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Long-Term Bilateral Grain Agreements and Grain Countertrade

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The Honorable George Brown, Chairman
Subcommittee on Department Operations,
Research, and Foreign Agriculture
Committee on Agriculture
House of Representatives

The Honorable Byron L. Dorgan
House of Representatives

In response to your requests, we have reviewed two types of alternative international grain trading practices: (1) long-term bilateral grain agreements (LBGAS) and (2) countertrade. LBGAS are agreements between two countries specifying the minimum and maximum quantity of a grain to be traded over a certain period of time. Countertrade refers to a commitment imposed as a condition of purchase by the importer on the exporter and generally involves the exhange of goods and/or services. Our review concentrated principally on the LBGAS and countertrade of foreign countries. Our March 1987 report on LBGAS and countertrade provided the U.S. perspective on these trading practices in international grain trade; Soviet and Chinese LBGAS with the United States are examined in a recently issued report.[1]

This report summarizes the opinions of foreign and U.S. officials abroad on (1) foreign countries' use of LBGAS and countertrade in international grain trade, (2) the factors that motivate foreign countries to engage in these forms of trade, and (3) prospects for using these practices to enhance U.S. grain exports.

We identified 109 LBGAS that were in existence between January 1975 and August 1986. The estimated minimum volume of world wheat and coarse grains under these agreements rose from 5 percent in trade year 1975/76 to 23 percent for trade year 1985/86,[2] averaging 14 to 16 percent of total grain exports over this period. The lack of a reliable central data source makes it difficult to determine the extent of countertrade, but we compiled information on 2,247 countertrade transactions occurring since the early 1950s, 125 (5.7 percent) of which involved grain.

[1] Alternative Trading Practices for International Grain Trade (GAO/NSIAD-87-90BR) Mar. 1987 and Long-Term Bilateral Grain Agreements With the Soviet Union and China (GAO/NSIAD-89-63) Mar. 1989.

[2] Trade years vary by crop; for example, the trade year for coarse grain begins October 1 and ends September 30 while that for wheat begins July 1 and ends June 30.

We found no evidence that either LBGAs or grain countertrade increased the market shares of the countries that used them, and according to officials we spoke with, trade in grain would have occurred in the absence of these agreements. Other factors such as price, quality, and incentives, i.e. technical assistance and/or favorable credit terms, are more important determinants of trade.

As with most international agreements, LBGAs cannot be enforced. Many foreign officials and traders maintained that this unenforceability limits the effectiveness of LBGAs. They also told us that grain is not well suited for countertrade because of its low profit margin and high price volatility. Furthermore, some countries with official countertrade policies have discouraged the use of grain as a countertrade item, stating that complex and prolonged negotiations could compromise their food security.

Officials we interviewed told us that the prospects for expanding U.S. grain sales through LBGAs and countertrade appear to be limited; however, both could be helpful as a mechanism to develop and reinforce trade relations and diplomatic ties with nations viewed as prospective U.S. markets, especially developing and centrally planned economies. Most U.S. officials and traders cautioned that expanded U.S. use of these trading practices, especially countertrade, would require a high degree of government intervention in the market. Major U.S. competitors use governmental entities to establish agricultural policies and control grain exports. The United States has historically opposed LBGAs and government-mandated countertrade on the grounds that they run counter to free-trade policies and the multilateral trading system. For LBGAs, the exception to this policy has been U.S. agreements with the centrally planned economies of the Soviet Union and the People's Republic of China.

Determining the extent of countertrade in world trade, including grain trade, is very difficult because of the lack of available information on individual countertrade transactions and the absence of a central data clearing house for such information. As a result, we found significant limitations in the quality and extent of information available on countertrade activities. The Congress, in recognition of this problem, has enacted legislation to improve the quality of information collected on countertrade. Most recently, the Omnibus Trade Bill of 1988 urged the Secretary of Agriculture to expedite implementation of the barter provisions of the 1985 Food Security Act. The Trade Bill also required that an interagency group on countertrade and an office of barter in the Department of Commerce be created to gather information on all types of countertrade.

As agreed, we did not obtain agency comments on this report. Copies of the report are being sent to the Secretaries of Agriculture, State, and Commerce and to other interested parties.

This report was prepared under the direction of Allan I. Mendelowitz, Director, Trade, Energy, and Finance Issues. Other staff members who made major contributions to the report are listed in appendix IV.

Bill W. Thurman

for Frank C. Conahan
Assistant Comptroller General

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Abbreviations

LBGA	Long-term Bilateral Grain Agreement
EC	European Community
USDA	United States Department of Agriculture
FAS	Foreign Agricultural Service
GAO	General Accounting Office
IWC	International Wheat Council
mmt	million metric tons
PRC	People's Republic of China

LBGAs and Countertrade

Extent of LBGAs and Countertrade in International Grain Trade

The decline of U.S. grain exports in the midst of increasing surpluses that occurred in the mid-1980s[1] renewed interest in the use of LBGAS and countertrade to maintain and possibly increase U.S. market share. From 1975 through 1986, the U.S. share of the world grain market declined nearly 33 percent, from approximately 55 to 37 percent. Other major exporters—Canada, Australia, the European Community (EC), and Argentina—gained much of the share lost by the United States. Since the mid-1970s, Canada, Australia, and Argentina have increased their use of LBGAS to market grain, but the EC has not actively used them. There appears to be no evidence that LBGAS increased the market shares of these countries; instead, many other variables, such as price, quantity, and quality, are responsible for the improvement in market share.

LBGAs

LBGAS are used most extensively by nations whose governments are directly involved in agricultual production and marketing. Argentina, Australia, and Canada, which market grain through grain marketing boards[2] accounted for most of the LBGAS in effect between January 1975 and August 1986, as shown in table I.1.

