WHY U.S. AGRICULTURAL EXPORTS HAVE DECLINED IN THE 1980s

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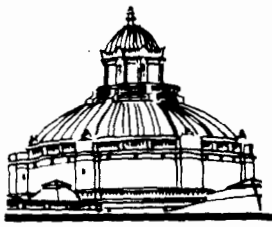

October 29, 1984

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ABSTRACT

U.S. agricultural exports declined sharply and substantially in the early 1980s. This decline has been due in large measure to a worldwide slowdown in economic growth, the enormous debt problems of the developing countries, and the strong value of the dollar. These factors have worked together to reduce the demand for U.S. agricultural exports. Other factors such as foreign agricultural policies and production, the U.S. embargo on sales of agricultural commodities to the USSR, and U.S. domestic commodity programs have been cited also as responsible for the reductions in agricultural exports.

This report reviews briefly the sources of the spectacular growth in U.S. agricultural exports in the 1970s, and then examines in detail the reasons for the poor performance of U.S. agricultural exports in the 1980s. Implications of the decline in U.S. agricultural exports for improving the export performance of U.S. agriculture are briefly discussed.

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INTRODUCTION

U.S. agricultural exports dropped sharply in the early 1980s after more than a decade of remarkable expansion. The reasons that have been advanced to explain the substantial and largely unanticipated decline in agricultural exports are the subject of this report.

To understand better what happened to U.S. agricultural exports in the early 1980s it is useful to review briefly the causes of the spectacular growth of agricultural exports in the 1970s. Following that, the reasons for the poor performance of U.S. agricultural exports in the 1980s will be discussed in some detail. The last section of the report will identify some of the policy issues suggested by the export performance of U.S. agriculture in the early 1980s.

The focus of the report is on the four-year period from 1980 to 1983 during which agricultural exports reached their peaks in both volume and value and then declined. While agricultural exports are forecast to increase in terms of value during 1984, they will be nearly six billion dollars less than their 1981 level.

GROWTH OF U.S. AGRICULTURAL EXPORTS

The value of U.S. agricultural exports, unadjusted for inflation, increased almost six-fold from 1970 to 1980 (Table 1). Agricultural exports reached their peak value in 1981 at $43.78 billion. The volume of U.S. agricultural exports had peaked at almost 164 million metric tons (MMT) a year earlier, two and one-half times the 1970 level.

Table 1.--Value and Quantity of U.S. Agricultural Exports by Fiscal Year, 1970-1984

Year	Value $ billion	Quantity million metric tons
1970	6.96	64.3
1971	7.95	60.3
1972	8.24	68.6
1973	14.98	106.6
1974	21.61	99.9
1975	21.85	93.5
1976	22.76	114.1
1977	23.97	111.9
1978	27.29	131.3
1979	31.98	137.4
1980	40.48	163.9
1981	43.78	162.3
1982	39.09	157.9
1983	34.78	144.8
1984	38.00	141.0

Source: U.S. Department of Agriculture, Economic Resarch Service, Foreign Agricultural Trade of the United States, Annual Supplements by Fiscal Year, various issues.

The commodities whose exports grew most rapidly were corn, wheat, and soybeans. Average annual rates of growth for these commodities are shown in Table 2. Exports of corn reached a maximum of 61 MMT in 1980, more than six times their 1970 level. Exports of wheat actually peaked at nearly 45 MMT in 1982. The volume of soybean exports in 1982 was more than twice that of 1970. In the seventies and the early eighties, these three commodities have consistently accounted for more than half of the value of U.S. agricultural exports and three-quarters of the volume.

Table 2.--Average Annual Rates of Growth for Exports of Wheat, Corn and Soybeans, Calendar Year 1970-1980

Commodity	Value %	Quantity %
Wheat	18.2	6.8
Corn	16.4	14.4
Soybeans	12.9	5.6

Source: U.S. Department of Agriculture, Economic Research Service.

