's share of the nation's production for the five major agricultural products in fiscal 1968 was about 60% (\$17.8 billion). The North Central Region accounted for about 64% of total U.S. exports for the five major categories of agricultural products (\$2.1 billion). However, the North Central Region's export in relation to its production was rather small for all except one category (wheat and wheat flour).

About 67% of U.S. agricultural exports were sold through commercial channels. In the North Central Region, commercial sales constituted about 70.3% of the total.

Appendix Table 1
Value of production for five selected agricultural commodity groups
in the North Central Region, by state and commodity, fiscal 1968.

Region and state	Meat products	Feed grains	Dairy products	Soy-beans	All wheat	Total
----- (million dollars) -----						
Corn Belt:						
Ohio	316.2	271.6	250.2	163.9	51.3	1,053.2
Indiana	466.5	439.3	130.7	225.3	39.4	1,301.2
Illinois	848.2	986.7	150.8	500.9	63.2	2,549.8
Iowa	1,714.6	1,000.6	221.2	436.0	2.3	3,374.7
Missouri	685.4	279.3	145.7	241.5	50.2	1,402.1
	<u>4,030.9</u>	<u>2,977.5</u>	<u>898.6</u>	<u>1,567.6</u>	<u>206.4</u>	<u>9,681.0</u>
Lake States:						
Michigan	137.2	113.4	248.0	28.9	34.1	561.6
Wisconsin	335.3	238.2	817.3	8.3	2.3	1,401.4
Minnesota	592.1	506.0	432.2	172.3	45.1	1,747.7
	<u>1,064.6</u>	<u>857.6</u>	<u>1,497.5</u>	<u>209.5</u>	<u>81.5</u>	<u>3,710.7</u>
Northern Plains:						
North Dakota	199.4	139.1	40.2	8.0	295.0	681.7
South Dakota	580.2	195.8	66.2	12.6	83.0	937.8
Nebraska	879.3	432.2	68.1	45.8	115.2	1,540.6
Kansas	658.9	240.7	86.5	55.0	292.5	1,333.6
	<u>2,317.8</u>	<u>1,007.8</u>	<u>261.0</u>	<u>121.4</u>	<u>785.7</u>	<u>4,493.7</u>
Region	7,413.3	4,842.9	2,657.1	1,898.5	1,073.6	17,885.4
United States	12,796.6	6,209.1	6,119.5	2,617.1	1,920.2	29,662.4

Sources: U.S. Department of Agriculture. *Crop Values: Season Average Prices Received by Farmers and Value of Production, by United States, 1967 and 1968*, Statistical Reporting Service and Crop Reporting Board, CR-PR 2-1-1 (68), Washington, D.C., December 1968.

U.S. Department of Agriculture. *Meat Animals: Farm Production, Disposition, and Income, By States, 1967-1968*, Statistical Reporting Service and Crop Reporting Board, MtAn 1-1 (69), Washington, D.C., April 1969.

U.S. Department of Agriculture. *Milk: Production, Disposition, and Income, 1967-68*, Statistical Reporting Service and Crop Reporting Board, Da 1-2 (69), Washington, D.C., April 1969.

Appendix Table 2
Value of exports for five selected agricultural commodity groups
in the North Central Region, by state and commodity, fiscal 1968.

Region and state	Meat prod- ucts	Feed grains	Dairy prod- ucts	Soybeans and soy- bean oil	Wheat and flour	Total
----- (million dollars) -----						
Corn Belt:						
Ohio	4.4	41.3	6.5	45.7	46.1	144.0
Indiana	2.6	82.0	1.9	65.8	41.6	193.9
Illinois	5.3	222.7	1.0	170.9	65.8	465.7
Iowa	17.5	118.6	6.9	133.1	3.2	279.3
Missouri	4.3	27.0	2.2	57.1	50.4	141.0
	34.1	491.6	18.5	472.6	207.1	1,223.9
Lake States:						
Michigan	2.3	12.6	3.4	7.5	34.8	60.6
Wisconsin	4.0	10.1	15.3	2.2	1.2	32.8
Minnesota	6.6	49.9	19.6	60.7	31.5	168.3
	12.9	72.6	38.3	70.4	67.5	261.7
Northern Plains:						
North Dakota	0.3	9.7	0.6	3.0	127.6	141.2
South Dakota	2.6	13.2	1.6	4.5	53.7	75.6
Nebraska	9.0	88.9	1.7	13.5	72.8	185.9
Kansas	4.2	49.1	2.0	14.3	189.2	258.8
	16.1	160.9	5.9	35.3	443.3	661.5
Region	63.1	725.1	62.7	578.3	717.9	2,147.1
United States	104.4	1,000.3	115.7	867.9	1,277.5	3,365.8

Source: Rahe, Dewain H. and Isaac E. Lemon, *U.S. Agricultural Export Shares By Region and State, Fiscal Year 1968*, Trade Statistics and Analysis Branch, Foreign Development and Trade Division, Economic Research Service, U.S. Department of Agriculture, ERS-Foreign-241, November 1968.