V. Ranking STEs with Respect to Their Capacity To Distort Trade

One of the primary goals of the WTO is to move toward freer trade while taking into account the existence of state trading enterprises. To this extent, quantitative measures of the trade impacts of such enterprises, as represented by tariff/subsidy equivalents, are desirable. Such information shows what types of institutions are most distortive and what activities might need disciplining. Attempts to capture the quantitative impacts of such entities and their activities on international agricultural trade have just begun. Progress has been slow because of the proprietary nature of the information sought.14 Besides, where the tariff/subsidy equivalents have been calculated, it has been difficult to argue convincingly that they solely represent the effects of STEs and not other factors that influence trade. An example is an STE that manages import licenses and is responsible for implementing health and sanitary measures.

A classification scheme—or taxonomy—that provides qualitative indications (or ordinal ranking) of the trade impacts of such enterprises is needed to understand and to analyze the market effects of STEs. Such a scheme, if based on a strong conceptual foundation, can be useful in several respects. Most obviously, it would provide a basis for evaluating state traders in terms of their distortionary capacity. This would be similar to approaches used in the WTO with respect to the Agreement on Agriculture (green and amber boxes) and the Agreement on Subsidies (permissible or nonpermissible). Moreover, a classification scheme can provide a snapshot of the similarities and differences among STEs in terms of their broad economic traits. Policymakers might find it useful to know, for instance, if the Canadian Wheat Board, the Australian Wheat Board, or the Commodity Credit Corporation are comparable with respect to economic characteristics such as market power, use of trade policy instruments, and their linkages to the government. Finally, a classification scheme provides a framework for development of a dynamic inventory of STEs as their powers and institutional structures change over time.

What might be an appropriate classification scheme to understand the economics of state trading enterprises? If the objective is to evaluate STEs in terms of their capacity to distort trade, then our discussion on the tariff/subsidy equivalent approach suggests there are three basic preconditions that need to be taken into consideration: the extent of control over the domestic market, the ability to influence international trade, and regulatory authority over substitute products. To keep it simple, we will initially confine our classification scheme to the first two characteristics, and later explain how this might change in a multiproduct environment.

Creating a Classification Scheme for STEs

Table 5 presents a simple classification scheme for STEs based on their ability to control domestic markets and external trade. The classification scheme helps policymakers to identify enterprises that have the greatest potential to distort trade, to compare agricultural STEs in terms of their broad economic traits, and to provide a framework for the development of a dynamic inventory of STEs as their powers and institutional structures change.

A Type I STE operates without any controls on either domestic markets or international trade. In other words, the STE is competing with private firms on a level playing field. Clearly, Type I STEs have little, if any, capacity to affect the market, and their potential to distort trade is negligible.

A Type II STE operates without any restrictions on external trade but maintains control over the domestic market. Market controls may take the form of price regulation, supply control, procurement, and domestic marketing. Domestic consumers (producers) can resort to international markets for purchases (or sales), suggesting that domestic controls without trade restrictions do not significantly violate competitive norms. The potential to distort trade for a Type II state trader is low.

A Type III STE competes with private firms to procure and sell domestic production in the home market, but maintains quantitative controls on external trade. These STEs have the potential to moderately distort trade, but the actual extent of distortion would depend on factors such as the extent of international market power, the range of exclusive privileges available to the firm, the policy objectives of the STE, and the

¹⁴For example, the Canadian Wheat Board (CWB) does not make public information on transaction prices and quantities of individual wheat and barley sales. Without these data, it is very difficult to establish meaningful domestic and export prices for Canadian wheat since the CWB publishes only its pool prices derived from a combination of domestic and export prices.

Table 5—Classifying STEs based on their control of domestic markets and trade

Туре	Trade controls	Domestic market controls	Potential for trade distortion	
Type I	No	No	Negligible	
Type II	No	Yes	Low	
Type III	Yes	No	Moderate	
Type IV	Yes	Yes	High	

Source: Dixit and Josling, 1997.

importance (share) of external trade in domestic consumption and production.

A Type IV STE imposes quantitative restrictions on imports or exports and maintains control over the domestic market as well. These STEs are more able to distort trade than the other three groups. But, whether a Type IV STE distorts trade much more than other types of STEs depends on factors that influence the magnitude of the tariff/subsidy equivalents, similar to those indicated for Type III STEs. Thus, a Type IV STE that has a small share of the global market may distort trade less than a Type III STE that is a big player in world trade.