The growth markets for U.S. agricultural exports included not only the European Community (EC) and Japan, both traditional markets for the United States, but also the developing and centrally planned countries (Table 3). In fact during the 1970s the relative importance of the EC and Japan declined while that of the developing countries, especially, and the centrally planned countries, to a lesser extent, increased. Together the developing and centrally planned countries accounted for 58 percent of the growth in U.S. agricultural exports from 1976 to 1981, while the EC, Japan and the other developed countries accounted for 42 percent of the increase (Table 4).

Table 3.--Value of U.S. Agricultural Exports by Major Importers, Fiscal Years 1976 and 1980 to 1983

Importers	1976		1980		1981		1982		1983	
	$bil.	%	$bil.	%	$bil.	%	$bil.	%	$bil.	%
EC	5.85	26	9.19	23	8.54	20	8.88	23	7.63	22
Japan	3.41	15	5.75	14	6.70	15	5.73	15	5.89	17
Other Developed	3.80	17	6.20	15	6.61	15	5.88	15	4.99	14
Developing	6.93	30	13.71	34	16.29	37	13.54	35	13.90	40
Centrally Planned	2.76	12	5.65	14	5.64	13	5.06	13	2.36	7
Total	22.76	100	40.48	100	43.78	100	39.09	100	34.78	100

Source: U.S. Department of Agriculture, Economic Research Service. Foreign Agricultural Trade of the United States, annual supplements, 1976 to 1983.

Table 4.--Change in the Value of U.S. Agricultural Exports

Importer	1976-81		1981-82		1981-83	
	$ bil.	%	$ bil.	%	$ bil.	%
EC and Japan	5.98	28	-0.63	13	-1.72	19
Other Developed	2.81	13	-0.73	16	-1.62	18
Developing	9.36	44	-2.75	59	-2.39	27
Centrally Planned	2.88	14	-0.58	12	-3.28	36
Total	21.02	100	-4.69	100	-9.00	100

Source: Table 3.

Why did U.S. agricultural exports grow so dramatically during the 1970s? The main reasons were rapid economic growth, especially in the developing countries, the easy availability of external credit, and the relatively steady depreciation of the dollar throughout the decade. These factors worked in combination to increase the demand for both foodgrains and feedstuffs, products in which the United States enjoys a comparative advantage. Food and agricultural policies of the developing countries and the USSR and other centrally planned countries also worked to strengthen the demand for U.S. agricultural products.

Income grew more rapidly in the developing and centrally planned countries during the seventies than in the developed countries. 1/ In the developing countries income growth averaged around 6.3 percent during the 1970s, with incomes in the middle income countries such as Mexico, Brazil, South Korea, and Malaysia growing more rapidly than in the lower income countries. Income growth in the centrally planned countries--the Soviet Union, Eastern Europe, China--averaged around 5 percent during this decade. In the developed countries, income grew at a much lower rate of 3.5 percent per year.

External credit, for a variety of purposes, was readily available to both the developing and centrally planned countries during the 1970s. 2/

1/ World Bank, World Development Report, various issues; and International Monetary Fund, World Economic Outlook, various issues.

2/ William R. Cline, International Debt and the Stability of the World Economy, Institute for International Economics, Washington, D.C., September, 1983.

The 1973 oil price increase by the countries of the Organization of Petroleum Exporting Countries (OPEC) resulted in the transfer to those countries of billions of dollars in oil revenues that they could not absorb in their own economies. These funds were deposited in commercial banks which then recycled the "petrodollars" by making loans mainly to the middle income or newly industrializing countries of the Third World that were judged to be good credit risks. Not only were the petrodollars invested in projects that potentially would generate sources of income with which to repay the loans, they were also lent for general balance of payments support. Typical of the latter kind of lending were loans to non-OPEC developing countries to help them pay their higher oil import bills. This kind of lending did not enhance the debt servicing capacity of the developing countries. Macroeconomic developments, discussed below, which adversely affected U.S. agricultural exports, also exacerbated the debt problem of the developing countries. These included rising real interest rates in the United States and other developed countries, a global recession which reduced export earnings and debt servicing capacity, and the large appreciation of the U.S. dollar which contributed to a decline in prices of primary product exports of the developing countries.