Table I.1: Exporters' Use of LBGAs 1975/76 to 1986/87

Exporter	Number of agreements in effect	Total grain trade (mmt)[b]	Average amount specified under LBGAs as a percent of total grain exports[a]	
			Minimum	Maximum
Argentina	24	177.0	33	35
Australia	29	178.0	24	27
Canada	34	267.2	33	38
United States	3	1076.4	2	3
EC	2	217.2	1	1
Other	17	222.1	(c)	(c)
Total	**109**	**2,137.9**		

[a]We provide information on minimum and maximum quantities specified under the agreements but actual sales information is not collected by either the U.S. government or the International Wheat Council and is difficult to obtain because of the inherently proprietary nature of such information.

[b]Million metric tons.

[c]Due to the unavailability of trade data, we could not calculate these percentages.

Sources: U.S. Department of Agriculture/Foreign Agricultural Service (USDA/FAS), International Wheat Council (IWC), and GAO.

[1]U.S. grain export volumes began to improve in 1987 and continued to increase in fiscal year 1988.

[2]Governmental involvement in agricultural production and marketing consists of quasi-governmental grain marketing boards or state trading organizations.

Since 1975, exporter countries' use of LBGAs and the volumes specified under these agreements have increased; in 1975, four exporting nations had 16 LBGAs in effect; in 1985, the peak year for the number of LBGAs in effect, 11 exporters participated in 34 LBGAs. The estimated minimum volume of world wheat and coarse grains covered under these agreements rose from 6.5 mmt (5 percent) for trade year 1975/76 to 38.7 mmt (23 percent) for trade year 1985/86. This increase is attributable to a variety of factors, including increased competition in the international grain market and the view by certain exporters that LBGAs could help maintain, if not improve, their respective market shares.

Between January 1975 and August 1986, grain trading countries participated in 109 LBGAs with the minimum and maximum quantities of grain specified in the agreements averaging 14 to 16 percent of total grain exports. (See table I.2.) Under these 109 agreements, 37 countries imported grain; 28 of these countries were developing economies, 7 were centrally planned economies, and 2 were developed economies. Japan was a party to 13 agreements; the People's Republic of China (PRC) participated in 12 agreements; the Soviet Union was a party to 11 agreements; and Egypt, a developing economy, was a party to 7 agreements.

Table I.2: Estimated Volume of Wheat and Coarse Grains Specified Under LBGAs

Year[a]	(mmt) Total world wheat and coarse grains trade	Volume specified under LBGA Minimum	Maximum	Volume Specified as a percent of wheat and coarse grains trade Minimum	Maximum
1975/76	141.9	6.5	0.1	5	6
1976/77	147.1	9.8	12.1	7	8
1977/78	161.6	13.8	16.8	9	10
1978/79	164.7	11.1	14.0	7	9
1979/80	185.2	14.0	17.0	8	9
1980/81	201.9	21.5	24.8	11	12
1981/82	197.9	33.5	40.4	17	20
1982/83	188.6	32.0	40.4	17	21
1983/84	195.1	39.7	49.5	20	25
1984/85	207.6	43.8	53.0	21	26
1985/86	168.3	38.7	43.2	23	26
1986/87[b]	178.0	35.9	40.3	20	23
Total	**2,137.9**	**300.3**	**359.6**		
Average	178.2	25.0	30.0	14	16

[a]Calendar year.

[b]1986/87 trade figures are USDA estimates; volume specified under LBGAs for 1986/87 reflect only LBGAs reported to the IWC to be in effect as of August 1986.

Sources: Total world wheat and coarse grains figures are from USDA/FAS Circular, World Grain Situation and Outlook, June 1987; volume specified under LBGAs is compiled from IWC listings, Long-Term Agreements Involving Grain, 1975-1986. Percentages were derived by GAO.

Countertrade

Countertrade, although considered by many to be less efficient and desirable than conventional monetary trade, allows countries with foreign exchange shortages to import goods without depleting their hard currency reserves and offers an avenue to countries searching for new ways to diversify and expand their export markets. As such, it may be appealing to both developing and centrally planned economies. The current foreign debt crisis, government involvement in the economies of many countries, and intense international trade competition are also important factors in the use of countertrade.

The extent to which countertrade is used cannot be accurately determined, because transactions are not separately identified in official trade statistics and no national or international organization systematically collects such information on a comprehensive basis. Consequently, estimates of the extent of countertrade vary from 1 to 40 percent of world trade, with a rough consensus falling around 5 to 10 percent.

Based on information we have compiled, the volume of world countertrade is small but not insignificant. For grain, however, countertrade appears to play an even less important role than LBGAS in international trade.

We compiled information on 2,247 countertrade transactions occurring between 1953 and 1987;[3] grain was involved in 125, or 5.7 percent, of these transactions. Most of the 2,247 countertrade transactions took place between developed economies and developing or centrally planned economies.[4] Most grain countertrade transactions were between developing and centrally planned economies, as shown in table I.3.[5]

Table I.3: Summary of Countertrade Arrangements by Country Economic Classification

	Number of Countertrade Arrangements			
Country economic classification	Total	Total Percent	Grain	Grain Percent
Developed-Developed	127	5.7	4	3.2
Developed-Developing	599	26.7	28	22.4
Developed-Centrally Planned	600	26.7	13	10.4
Developing-Developing	429	19.1	30	24.0
Developing-Centrally Planned	317	14.1	45	36.0
Centrally Planned-Centrally Planned	25	1.1	2	1.6
Other[a]	150	6.7	3	2.4
Total	**2,247**		**125**	

[a]Included in this category are transactions in which the country economic classification for one of the parties is unspecified.

Developing economies used grain countertrade to both import and export grain more frequently than other economies. Argentina and Thailand were the most frequent exporters (15 transactions each), while Zimbabwe was the most frequent grain importer (23 transactions).

[3]This information is based on (1) a comprehensive review of available literature sources, (2) a detailed analysis of Countertrade Outlook: Weekly Intelligence on Reciprocal International Trade, DP Publications Co.(Alexandria, Va.) Apr. 25, 1983 - June 1, 1987, and (3) information obtained from international traders and foreign government officials during our overseas work.