This classification does not account for the multiproduct nature of STEs. We pursued a single-product approach to keep the scheme manageable. But, if the multiproduct element of the parastatal organization is important, two points are worth noting. First, the four types of STEs could be further disaggregated within each group to create subgroups A (single product) and B (multiple product), where Type B could be potentially more trade-distorting than Type A. The disaggregation, though, might be realistically relevant only for Types III and IV STEs because of their potential for moderate to high trade distortions. Second, in a multicommodity setting, the same STE might be classified differently, depending on the commodity under consideration.

Classifying Eight Major State Traders

Can policymakers use the classification scheme to determine which existing agricultural STEs have the greatest potential to distort trade? To illustrate this possibility, we examined the four largest export-oriented agricultural STEs and the three major import-oriented STEs reported by their governments to the WTO in 1995 and 1996. The four export STEs are the Australian Wheat Board, Canadian Wheat Board, New Zealand Dairy Board, and Queensland Sugar

Corporation, while the three largest import STEs reported to the WTO in 1995 and 1996 are Japan's Food Agency (barley, rice, and wheat), Indonesia's Badan Urusan Logistik (BULOG) for several commodities, and the Republic of South Korea's Livestock Products Marketing Organization (LPMO) for beef. We also examined a fourth import STE, Mexico's Compania Nacional de Subsistencias Populares (CONASUPO) for milk powder, even though Mexico did not report CONASUPO to the WTO as an STE in 1995 or 1996. CONASUPO was the largest single milk powder importer in the world until March 31, 1999, when the Mexican Government closed CONASUPO's doors. The Mexican Government continues to import milk powder for social programs through LICONSA, and began auctioning import permits for milk powder to the private sector July 7, 1999.

In addition, we applied the classification scheme to the programs of the U.S. Commodity Credit Corporation in the box on p. 19, "Does the U.S. Commodity Credit Corporation Function as an STE?" and to China's state control of grains and oilseeds.

Tables 6 and 7 present important indicators of the control of STEs over domestic supplies and trade. Exporters are distinguished from importers because their behavior can be expected to differ significantly. For each export and import STE, we compared the STE's share of exports or imports, its share of the domestic market, its procurement of domestic production, its export share of domestic production or import

¹⁵Many of the major export STEs seem to follow export expansion objectives, while STE importers are more interested in restricting trade. The concern with exporting STEs is whether they circumvent the Uruguay Round Agreement on Agriculture export subsidy disciplines. The issue with importing STEs is whether they use nontariff barriers to trade to protect domestic industries. A dichotomy between exporters and importers, therefore, allows us to emphasize that the trade balance of an STE is an important element to consider in designing rules and disciplines for such enterprises.

Does the U.S. Commodity Credit Corporation Function as an STE?

The Commodity Credit Corporation (CCC), a government-owned and operated corporation within the U.S. Department of Agriculture (USDA), was created to stabilize, support, and protect farm income and prices. The 1948 Commodity Credit Corporation Charter Act gives the CCC wide-ranging authorities to support prices of agricultural commodities through loans, purchases, payments, and other operations, and makes available materials and facilities required in the production and marketing of agricultural products. The Act authorizes the sale of agricultural commodities to other government agencies and foreign governments and food donations to domestic, foreign, or international relief agencies. The CCC also is authorized to develop new domestic and foreign markets and marketing facilities for agricultural commodities (G/STR/N/1/USA, September 29, 1995). The CCC has an authorized capital stock of \$100 million and is able to borrow up to \$30 billion at any one time.

Congress limits the authorities of the CCC when it defines the structure of domestic support and export programs in multiyear farm bills. The U.S. notifications to the WTO in 1995 and 1996 covered the CCC's activities from 1992 through 1995. Through USDA's Farm Service Agency (FSA), the CCC operated USDA price and income support programs for numerous commodities, including wheat, corn, oilseeds, cotton, rice, tobacco, milk and milk products, barley, oats, sorghum, rye, honey, peanuts, and sugar. In carrying out the commodity support programs, the CCC acquired inventory by taking title to producer loans which had not been redeemed by loan repayment time and by purchasing dairy products to help support milk prices.

The CCC, through the Foreign Agricultural Service (FAS), has regulated the export prices and quantities for eligible wheat, barley, and other commodities from the mid-1980's under the Export Enhancement Program (EEP) and of eligible dairy products under the Dairy Export Incentive Program (DEIP). The CCC approved sale prices and export subsidy levels for commercial sales under the EEP and DEIP, but did not itself make sales under the EEP or DEIP. The CCC also sold dairy products directly from its inventories through 1995. The United States reports EEP and DEIP subsidies and direct export sales to the WTO under its export subsidy commitments. The CCC also administers the other major USDA export programs: the General Sales Manager export credit guarantee programs, international food assistance programs, and the Food Security Commodity Reserve.