During the seventies, the foreign exchange earnings from the commodity exports of both the oil exporting and the non-oil exporting developing countries were also growing rapidly. Credit availability, especially the balance of payments support, coupled with the increased foreign exchange earnings enabled the developing and centrally planned countries to increase imports of all kinds. These countries' imports of feedgrains and

soybeans increased in order to support an increased demand for livestock products. The developing and centrally planned countries demand for foodgrains also increased during the decade. The United States, a low-cost producer with abundant agricultural resources, was in a good position to meet these increased demands for food, feedgrains and other feedstuffs.

Mexico is a prime example of the economic forces at work during the 1970s and how they affected U.S. agricultural exports. 3/ Mexico's export earnings increased from $3 billion in 1975 to $16 billion in 1981. Its real per capita income was increasing at an annual rate of 3.6 percent. Meat consumption increased by 45 percent over the same period. The value of food imports from the United States, mainly corn, grain sorghum, and wheat, reached $2.7 billion in 1980. By 1981, Mexico was the third largest market in the world for U.S. agricultural exports.

Exchange rates also began moving freely against one another during the early 1970's after having been bound together in fixed relationships since the end of World War II. 4/ From 1970 to 1979 the dollar fell in

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3/ U.S. Department of Agriculture, Economic Research Service, Debt, Trade and Payments Issues and U.S.-Mexican Economic Interdependencies, ERS Staff Report No. AGES84067; David E. Erwin and Maury Bredahl, Future Dimensions of Agricultural Trade, University of Missouri, Agricultural Experiment Station Report No. 312, Columbia, Missouri, August 1984; and U.S. Dept. of Agriculture, Foreign Agricultural Trade of the United States, annual supplements, 1981 and 1982.

4/ G. Edward Schuh, The Exchange Rate and U.S. Agriculture, American Journal of Agricultural Economics, vol. 56, no. 1, 1974, pp. 1-13; G. Edward Schuh, Agriculture in an Open Economy, Testimony presented to the Joint Economic Committee of the U.S. Congress, Washington, D.C. April, 1984: G Edward Schuh, Policy Options for Improving the Trade Performance of U.S. Agriculture prepared for the National Agricultural Forum, January 1984; James Longmire and Arthur Morey, Strong Dollar Dampens Demand for U.S. Farm Exports, Foreign Agricultural Economic Report No. 194, December 1983.

value by 30 percent against other major world currencies. This depreciation of the dollar which was fairly steady throughout the decade, reduced the cost of U.S. agricultural exports in foreign currencies and further stimulated demand.

Agricultural policies of both the developing and the centrally planned countries also helped to increase the demand for U.S. agricultural commodities. Many developing countries followed "cheap food policies" which kept food prices low to domestic producers, provided little incentive to their own farmers to increase production and as a result stimulated the demand for food imports. 5/ A common element in such policies is an overvalued currency which makes imports cheap and exports more expensive. The USSR and the centrally planned countries of Eastern Europe also followed food and agricultural policies that stimulated the demand for agricultural commodities. 6/ In the early seventies the USSR evidently decided to maintain the consumption of livestock products for its people even when grain supplies were short. This meant that the USSR had to import food grains and feedstuffs in order to meet this domestic policy objective. The Eastern European centrally planned countries followed suit. In addition, the USSR and the Eastern European countries

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5/ Charles E. Hanrahan and G. Edward Schuh, Food Policy in Developing Countries, U.S. Dept. of Agriculture, Economic Research Service, Foreign Agricultural Economic report No. 193, December 1983.

6/ D. Gale Johnson, Agriculture in the Centrally Planned Economies, Paper No. 82-15, Office of Agricultural Economic Research, University of Chicago, July 21, 1982.

subsidize the consumption of livestock products. These food subsidies also contributed to an expansion of demand for agricultural imports.

All the factors discussed above contributed to increased demand for U.S. agricultural exports throughout the seventies. At the beginning of the 1980s there appeared to be every expectation that the export boom of the preceding decade would continue. The complete turnaround in economic conditions in the early 1980s and its consequences for U.S. agricultural trade were largely unanticipated.