[4]As classified by the U.N. Food and Agriculture Organization, developing economies include Argentina, Egypt, Algeria, South Korea, Brazil, Indonesia, and Thailand; centrally planned economies include Poland, Czechoslovakia, Hungary, the Soviet Union, and the PRC; and developed economies include Canada, the EC, Australia, Japan, and Austria.

[5]Country classifications should not be interpreted to imply direct government involvement but merely as trade flows between countries. Based on our data sources, the actual participants (i.e., government, quasi-governmental grain marketing board or private trader) could not be determined in the majority of the countertrade transactions reported.

The major U.S. competitors—Argentina, Australia, Canada, and the EC—were involved in 36 of the 125 grain countertrade transactions. Argentina exported grain under 15 transactions, the EC under 8, Australia under 7, and Canada under 6. Two countries identified as most often importing grain through countertrade from the major U.S. competitors were the USSR (3 transactions with Argentina and 1 each with Canada and the EC) and Pakistan (3 transactions with Australia). The United States was identified as either an exporter or importer of grain in 6 of the 125 countertrade transactions. (See table I.5.)

A wide variety of products were exchanged under the grain countertrade agreements. As shown in table I.4, grain exporters traded for 284 products grouped under 16 product classifications; overall, the principal products involved were metals and metal products and consumer goods. Developed economies most often traded for oil, petroleum products and grain; developing economies for oil and petroleum products; and centrally planned economies for consumer goods, metals and metal products, and agricultural commodities.

Table I.4: Summary of Products Countertraded for Grain

Type of product	Frequency Product was Countertraded by Economic Classification: Developed	Developing	Centrally planned	Total
Metals and metal products	5	15	19	39
Consumer goods	4	14	20	38
Agricultural commodities	3	5	19	29[a]
Oil, petroleum products	6	22	0	28
Nonmetallic minerals and products	1	3	18	22
Fertilizer	5	13	3	21
Plant and equipment	2	14	3	19
Grain	6	4	2	12
Chemicals	1	8	0	9
Industrial products	0	7	1	8
Textile fibers and textile products	4	3	1	8
Transportation equipment	1	5	2	8
Electrical machinery and equipment	1	6	0	7
Minerals	1	5	1	7
Pharmaceuticals	0	6	0	6
Other[b]	9	11	3	23
Total	**49**	**141**	**92**	**284**

[a]In one transaction, two separate agricultural commodities were traded by an unspecified country.

[b]Includes coal, technical assistance, wood and wood products, ammunition, credits, rubber, USSR exports, raw materials, insulin, hotel construction, and food aid.

U.S. Countertrade of Grain

The United States has participated in six grain countertrade arrangements: exporting grain to India and Brazil, importing grain for a third country under three triangular arrangements, and directly importing grain from Canada. (See table I.5.) Except for Canada, the arrangements were all with developing economies.

Table I.5: Summary of Grain Countertrade by the United States[a]

Exporter	Importer	Products obtained by exporter	Date of transaction
United States	India	Ferrous manganese and manganese ore	1960
United States	Brazil	Credits	1985
Ghana	United States	Rice[b]	1986
Malawi	United States	Wheat[c]	1986
Zimbabwe	United States	Wheat[d]	1986
Canada	United States	Hotel construction	1987

[a]This represents trade by private U.S. companies.

[b]Ghana was required to export maize to Mali and Burkino Faso under this arrangement.

[c]Malawi was required to export corn to Mozambique.

[d]Zimbabwe was required to export maize to Mozambique.

Factors That Motivate Foreign Countries to Engage in LBGAs and Countertrade

Why Countries Enter Into LBGAs

Officials of grain-trading nations around the world told us that countries enter into LBGAS for various reasons, which include (1) limiting uncertainty and stabilizing markets, (2) facilitating planning and permitting diversification of suppliers, (3) gaining information on and access to markets, and (4) strengthening political and economic ties.

Some grain exporter nations, such as Canada and Australia, engage in these agreements expecting to limit uncertainty and bring some stability to their grain sales and domestic farm sectors. Canadian officials stated that LBGAS help to stabilize the farm sector by moderating the impact of production, price, and sales fluctuations on farm income. Australian officials indicated that LBGAS provide some assurance of sales for the exporters and allow them to modify the quality and type of grain produced to meet the specifications of importers.

Exporter countries also indicated that they engage in LBGAS to (1) gain information about the buying intentions of major purchasers, (2) maintain communication with importers, and (3) facilitate periodic negotiations of individual contracts. These activities, from both an importer's and an exporter's perspective, facilitate export and import planning, diversify suppliers, and assure access to particular types of grain. For example, Argentina has limited storage capacity and enters into these agreements to export grain expeditiously. Japan, the USSR, and Egypt entered into agreements with both Canada and Australia to diversify suppliers. Canadian traders told us that importers such as Brazil, Egypt, and Japan prefer Canadian wheat over U.S. wheat because of its higher protein content.

Countries also use LBGAS to reinforce diplomatic relations and achieve political and economic goals. For example, Brazil and Argentina entered into an LBGA to strengthen regional political ties and integrate their economies. LBGAS have political and economic significance because, in many countries, the governments control imports and exports through centralized state trading organizations. The collective buying power of a state trading organization can encourage exporters to offer a more attractive price or other incentives to secure trade, such as credit terms and technical assistance.

Why Countries May Be Reluctant to Enter Into LBGAs

Although LBGAS provide a framework within which to negotiate specific contracts for trade, their impact on grain availability and price variability is negligible because importers usually pay prevailing market prices for grain whether or not it is purchased through LBGAS. Some traders told us that given favorable prices, trade would have occurred in the absence of LBGAS.

Some officials said that importers may be reluctant to enter into LBGAS because such agreements may inhibit a nation's ability to react to marketplace changes. A South Korean official stated that South Korea does not enter into LBGAS because it wants to be able to obtain the best price available. Japan maintains some flexibility by limiting the timeframe of its agreements to one year. Indonesia no longer pursues LBGAS because grain is plentiful.