The Federal Agriculture Improvement and Reform (FAIR) Act of 1996 eliminated commodity-specific price and income support programs and replaced most of the programs with fixed farm payments to be phased out in 2002. The 1996 Act emphasizes income transfers rather than commodity price supports. As a result, the legislation discourages the CCC from acquiring commodities as it did in earlier years. The CCC's major export price subsidy program, the EEP, has not assisted export sales of wheat or other major commodities since July 1995 with the exception of a few barley and frozen poultry sales. CCC has continued to use the DEIP to help U.S. dairy product exporters compete in selected export markets.

The CCC's agricultural commodity price support, commodity acquisition, and sales activities have declined sharply since its massive interventions of the mid-to-late 1980's. Today, the CCC continues to act as a conduit for Congressionally approved payments to farmers such as the 1998 crop loss disaster assistance and dairy marketing assistance payments, but the CCC procures U.S. commodities chiefly for domestic food assistance and for donation overseas (Sumner and Josling, 1998).

Classifying the CCC under our scheme is a bit difficult. The CCC does not have monopoly control over the domestic market or trade. The CCC would vacillate between a Type I and Type II classification since its control over domestic markets and trade varies by programs authorized each year, by commodity, and by market conditions. Since the major farm policy reforms of 1996, Type I would be the most appropriate classification for the CCC.

Table 6—Major export-oriented state trading enterprises are types III or IV

STE characteristics	Australian Wheat Board	Canadian Wheat Board	New Zealand Dairy Board	Queensland Sugar Corporation
I. Commodities	Wheat	Western Canadian wheat and barley	Dairy products (butter, milk powder, casein, others)	Raw sugar
II. Trade attributes				
STE share of country's exports	100 percent	Wheat: 96-99 percent Barley: 100 percent	100 percent	100 percent of Queensland raw sugar or 100 percent of Australian raw sugar until 1996 and 1997, when New South Wales and Western Australia exported very small amounts of sugar.
Export share of production	79 percent	Wheat: 75 percent Barley: 22 percent	Butter: 88 percent Cheese: 82 percent Nonfat dry milk: 93 percent	83 percent
Country's share of world trade	13 percent	Wheat: 19 percent Barley: 18 percent	Butter: 22 percent Cheese: 9 percent Nonfat dry milk: 12 percent	11 percent of world sugar (raw and refined) exports.
Exclusive or special authorities	Exclusive authority to export wheat.	Exclusive authority to export Western wheat and barley.	Exclusive authority to export dairy products.	Exclusive authority to export Queensland raw sugar.
STE control of imports	No STE control, but imports are subject to quarantine and transportation regulations.	No STE control, but imports are subject to varietal licensing and some phytosanitary barriers.	None	None, but the Australian Government imposed a tariff on imported sugar until July 1997 that priced raw sugar higher for the domestic market than for export.
Imports as a share of domestic consumption	0.7 percent	Wheat: 1.5 percent Barley: 0.1 percent	Butter: 0 percent Cheese: 0.45 percent Nonfat dry milk: 0 percent	0.2 percent
See notes at end of table.				Continued—

Table 6—Major export-oriented state trading enterprises are types III or IV—Continued

STE characteristics	Australian Wheat Board	Canadian Wheat Board	New Zealand Dairy Board	Queensland Sugar Corporation
III. Domestic market attributes				
STE share of domestic market	No exclusive authority, but holds an estimated 50-percent share of the domestic market.	Markets Western wheat and barley for human consumptionHuman consumption/ (total food+feed use): Wheat: 67 percent Barley: 52 percent	None	Exclusive authority to market raw sugar in Queensland, but not in other Australian States. Queensland produces 95 percent of Australian raw sugar.
Procurement of production	Domestic production for export and for some of the domestic market.	Procures domestic production for export and for human consumption in the domestic market.	Procures manufactured products from domestic cooperatives for export.	Procures cane from Queensland growers for processing and export.
IV. Ownership/financing	Ended government underwriting of pool payments and status as a government corporation July 1, 1999.	As of January 1, 1999, the CWB is composed of 2/3 producers and 1/3 government-appointed directors. The Canadian Government will continue to underwrite CWB operational losses.	Producer-owned and financed.	Producer-owned and financed.
V. Type	Type III	Type IV	Type III	Type III

Notes: The Australian Wheat Board (AWB) and Queensland Sugar Corporation (QSC) shares of their countries' trade are for 1993-95 and come from Australia's WTO notification. The Canadian Wheat Board (CWB) and New Zealand Dairy Board (NZDB) shares of their countries' trade are for 1992-94 based on their countries' WTO notifications. Exports as a share of world trade for wheat and barley are averages for the 1993/94-1997/98 marketing years and do not include intra-EU trade. Export shares of production and import shares of domestic consumption plus feed are averages for the 1993-97 local marketing years.