THE DECLINE IN U.S. AGRICULTURAL EXPORTS

The dramatic reversal in the early 1980's of the economic conditions of the previous decade precipitated a sharp drop in U.S. agricultural exports. From 1981 to 1983, the value of U.S. agricultural exports fell by more than $9 billion dollars. The volume of agricultural exports fell by more than 19 MMT (Table 1). There is wide agreement that worldwide economic recession, the enormous debt problems of the developing countries, and the rapid appreciation of the U.S. dollar have been the major contributors to the weak demand for U.S. agricultural exports. 7/ In addition to these macroeconomic factors, a number of other factors are frequently cited as sources of the decline in U.S. agricultural exports. 8/ These include increased worldwide production of major agricultural commodities, the agricultural and trade policies of foreign countries, the partial U.S. embargo of sales of agricltural commodities to the USSR, and U.S. commodity programs which in conjunction with the high value of the dollar reduce the competitiveness of U.S. products in world markets. Although there is broad agreement about the effects of the changed economic conditions of the 1980s on U.S. agricultural exports there is much less agreement about the effects of the other major factors listed above.

7/ Council of Economic Advisors, Annual Report, February 1984; G. Edward Schuh, Policy Options...; Dale E. Hathaway, Agricultural Trade Policy for the 1980's in William R. Cline, ed., Trade policy in the 1980's, Institute for International Economics, Washington, 1983.

8/ John Dunmore and James Longmire, Sources of Recent Change in U.S. Agricultural Exports, U.S. Dept. of Agriculture, Economic Research Service, Staff Report No. AGES831219, January 1984.

Macroeconomic Factors

Efforts by the major industrialized developed countries, including the United States, in the early 1980s to reduce inflation in their economies by slowing the growth in money supplies resulted in a world-wide slowdown in economic activity. These restrictive monetary policies resulted in higher interest rates and slowed economic growth, first in the developed countries and subsequently in the developing and centrally planned countries. These monetary policies worked to achieve the desired reductions in inflation. Rates of inflation in the countries that are members of the Organization for Economic Cooperation and Development (OECD) declined from an average of 12 percent in 1980 to 7.5 percent in 1982. 9/ The economic slowdown in the OECD countries also depressed the demand for goods imported from the developing countries, and consequently reduced their foreign exchange earnings and slowed the growth of their economies. In the early 1980s incomes in the developing countries were growing only about half as rapidly as they had grown in the seventies. The higher interest rates in the developed countries also added to the debt service burden of the developing and centrally planned countries, since many of the debts owed to commercial banks in the OECD countries were loans with variable interest rates.

Both the reduced export earnings and the higher interest rates exacerbated the debt problem that had been growing in the 1970s. By

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9/ CEA, 1984.

1982, many developing countries had accumulated debt service obligations that exceeded their export earnings. An "international liquidity crisis" was provoked in August of 1982 when Mexico announced that it could not meet the interest payments due on its nearly $85 billion of loans from foreign creditors. The Mexican debt crisis caused banks in the developed countries to cut back on new lending to other heavily indebted countries. As a result, the debtor developing countries found it necessary to seek relief from creditors in the form of rescheduling of debts and to undertake economic austerity measures, monitored usually by the International Monetary Fund (IMF), to improve their short run trade balances. 10/ For the most part the austerity programs involved import reductions, including food and agricultural imports, and currency devaluations designed to stimulate exports in exchange for new loans and debt reschedulings to meet shortrun financial obligations.

The debt problem and the austerity measures designed to cope with it have had a substantial effect on U.S. agricultural exports to developing countries (Table 5). In Latin America, for example, U.S. agricultural exports declined by nearly $2 billion from 1981 to 1982. More than half of that decline was accounted for by Mexico whose agricultural imports from the United States dropped by $1.3 billion or 54 percent from 1981 to 1982. Other major debtor countries in Latin America such as Venezuela and Brazil also cut back sharply their agricultural imports from the United States.