U.S. and foreign officials generally agreed that trade depended on price, quality, and incentives offered, regardless of the existence of LBGAS. We could find no evidence that the use of LBGAS increased the market share of the countries that used them. Moreover, LBGAS do not appear to restrict supplies to non-participating countries or result in greater price instability.

Why Countries Enter Into Countertrade

Some countries recognize countertrade as a tool to export surplus goods or to create new markets for their goods while importing needed products and conserving foreign exchange reserves.

Countertrade, like LBGAS, reinforces political and economic ties among nations. According to the director of Brazil's state trading organization, Argentina and Brazil have signed a protocol which provides for the countertrade of Argentine grain for Brazilian manufactured goods.

Although countertrade is not the preferred method of trading for most countries, some recognize it as better than no trade at all. Australia and South Korea have used countertrade when necessary to make sales. Countries such as Egypt have turned to countertrade to conserve hard currency. A U.S. commercial attaché said that Austrian officials attribute 10 to 20 percent of their trade with Eastern bloc countries to countertrade and estimates that this will increase to about 50 percent by 1995 due to these countries' lack of hard currency.

Why Countries May Be Reluctant to Use Countertrade

Many U.S. officials overseas and foreign traders said that countertrade is inefficient, costly, time-consuming, and complex. A Department of Commerce senior economist reported that only one out of 20 countertrade negotiations is completed and only one out of every 3 completed countertrade transactions is profitable. Because countertrade contracts are complex, the risk of non-compliance is greater than for a cash or credit sale. Transaction costs are higher because, among other reasons, trading companies are often needed to dispose of take-back products.[6]

Foreign traders explained that products obtained under countertrade often have no cash market, are difficult to dispose of, and are generally inferior in quality. While inferior product quality is not unique to countertrade, several examples of this problem were noted in our interviews. For example, a U.S. company received dates infested with insects under a countertrade arrangement with Algeria, Argentine officials reported receiving substandard Soviet trucks for which spare parts were not available, and a Canadian multinational food conglomerate was able to absorb Yugoslavian furniture received in return for feed grain only by decorating its offices.

[6]Take-back products refer to those products which a countertrade partner agrees to accept as part of the countertrade arrangement.

Some countries have established policies which discourage the countertrade of certain commodities. Indonesia, for example, instituted a countertrade policy in 1982 to develop market outlets for its non-oil exports, but its policy exempts grain imports from being linked to exports. Indonesia exempts grain from countertrade because it does not want to disrupt its supplies of basic food commodities. Algeria expanded its countertrade activity in 1985 to create exports in the non-hydrocarbon sector and to conserve hard currency due to the decline in oil revenues. Algerian officials, however, said their countertrade arrangements have not included grain.

Other countries simply avoid entering into countertrade arrangements for grain and other agricultural products. A Brazilian official explained that countertrade is unsuitable for trading grain because of its high price volatility and low profit margin. Likewise, Hungary will not countertrade for agricultural goods. South Korean traders commented that countertrade has no advantages and takes about 1 to 3 years to complete negotiations. Officials from Egypt and Algeria said that their countries lack the quantity and quality of products to make countertrade for grain practical.

Countertrade may also displace a country's cash sales. The director of Brazil's state trading organization told us that Brazil lost sales when it exchanged coffee for Polish locomotives and Poland sold the coffee on the open market.

Prospects for Using LBGAs and Countertrade to Increase U.S. Market Share

LBGAs

U.S. officials we interviewed said that for the United States to maximize export sales volumes or revenues through the use of LBGAs, the agreements would have to displace competitors from the market or increase world aggregate demand. According to these officials, these are unrealistic possibilities because, among other factors, the volume of grain traded under them is small. Under current world supply conditions, many importers are not concerned about grain availability and have little incentive to enter into LBGAS.

The United States has traditionally opposed the use of LBGAs because they run counter to the concept of a free multilateral trading system. However, the United States entered into LBGAs with the Soviet Union and the PRC in order to minimize market disruptions and to promote an orderly expansion of trade between the United States and these two countries.[7]

A number of U.S. officials told us that the agreements, to be effective, should be worthwhile for both importers and exporters. Importers want flexibility to allow for adjusting sales levels for unforseen circumstances. Exporters want assurances that the agreement's terms are met. One option suggested was the inclusion of supply assurances—guaranteeing the importer priority purchases in the event of shortages—in exchange for assurances of at least minimum purchases. This option would be difficult for the United States to implement because the government does not directly control grain supplies. Also, importers have little incentive to agree to such terms when grain is plentiful. Consequently, it may be difficult for the United States to negotiate agreements that would improve its position in the world market.

Countertrade

Government officials of grain importing countries—prospective countertrade partners—generally stated that they would not increase their purchases of U.S. grain if countertrade was more readily available. Some said grain is too critical to their national food security to risk on countertrade. Others said countertrade might displace their current purchases of U.S. grain under other grain export programs.

Officials representing Algeria, Egypt, Brazil, and some Eastern bloc countries expressed interest in countertrading for U.S. grain under certain conditions. Algerian and Egyptian officials, however, said that their countries have neither the quantity nor the quality of goods that could be exchanged for U.S. grain that would make a countertrade transaction viable. Additionally, if they were to countertrade for U.S. grain, they might reduce their grain purchases under other U.S. export programs.

[7]While the U.S.-Soviet LBGA is currently active, the LBGA with China is not. For futher information on these agreements, see Long-Term Bilateral Grain Agreements with the Soviet Union and China (GAO/NSIAD-89-63) Mar. 1989.

Brazilian officials and the representatives of some Eastern bloc countries said they would be willing to engage in countertrade arrangements with the United States for grain but would not exchange their cash export products in return. For example, Brazil would not countertrade its coffee or Hungary its canned hams.