10/ Cline, International Debt.

In the early 1980s the value of the dollar in terms of other major world trading currencies increased. As the dollar increased in value, first the volume and then the value of U.S. agricultural exports declined. Between January 1980 and December 1983, the value of the dollar adjusted for inflation, went up by 45 percent. 11/ During the same period, farm prices in the United States were falling. The price of corn, for example, fell by 5 percent during this period. However, while the prices for farm commodities were falling in the United States, they were rising in terms of the currencies of importing countries. Thus, importing countries in 1983 were paying about 40 percent more in real terms than they were paying in 1980 to buy U.S. corn.

Because agriculture in the United States earns about 25 percent of its gross receipts from exports it is particularly sensitive to the

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11/ CEA 1984 and Jerry A. Sharples, Alan Webb, and Forest Holland, World Trade and U.S. Farm Policy, U.S. Department of Agriculture, Economic Research Service Staff report No. AGES840521.

Table 5.--Foreign Debt at the End of 1982 and U.S. Agricultural Exports to Selected Countries, Calendar Years 1981 and 1982

Borrowing Country	Total Debt	U.S. Agricultural Exports	
		1981	1982
	$ billion		
Latin America	288.1	5.30	3.40
Argentina	38.8	.4	.2
Brazil	86.3	.7	.5
Chile	17.2	.3	.2
Colombia	10.2	.2	.3
Ecuador	6.6	.12	.10
Mexico	84.6	2.4	1.1
Peru	11.2	.4	.3
Venezuela	33.2	.9	.7
Asia	108.8	4.14	3.80
Indonesia	21.9	.4	.4
Korea	37.2	2.0	1.6
Malaysia	8.6	.11	.14
Philippines	20.7	.32	.35
Taiwan	9.3	1.14	1.15
Thailand	11.1	.17	.16
Middle East and North Africa	117.6	5.55	4.51
Algeria	14.8	.3	.15
Egypt	21.8	.97	.80
Israel	28.0	.35	.33
Ivory Coast	8.4	.19	.16
Morocco	10.8	1.5	1.2
Nigeria	11.2	.54	.47
Turkey	22.6	1.7	1.4
Total	514.5	14.99	11.71

Source: Debt numbers are from Morgan Guaranty Trust Company of New York, World Financial markets, June 1983; U.S. agricultural exports are from U.S. Dept. of Agriculture, Economic Research Service, Foreign Agricultural Trade of the United States, Calendar Year 1983, Washington, D.C. 1984.

effects of international economic developments. Agriculture is not alone however in feeling the effects of the strong dollar on trade. 12/ Because the strong dollar makes U.S. exports more expensive, all sectors of the U.S. economy which depend on trade for a substantial portion of their sales have experienced reduced demand and lower incomes. Largely because of the strong dollar which makes imports cheaper and exports more expensive, the U.S. merchandise trade deficit which was nearly $70 billion in 1983 is expected to be around $130 billion in 1984.

The rise in the value of the dollar since mid-1980 reflects primarily the high real interest rates in the United States relative to other countries and the belief that the United States, in contrast to many developing and some developed countries, is a "safe haven" for capital investment. The apparent strength of the U.S. economic recovery, the reduced expectations of inflation, high demand for credit by government and by private borrowers, and the favorable tax treatment accorded investment in the United States are also probable causes for the continued strong value of the dollar. The dollar is likely to remain strong and prices of U.S. exports high as long as these conditions persist.

Foreign Production

Another factor affecting the demand for U.S. agricultural exports has been foreign crop production (Table 6). From 1981 to 1983 foreign

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12/ William A. Cox, Flexible Exchange Rates and U.S. Industries, CRS Report No. 84-63 S, September 1984.

production of wheat increased by about 26.5 MMT. 13/ Among the exporters, Canada, Argentina, and the EC all experienced substantial increases in production. Importing countries such as China and India also increased their production. These gains in output meant greater availability of wheat for domestic consumption in the case of importing countries and greater availability of exportable supplies in the case of the exporting countries. Increased foreign supplies probably worked in tandem with the

Table 6.--Foreign and U.S. Production of Wheat, Coarse Grains, and Soybeans, 1981 and 1983 1/

	---------Million Metric Tons---------		
Foreign Production	1981	1983	Change
Wheat	377.9	404.4	+26.5
Coarse Grains	533.7	530.7	- 3.7
Soybeans	32.0	33.6	- 1.6
U.S. Production			
Wheat	64.8	75.3	+10.5
Coarse Grains	198.3	250.7	+52.4
Soybeans	48.8	60.7	+11.9

1/ Crop years.

Source: Foreign Agricultural Service, Foreign Agricultural Circular, Grains, various issues.

13/ U.S. Department of Agriculture, Foreign Agricultural Service, Grains, Foreign Agricultural Circular, various issues and Soybeans, various issues.

higher exchange value of the dollar to weaken the demand for U.S. wheat exports.

Foreign supplies of corn and other coarse grains declined from 1981 to 1983 and thus probably strengthened the demand for U.S. coarse grain exports. Corn output was down substantially during this period in Argentina, South Africa and Thailand, the United States' major competitors in corn exports. Small increases in world soybean production probably had a slight negative effect on the demand for soybean exports from the United States.

Foreign Agricultural Policies

The agricultural policies of other countries, both trade and domestic farm policies, are often cited as reasons for the decline in U.S. agricultural exports. It is difficult, however, to distinguish between the shortrun and longrun effects of these policies on U.S. agricultural trade.

In the EC, surpluses of wheat and wheat flour have developed as a result of high internal price supports which stimulate domestic production. Rather than store these excess supplies of grain, the EC exports them to foreign markets. The high domestic prices for these products have necessitated large export subsidies in order to move the surpluses into international markets. North Africa and the Middle East have been target markets for these export. The United States has tried to maintain its share of the market in this region by making subsidized agricultural

credit available to importing countries. It does not appear however, that the relative market shares of the EC and the United States for wheat and wheat flour in the Middle East in the 1980s have been appreciably changed as a result of the EC subsidy policies. In the longer run the effect of the EC's domestic and trade policies has probably been to give the EC a larger share of this region's market than it would have had with lower domestic prices and no, or less generous, export subsidies.

A major effect of EC policy over the longrun has been to shift the EC from a net importer to a net exporter of wheat. At the beginning of the 1970s, the EC imported over 14 MMT of wheat. By 1980/81, the EC was a net exporter of over 10 MMT of wheat. In the period 1980/81 to 1982/83 when U.S. agricultural exports were declining, the EC increased its net exports of wheat and wheat flour by 1.5 million MMT. During the same period, U.S. net exports of wheat and wheat flour declined by 2.0 MMT. (If the drop in U.S. wheat and wheat flour exports is measured from 1981/82 to 1982/83, the drop in exports was 8.9 MMT.)

Canada, Australia, and Argentina have been following policies in the 1980s that aim at maximizing their export volumes. Canada has made improvements in its grain transportation infrastructure that enhance its capabilities to export. These countries have not made production adjustments as the United States has in order to bring world supplies into better balance with demand. They have been able to maintain their market shares especially for wheat during the recent period of declining U.S. agricultural exports. All of them rely more heavily than does the United

States on bilateral agreements which help to maintain, but probably not increase, their market shares. These other exporters also appear to be benefitting from higher U.S. prices attributable to the strong value of the dollar. Successive devaluations by Argentina in particular during the early 1980s have brought its wheat prices about 30 percent below U.S. export prices. 14/

The Embargo on Sales of Agricultural Commodities to the USSR

At various times during the 1970s and 1980s the United States has embargoed or controlled exports of certain agricultural products, either globally or selectively, for domestic supply or foreign policy reasons. 15/ In 1973, for example, soybean exports were temporarily embargoed to hold down domestic prices to livestock producers who used soybean meal as an important feed ingredient. The soybean embargo was justified also as a means of mitigating the inflationary pressures of soybean exports on consumer food prices, especially prices of livestock products.