Some experts have suggested that the United States could use countertrade, to a limited extent, to dispose of its surplus grain by providing food aid and assisting in foreign economic development programs for developing economies with food shortages, chronic foreign debts, and rising populations. They state that in addition to saving on scarce foreign exchange, these countries could potentially find future commercial market outlets for their non-traditional products, thus expanding and diversifying their export product lines. On the other hand, the potential for an offsetting impact should be recognized. Using U.S. grain stocks to fulfill the food needs of other countries could serve to displace what otherwise would be commercial grain sales. As such, using U.S. stocks will not necessarily reduce U.S. grain surpluses overall. It might simply shift around the mix of surpluses that are present in U.S. markets.

Although the United States officially opposes government-mandated countertrade as contrary to a policy of free trade, the Congress has recently supported the use of voluntary barter/countertrade for expanding the U.S. share of the international grain market. Furthermore, the U.S. government's use of countertrade as a food aid/foreign assistance program is not without precedent. Both the 1950-73 Barter Program and the U.S.-Jamaican Bauxite Agreement of 1982 are considered forms of food aid or foreign assistance. Also, the pilot barter provisions of the 1985 Food Security Act were aimed at providing food to countries with food or foreign exchange shortages in return for strategic materials. These provisions have not yet been implemented, however, due to the administration's assessment of stockpile requirements, interdepartmental disputes over reimbursement and accounting procedures, and the time Agriculture needed to devote to carrying out various mandates of the 1985 Farm Bill.[8]

Despite the limited part currently played by grain countertrade in U.S. agricultural trade and limited prospects for future expansion, the Congress has continued to express interest in this trade practice, in part because of the continuing U.S. trade deficit. For example, Section 4309

[8]For futher information on this subject, see our report, Implementation of 1985 Food Security Act Barter Provisions (GAO/NSIAD-87-181BR) June 1987.

of Title IV (Agricultural Trade) of the Omnibus Trade and Competitiveness Act of 1988 conveyed a sense of Congress that the Secretary of Agriculture should implement the pilot barter provisions of the 1985 Food Security Act. In addition, Section 2205 of Title II (Export Enhancement) of the Trade Bill requires the creation of an interagency group on countertrade and an office of barter in the Department of Commerce in order to gather information on all types of countertrade for policy development purposes.

Objectives, Scope, and Methodology

At the request of the Chairman of the House Agriculture Subcommittee on Department Operations, Research and Foreign Agriculture, and Representative Byron L. Dorgan, we reviewed the prospects for the United States using long-term bilateral grain agreements and countertrade to enhance U.S. grain exports. We also summarized information on the extent of LBGAS and countertrade in international grain trade.

We interviewed numerous officials from private trading organizations, international grain companies, U.S. government agencies, and foreign governments involved in LGBAs and countertrade. These officials were selected because of their expertise in U.S. domestic farm policy, agricultural economics, foreign trade and international relations, trade statistics, commodity trading, and related subjects.

We reviewed executive branch agencies' documents and files and private sector documents and publications. To identify LBGAS we reviewed various background material, including International Wheat Council listings. Due to the manner in which international grain data is reported, we compared IWC statistics, which were generally reported on a calendar year basis, to USDA trade figures, which were reported on a trade year basis (i.e., July-June for wheat and Oct.-Sept. for coarse grains). We reviewed LBGAS employed from January 1975 to August 1986. Appendix II includes additional data on new LBGAS beginning in September 1986 through June 1987. It should also be noted that IWC statistics generally lag actual figures by one year. We could not verify the terms or disposition of LBGAS and countertrade arrangements because this information is not systematically collected or maintained.

For countertrade grain arrangements, we compiled example arrangements based primarily on a detailed analysis of Countertrade Outlook; Weekly Intelligence on Reciprocal Trade issued from April 23, 1983 through June 1, 1987. Because no national or international agency systematically collects information on countertrade, it is not possible to determine accurately the total number of countertrade arrangements. The data we gathered was limited to publicly announced countertrade arrangements.

Our review was conducted in accordance with generally accepted government auditing standards.

LBGAs in Existence Between January 1975 and August 1986

Exporter/importer	Date signed	Date effective	Duration (years)	Average annual quantity[c] (mmt) minimum	maximum
Argentina with					
PRC	Nov–73	Jan–74	3	0.700	1.000
Korea, Rep.	Nov–73	Jan–74	3	0.267	0.267
Algeria	Oct–74	Jan–75	5	0.270	0.450
Paraguay	Nov–74	Jan–75	1	0.110	0.110
Portugal	Dec–74	Jan–75	1	0.650	0.670
Venezuela	Nov–75	Jan–76	5	0.380	0.380
Libya	Dec–75	Jan–76	1	0.226	0.226
Peru	Mar–76	Jan–76	3	0.237	0.237
Chile	Nov–76	Jan–77	3	0.500	0.500
PRC	May–78	Jan–79	3	1.000	1.000
Iraq	Apr–80	Dec–80	3	0.300	0.300
USSR	Jul–80	Jan–80	6	4.500	4.500
Mexico	Aug–80	Jan–81	2	0.700	0.700
PRC	Sep–80	Jan–81	4	1.000	1.500
Algeria	Sep–81	Jan–82	5	0.120	0.240
Cuba	Sep–82	Jan–82	4	0.138	0.138
Angola	(a)	Jan–83	3	0.100	0.100
Czechoslovakia	(a)	Jan–83	3	0.200	0.200
Haiti	(a)	Jan–83	3	0.150	0.150
Iran	Mar–83	Dec–83	2	1.500	1.500
Mexico	Mar–85	Jan–85	4	(a)	(a)
Peru	Mar–85	Jan–85	4	0.700	0.700
Bulgaria	Oct–85	Jan–86	1	0.600	0.600
USSR	Jan–86	Jan–86	5	4.000	4.000
Australia with					
Egypt	Jun–72	Jul–72	3	1.000	1.000
Lebanon	(a)	Jan–74	3	0.040	0.070
PRC	Oct–73	Jan–74	3	1.367	1.567
Egypt	Oct–75	Jan–76	3	1.000	1.000
Pakistan	Feb–76	Jan–76	1	0.500	0.500
Saudi Arabia	Mar–76	Jan–76	3	0.200	0.200
Taiwan	Aug–76	Aug–76	1	0.100	0.100
Japan	Oct–76	Jan–77	1	1.000	1.000
Egypt	Nov–77	Jan–79	3	1.000	1.000
Indonesia	Nov–77	Jan–78	1	0.400	0.400
PRC	Jan–79	Jan–79	3	2.500	2.500
Qatar	Jan–80	Jan–80	1	0.044	0.044