The most recent embargo imposed by the United States was on sales of grain to the USSR following its invasion of Afghanistan. This embargo is often cited as a major reason for the decline in U.S. agricultural exports during the early 1980s.

The embargo on sales of commodities above those already contracted for under the terms of a Longterm Grain Agreement (LTA) between the United

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14/ International Monetary Fund, International Financial Statistics, and U.S. Dept. of Agriculture, Foreign Agricultural Trade of the United States, various issues.

15/ Penelope C. Cate, A Description and Chronology of Embargoes, Moratoriums, and Suspensions of U.S. Agricultural Exports Since 1970, CRS Report No. 81-235 ENR. Washington, D.C., October 16, 1981.

States and the USSR went into effect on January 8, 1980. The embargo was lifted on April 24, 1981. U.S. wheat and coarse grain exports to the USSR declined as a result of the embargo. U.S. grain exports to the USSR during the July 1979 to June 1980 marketing year totaled 15.2 MMT; in the July 1980 to June 1981 marketing year, U.S. wheat and coarse grain exports to the USSR were 8.0 MMT. 16/ However, it was during this period when the embargo was in effect that U.S. agricultural exports reached their peak levels, for volume in 1980 and value in 1981. It is likely that the exports lost to the USSR were redirected to other countries as other exporters, notably Argentina, moved to meet Soviet import needs that were not being met by the United States.

While in the shortrun the embargo on the USSR appears to have had little effect on U.S. agricultural exports, it could have more serious long-run consequences. 17/ The use of embargoes has created some uncertainty about the reliability of the United States as a supplier of agricultural commodities.

As a result of such policies, not only the USSR but also other countries may make policy changes either to become more self-sufficient in agricultural products or to secure alternative sources of food supplies and therefore could rely less on the United States for meeting their food and agricultural product demands. Foreign policy considerations are likely always to enter into the USSR's decision to buy grain from the

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16/ U.S. Department of Agriculture, Foreign Agricultural Services, The Grain Situation in the USSR, Foreign Agricultural Circular, various issues.

17/ Schuh, Policy Options.

United States, but so will world prices and its own ability to increase its grain production. The smallest Soviet grain crop in five years of poor crops is likely to make 1984/85 a record year for U.S. grain sales to the USSR. 18/

U.S. Price Support Programs

Another frequently cited reason for the short run decline in U.S. agricultural exports is the level of price supports (loan rates) for grains and feedstuffs in the United States. 19/ The argument is made that U.S. price supports for grains and feedstuffs are high in relation to prices in the world market. High U.S. price supports which establish a high world floor price encourage other producing countries to increase production and exports. Proponents of this argument point to world markets for wheat and tobacco to illustrate the effects of high (and relatively stable) U.S. price supports on U.S. agricultural exports. 20/

Market prices in the United States for wheat were well above support levels throughout most of the 1970s. During the 1980s, however, the wheat loan rate has stabilized the market price of wheat, that is, the

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18/ U.S. Department of Agriculture, Economic Research Service, Agricultural Outlook, October, 1984.

19/ Schuh, Policy Options.

20/ Sharples and others, World Trade and U.S. Farm Policy.

loan rate has put a floor under market prices. Between 1981 and 1983, U.S. wheat exports dropped 10 MMT and stocks of wheat increased by 11 MMT. However during the same period, other wheat exporting countries increased their production of wheat by 10 MMT and increased their exports by 8 MMT. With lower support levels, the argument goes, the United States would have been more competitive in the world wheat market, that is, the United States would have been able to sell its wheat on world markets and avoid the accumulation of stocks.

Tobacco is used as another example. Tobacco has been under price supports and production controls since the 1930s. In the early 1950s the U.S. share of world tobacco exports was 35 to 40 percent. U.S. net exports (exports minus imports) accounted for 30 to 35 percent of world tobacco exports in the 1950s. In the 1980s, U.S. net exports were less than 10 percent of world tobacco exports. The conclusion drawn by many is that high price supports for tobacco have provided an "umbrella" over world tobacco prices, and encouraged the expansion of production and trade by other countries.

Supporters of this line of reasoning conclude that U.S. agricultural exports would be more competitive in world markets if loan rates would rise or fall in response to market conditions. The alternative to price supports determined legislatively that is most often proposed to enhance U.S. competitiveness is to introduce flexibility into the procedure for determining price supports. Several methods could be used to make the determination of price supports more flexible. Loan rates could be indexed to the value of the dollar so that prices would fall when the value of the dollar increased or rise when the value of the dollar declined.

Moving averages of market prices are another possible basis for making loan rate determination more flexible as is indexing loan rates to the cost of production. Trying loan rates (and target prices) to market conditions would also presumably result in the additional advantages of reduced stocks and lower government outlays.

Whether lower loan rates in the face of current economic conditions would result in larger exports of U.S. agricultural products depends on how responsive export demand is to changes in price. 21/ This responsiveness to price changes is termed by economists the price elasticity of demand. It is defined as the percentage change in the quantity demanded of a product due to a one percent change in price. Demand is said to be elastic if a change in price results in a more than proportional change in the quantity consumed. Conversely, demand is said to be inelastic if a change in price results in a less than proportional change in quantity consumed.

If export demand has an elasticity greater than one, then a lower price will result in a more than proportional increase in the volume of purchases, and the total revenue (price times quantity) for the export market will increase. This is the economic logic behind the notion that lower loan rates for U.S. agricultural commodities would enhance the prosperity of U.S. agricultural producers.

There is, however, no real consensus on just how price responsive the demand for wheat and other grain is, although there is a great deal of consensus that export demand for these commodities is more price responsive than domestic demand. There are a number of reasons why export

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21/ Jasper Womach, The Elasticity of Demand for Wheat and Farm Policy Implications, CRS, 84-595 ENR, April 5, 1984.

demand for wheat is more price responsive than domestic demand. Wheat imports make up only a small portion of the food supplies in the importing countries, so adjustments can easily be made in consumption. Importers can switch to alternative wheat suppliers such as Canada, Argentina, Australia or the EC. In the longer run, an importing country can increase its wheat production or the production of other, substitute grains. Nevertheless, there is still disagreement over just how responsive total wheat demand is to price changes. In a recent review of the literature on the elasticity of demand for wheat, Chase Econometrics identified 44 studies that indicated wheat demand is relatively inelastic and 20 studies that indicated an elasticity greater than one. Only four studies found large price elastic demand for wheat. 22/

While lower loan rates might make U.S. agricultural exports more competitive in world markets, lower prices to individual producers, who in the shortrun are not able to increase their production so easily, would mean lower incomes, even though income to the total agricultural sector might increase. In addition, landowners would also be adversely affected as lower loan rates, translated into lower prices, depressed land rents and values. Farmers who are experiencing financial difficulties could also be hurt by lower prices, especially if they have cash flow problems. These considerations raise an issue about the effectiveness of price

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22/ Chase Econometrics, Inc., Price Elasticity of Demand for Wheat, August 10, 1984.

policy as a means of dealing with the problems of low income in farming, an issue beyond the scope of this report. 23/

23/ Some of the policy alternatives for dealing with the problem of low income have been discussed in a number of recent reports: U.S. Congress, Joint Economic Committee, Subcommittee on Agriculture and Transportation, Toward the Next Generation of Farm Policy; hearings, 98th Congress, 1st Session, part I, May 19, 25, 26 and June 8, 1983; U.S. Congress, Committee on Agriculture, Nutrition and Forestry, United States Senate, Farm Policy Perspectives: Setting the Stage for 1985 Agricultural Legislation, Committee Print, 98th Congress, 2nd Session, April 1984, Washington, D.C.; and Agriculture, Stability and Growth: Toward a Cooperative Approach, An Agricultural Policy Study of the Curry Foundation (Overview of Discussion, prepared by Don Paarlberg and Howard Hjort), Kansas City, Missouri, May 21 and 22, 1984.