(continued)

Exporter/importer	Date signed	Date effective	Duration (years)	Average annual quantity[c] (mmt) minimum	maximum
Indonesia	Feb–81	Jan–81	1	0.600	0.600
Japan	Feb–81	Jan–81	1	0.900	0.900
Egypt	Feb–81	Jan–82	5	1.000	1.000
Yemen AR	May–81	Dec–81	3	0.250	0.250
PRC	Nov–81	Jan–82	3	1.500	2.500
Abu Dhabi	Dec–81	Jan–82	3	0.070	0.070
Iraq	Nov–82	Jan–83	3	0.750	0.917
Japan	Feb–83	Jan–83	1	0.900	0.900
Yemen PDR	Aug–83	Jan–84	1	0.120	0.130
Japan	Feb–84	Jan–84	1	0.965	0.965
Yemen PDR	(a)	Jan–85	1	0.120	0.130
Egypt	Oct–84	Jan–85	5	2.000	2.000
Japan	Feb–85	Jan–85	1	0.900	0.900
Abu Dhabi	Apr–85	Jan–85	3	0.070	0.070
Iraq	Nov–85	Jan–86	5	0.800	1.200
Yemen AR	Dec–85	Jan–86	1	0.400	0.400
Japan	Feb–86	Jan–86	1	0.900	0.900
Canada with					
Lebanon	Sep–73	Jan–73	3	0.080	0.080
PRC	Oct–73	Jan–74	3	1.626	2.032
Brazil	Nov–73	Jun–73	3	0.200	0.200
Poland	Dec–73	Jan–74	3	0.250	0.333
Iraq	Mar–74	Jan–74	3	0.100	0.300
Norway	Mar–74	Jan–74	3	0.060	0.120
Brazil	Oct–75	Jan–76	3	0.300	0.500
Algeria	May–76	Jan–76	3	0.292	0.333
Japan	Nov–76	Jan–77	1	2.300	2.300
Poland	Nov–76	Jan–77	3	0.250	0.400
Norway	Jan–77	Jan–77	3	0.060	0.120
Poland	Apr–77	Jan–77	3	0.500	0.800
Jamaica	Jan–79	Jan–79	3	0.050	0.083
PRC	Feb–79	Aug–79	3	2.800	3.500
Poland	Oct–79	Jan–80	3	1.000	1.500
Brazil	Jan–80	Jan–80	3	1.000	1.000
Japan	Dec–80	Jan–81	1	2.150	2.150
Mexico	Feb–81	Jan–81	2	0.100	0.250
USSR	May–81	Aug–81	5	5.000	5.000
Jamaica	1981[b]	Jan–82	3	0.023	0.038
Algeria	Apr–82	Aug–82	3	0.600	0.800

(continued)

Exporter/importer	Date signed	Date effective	Duration (years)	Average annual quantity[c] (mmt) minimum	maximum
PRC	May–82	Aug–82	3	3.500	4.200
Brazil	Jul–82	Jan–83	3	1.667	2.500
Iraq	Nov–82	Jan–83	3	0.350	0.450
Japan	Nov–82	Jan–83	1	2.200	2.200
GDR	Sep–83	Jan–84	3	1.000	1.000
Japan	Nov–83	Jan–84	1	2.200	2.200
Japan	Nov–84	Jan–85	1	2.100	2.100
Egypt	Apr–85	Jan–85	5	0.500	0.500
Japan	Nov–85	Jan–86	1	2.050	2.050
USSR	Dec–85	Aug–86	5	5.000	5.000
Egypt	Jan–86	Jan–86	3	0.025	0.025
Brazil	Jan–86	Jan–86	3	0.700	1.500
Iraq	Mar–86	Jan–86	5	0.660	0.760
E.C. with					
PRC	Sep–80	Aug–80	3	0.500	0.700
USSR	Oct–82	Jan–83	3	(a)	(a)
U.S. with					
USSR	Oct–75	Oct–76	7	6.000	8.000
PRC	Oct–80	Jan–81	4	6.000	9.000
USSR	Jul–83	Oct–83	5	9.000	12.000
Others with					
Sweden-Norway	Mar–75	Jan–75	3	0.050	0.083
Sweden-Algeria	Mar–75	Jan–75	3	0.080	0.085
Uruguay-Bolivia	Oct–75	Jan–76	3	0.050	0.050
Sweden-Poland	Mar–77	Jan–77	3	0.200	0.200
Turkey-Tunisia	Jul–77	Aug–77	1	0.240	0.240
Austria-Poland	Dec–77	Jan–78	1	0.200	0.200
Turkey-Libya	Jun–78	Jan–78	5	0.100	0.100
Turkey-Jordan	Jun–80	Jan–81	3	0.033	0.033
S.Africa-Taiwan	1982[b]	Jun–82	3	0.600	0.600
Hungary-USSR	(a)	Jan–83	3	0.400	0.400

(continued)

Exporter/importer	Date signed	Date effective	Duration (years)	Average annual quantity[c] (mmt) minimum	maximum
Brazil-USSR	Mar–82	Jan–83	4	0.500	0.500
Austria-GDR	May–84	Jan–84	3	0.350	0.350
Uruguay-Mexico	Jan–85	Jan–85	3	0.100	0.100
Uruguay-Taiwan	Jan–85	Jan–85	6	0.369	0.369
PRC-Japan	Mar–85	May–85	2	2.300	2.300
Turkey-USSR	Mar–85	Jan–86	5	(a)	(a)
PRC-USSR	Jan–86	May–85	4	1.500	1.500
Additional LBGAs Initiated Between September 1986 and June 1987					
Argentina with					
Brazil	Jun–87	1992[b]	ext.	2.000	2.000
Australia with					
Japan	Mar–87	Jan–87	1	.900	.900
Yemen	Jan–87	Jan–87	2	.400	.600
Canada with					
Japan	Nov–86	Jan–87	1	(a)	(a)
USSR	Oct–86	Aug–86	5	5.000	5.000
South Africa with					
Taiwan	Nov–86	Jan–87	3	.600	.600

[a]Not available.

[b]Specific month not available from source.

[c]We provide information on minimum and maximum quantities specified under the agreements but actual sales information is not collected by either the U.S. government or the International Wheat Council and is difficult to obtain because of the inherently proprietary nature of such information.

Source: International Wheat Council.

Countertrade Arrangements Involving Grain From 1953 to 1987

Country A	Country B	Product Exported from Country A	Product Exported from Country B	Timeframe
Spain	Egypt	wheat, wheat flour	cotton	1953
United States	India	wheat	ferrous manganese	1960
Argentina	Peru	wheat corn beef offal	copper iron ore cotton	1976
	Venezuela	wheat (200,000 metric tons (mt), grain, sorghum, corn (100,000 mt)	iron ore	1976
Hungary	Peru	wheat equipment	fishmeal cotton coffee minerals	1977
India	Iran	wheat construction equip. railway equip. rice tea	crude oil raisins almonds	1980
Turkey	Iran	barley wheat horticultural items	crude oil	1980
India	USSR	barley (100,000 tons) corn (300,000 tons) rice peanuts other	crude oil petroleum products	1981
Thailand	PRC	maize (200,000 mt) rice black matupe rubber other	crude oil diesel oil jet petroleum	1981
	Romania	corn (200,000 mt)	fertilizer	1981
	USSR	corn (100,000 mt)	fertilizer	1981
	USSR	corn (200,000 mt)	fertilizer	1981
Argentina	Iraq	wheat (300,000 mt) rice	crude oil	1982
South Africa	Romania	corn (200,000 tons)	urea fertilizer	1982
	USSR	corn (200,000 tons)	urea fertilizer	1982
Argentina	Iraq	grain	oil	1983
Pakistan	Iran	wheat (130,000 tons) sugar rice chemical fertilizer	crude oil	1983

(continued)

Country		Product Exported from Country		
A	B	A	B	Timeframe
Argentina	Mexico	wheat other cereals foodstuffs	petrochemicals pharmaceuticals motors	1984
	Mexico	grain	steel	1984
	USSR	grain meat	crude oil	1984
Australia	Pakistan	wheat (550,000 tons)	cotton other commodities	1984
PRC	Tunisia	wheat (150,000 tons) cotton	phosphates	1984
East Germany	Brazil	corn	unspecified	1984
Greece	Iran	wheat (15,000 mt) various commodities manufacturing goods & services	crude oil chromite zinc	1984
Indonesia	Japan	maize shrimp rubber rattan plywood & sawn lumber	coal carrying vessel	1984
	Netherlands	white corn	unspecified	1984
Thailand	USSR	corn (5,200 mt) garments tapioca pellets tapioca flour	rosewood machinery fertilizer	1984
United Kingdom	Poland	wheat (70,000 tons)	coal	1984
Brazil	Malaysia	grain iron ore cotton foodstuffs frozen meat	rubber crude oil rubber processing machine tin	1985
	Peru	grain processed foods	oil copper zinc industrial equipment manufacturing goods	1985
Bulgaria	Zimbabwe	wheat (20,000 tons)	tobacco	1985
PRC	Japan	corn (2,500,000 tons)	machinery	1985
Hungary	Yugoslavia	maize	wheat	1985
India	Pakistan	grain foodstuffs	leather, cotton animal feed	1985
	Pakistan	wheat (2,500,000 tons)	rice	1985
Thailand	Bulgaria	corn rubber rice tapioca other	chemicals pharmaceuticals steel, steel products machinery electrical equipment	1985

(continued)

Country A	Country B	Product Exported from Country A	Product Exported from Country B	Timeframe
Thailand	Poland	corn	patrol boats	1985
	Romania	maize sugar tapioca rice sugar and molasses coffee and chicken	fertilizer agricultural machines insecticides pesticides wine and spirits	1985
	Romania	corn crude oil rice fish meal rubber	fertilizer chemicals minerals	1985
	South Korea	corn (3,000,000 tons) sorghum (300,000 tons)	ammunition explosives	1985
	USSR	corn (500,000 tons) tapioca pellets	fertilizer	1985
United States	Brazil	corn	credits	1985
Zimbabwe	Australia	maize (30,600 tons)	wheat (25,000 tons)	1985
Argentina	Bulgaria	maize (500,000 mt) wheat (100,000 mt) soybeans beef	equipment technical assistance leather processing metal refining insulin	1986
	PRC	grain beef steel	equipment technical assistance chemicals petroleum products	1986
	Czechoslovakia	grain beef	thermal power plant industrial products	1986
	Czechoslovakia	maize soybeans beef	chemicals raw materials	1986
	Peru	grain	iron ore	1986
	USSR	grain (4,500,000 mt) soybeans	heavy manufactures	1986
Australia	Egypt	wheat (10,000,000 tons)	grain silo financing	1986
	Iran	barley mutton butter wool	crude oil	1986
Bangladesh	Sweden	wheatbran jute products tea hides and skins other	pharmaceutical materials hospital lab equipment baby food	1986
	Switzerland 2 agreements[b]	wheat bran jute products tea hides and skins, other	pharmaceutical materials, hospital lab equipment, baby food	1986

(continued)

Country		Product Exported from Country		
A	B	A	B	Timeframe
Bangladesh	West Germany	wheatbran jute products tea hides and skins, other	pharmaceutical materials, hospital lab equipment, baby food	1986
Brazil	Guyana	wheat auto spares	gold other minerals	1986
Bulgaria	Zimbabwe 3 agreements[b]	wheat maize chemicals and plastics steel and tin plates industrial goods	tobacco asbestos ferrochrome blue denim	1986
Canada	Nigeria	grain other	oil	1986
PRC	East Germany	grain cotton light industrial goods	trucks factory equipment grain, cotton	1986
	Japan	maize raw cotton crude oil petroleum products petrochemicals	plywood	1986
	Japan	corn	machinery	1986
	Tunisia	wheat maize cotton	phosphates	1986
	USSR	corn soybeans fruit metals light manufactures	lumber steel fertilizer aircraft and vehicles heavy manufactures	1986
Czechoslovakia	Zimbabwe 4 agreements[b]	wheat maize chemicals and plastics steel and tin plates industrial goods	tobacco asbestos ferrochrome blue denim	1986
East Germany	Zimbabwe 2 agreements[b]	wheat maize chemicals and plastics steel and tin plates industrial goods	tobacco asbestos ferrochrome blue denim	1986
Ghana	U.S.	maize	rice	1986
Greece	USSR	wheat (100,000 tons) maize (100,000 tons) steel tubes olive oil, ship repair	USSR exports	1986
Hungary	Zimbabwe 2 agreements[b]	wheat, maize chemicals and plastics steel and tin plates industrial goods	tobacco asbestos ferrochrome blue denim	1986

(continued)

Country		Product Exported from Country		
A	B	A	B	Timeframe
India	North Korea	wheat 30 commodities	cement, yarn rail equipment polyvinyl chloride	1986
	North Korea	wheat (10,000 tons)	zinc	1986
	Unspecified	wheat rice, tea engineering goods agricultural products	pig iron and billets	1986
	Unspecified	wheat engineering goods agricultural products textiles other	fertilizer phosphate rock chemical compounds steel asbestos, other	1986
Malawi	U.S.	corn	wheat	1986
Pakistan	Iran	wheat rice, textiles	oil other products	1986
Poland	Zimbabwe	wheat maize chemicals and plastics steel and tin plates industrial goods	tobacco asbestos ferrochrome blue denim	1986
Romania	Zimbabwe - 6 agreements[b]	wheat maize chemicals and plastics steel and tin plates industrial goods	tobacco asbestos ferrochrome blue denim	1986
Sudan	Saudi Arabia	sorghum meat agricultural products	petroleum products fertilizer electric cables industrial products	1986
Thailand	Brazil	corn, rice	army tanks	1986
	Romania	maize, rubber	fertilizer	1986
	South Korea	corn tapioca	fertilizer	1986
Turkey	Iran	wheat barley fertilizer steel	oil manufactures agricultural commodities minerals	1986
Uganda	Libya	maize coffee tea timber other	oil	1986
	Tanzania	maize beans electric power	electric transformers detergents aluminum ware processing equipment maize	1986

(continued)

Country		Product Exported from Country		
A	B	A	B	Timeframe
Yugoslavia	Belgium	maize	unspecified	1986
	Middle East	maize (420,000 mt) other	irrigation development	1986
	Zimbabwe	wheat maize chemicals and plastics steel and tin plates industrial goods	tobacco asbestos ferrochrome blue denim	1986
Zimbabwe	Mozambique	maize tobacco malt aluminum sulfate agricultural machinery	fish and shellfish cashews bauxite petroleum products	1986
	South Africa	maize (200,000 tons)	manufactures	1986
	U.S.	maize (7,000 mt)	wheat (9,600 mt)	1986
Argentina	Brazil	wheat (900,000 tons) rice beans	bananas cacao paste	1987
Canada	U.S.	barley (300 bushels)	hotel construction	1987
Greece	Albania	wheat flour textiles pharmaceuticals	asphalt diesel fuels electric power	1987
	Algeria	wheat (200,000 tons) cement milk powder tobacco other	crude oil petroleum products phosphates	1987
	Belgium	maize	unspecified	1987
Uganda	Burkino Faso	maize	blankets	1987
	Libya	yellow maize (2,000 mt) coffee and beans cotton yarn fruits other	crude oil cement tractors gypsum fertilizer	1987
Zimbabwe	Australia	maize (14,000 tons)	wheat other food aid	1987
	Brazil	maize	coffee-process. machine	1987
	Pakistan	maize (35,950 tons)	rice	1987
Argentina	USSR	grain	trucks	(a)
Australia	Pakistan	wheat (250,000 mt)	cotton	(a)
	Pakistan	wheat	fertilizer	(a)
Brazil	USSR	corn (2,500,000 tons) soybeans, beans, meal, oil, other	petroleum	(a)

(continued)

Country		Product Exported from Country		
A	**B**	**A**	**B**	**Timeframe**
Canada	Balkan Countries	grain	corn	(a)
	South Korea	wheat (500,000 mt)	cars	(a)
	USSR	wheat	generators	(a)
	Yugoslavia	feed grain	furniture	(a)
France	Egypt	maize flour frozen chicken tallow	cotton, yarn, textiles leather furniture aluminum phosphates	(a)
	Poland	grain (160,000 tons)	coal	(a)
	Vietnam	wheat and wheat flour (2,000,000 mt) fertilizer	rice coal	(a)
Indonesia	Japan	maize, shrimp, lobster jellyfish quartz, other	shop and ground equipment	(a)
Thailand	South Korea	maize	electric water pump	(a)

[a]Not available.

[b]Multiple agreements represent separate agreements with the identical types of products counter-traded.

Sources: International Trade: Alternative Trading Practices for International Grain Trade, (GAO/NSIAD-87-90BR) Mar. 1987, Countertrade Outlook: Weekly Intelligence on Reciprocal Trade, DP Publications Co. (Alexandria, Va), Apr. 25, 1983 - June 1, 1987, and information provided to us by international traders and foreign government officials.

Note: Table excludes one agreement in which both countries are unspecified.

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