Sources: STE shares of trade come from WTO notifications for 1995 and 1996. Other trade statistics are calculated from USDA/FAS, various commodity circulars and USDA/ERS, TS View.

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See notes at end of table.

Table 7—Reforms have reduced potential trade effects from import-oriented state trading enterprises

STE characteristics	Badan Urusan Logistik (BULOG)—Indonesia	Compania Nacional de Subsistencias Populares (CONASUPO)—Mexico	The Food Agency– Japan	Livestock Products Marketing Organization— Republic of South Korea
I. Commodities	Garlic, rice, soybeans, sugar, wheat, wheat flour	Milk powder	Barley, rice, wheat	Beef
II. Trade attributes	• , ,			
STE share of country's imports	100 percent of above commodities until September 1998.	100 percent until 1998 when licenses were issued to a multinational firm. CONASUPO was closed March 31, 1999.	Rice: -100 percent (1993-95) -80 percent (1998-99) Wheat: 100 percent Barley: 100 percent	From 1993-95, an average of 80 percent of the TRQ; in 1998, 40 percent of the beef import TRQ. The remainder of the TRQ goes to the private industry Super Groups.
Imports as a share of domestic consumption plus feed	Rice: 3 percent Wheat/flour: 100 percent	Nonfat dry milk: 74 percent (1993-97)	Rice: 4 percent Wheat: 98 percent Barley: 48 percent	Beef and veal: 41 percent (1994-98)
Country's share of world trade	Rice: 12 percent Soybeans: 2 percent Sugar: 2 percent Wheat: 4 percent	Nonfat dry milk: 31 percent (1993-97)	Rice: 4 percent Wheat: 6 percent Barley: 9 percent	Beef and veal: 3 percent (1994-98)
Means of control	BULOG's exclusive import authorities were terminated in 1998. However, BULOG has continued to sell from its earlier accumulated stocks and imports rice as needed to stabilize rice prices.	CONASUPO received all licenses for imports of milk powder under Mexico's WTO and NAFTA TRQ's until 1998 when the Mexican Government issued a large number of licenses for milk powder imports to a multinational firm.	Food Agency has exclusive authority to import under Japan's minimum access quota for rice and TRQ's for barley and wheat. The Food Agency allows the private sector to import small quantities of rice and of feed wheat and barley under SBS tenders.	See above
Export authority	Exclusive authority until September 1998.	None	None	None

Continued—

Table 7—Reforms have reduced potential trade effects from import-oriented state trading enterprises—Continued

STE characteristics	Badan Urusan Logistik (BULOG)—Indonesia	Compania Nacional de Subsistencias Populares (CONASUPO)—Mexico	The Food Agency— Japan	Livestock Products Marketing Organization— Republic of South Korea
III. Domestic market attributes				
STE share of domestic market	Until September 1998, controlled the distribution of imported commodities to processors and retailers through restrictive licensing. Procured rice for national stocks. Maintained administered price systems for wheat flour and sugar.	None, resold imported milk to private firms.	Resells imported rice, wheat, and barley; 100 percent control of domestically produced wheat and barley.	None
Procurement of production	See above	None	Procures domestic production of barley and wheat.	None
IV. Type	Type III-IV until September 1998	Type III until 1998	Type III for rice Type IV for barley and wheat	Type III until 1998
V. Major reforms	See above	The Mexican Government closed CONASUPO March 31, 1999, and started auctioning import permits to private firms in July 1999.	For 1999/2000, the Food Agency will allow private firms to import some feed wheat and barley under a Simultaneous Buy-Sell system.	See above

Notes: Some information comes from WTO Article XVII notifications for Japan, Indonesia, and South Korea for 1995 and 1996. Information about Mexico's CONASUPO comes from FAS, Mexico City, and other publications. Imports as a share of world imports for wheat and barley are averages for the 1994/95-1997/98 marketing years and do not include intra-EU trade. For rice and beef/veal, average imports as a share of world imports are for 1994-98. For nonfat dry milk, average imports as a share of world imports are for 1993-97. Import shares of domestic consumption plus feed are averages for the 1993-97 local marketing years.

Sources: Food Agency, BULOG, and LPMO shares of trade come from WTO notifications for 1995 and 1996. CONASUPO's shares of trade come from USDA. Other trade statistics are calculated from USDA/ERS, "Production, Supply, and Demand" database for barley, beef and veal, nonfat dry milk, rice, soybeans, and wheat.

share of domestic consumption, the policies that help the STE maintain or reinforce its authorities, government financial support for the STE, and the structure of the STE (government or private).

Export-Oriented STEs

The Australian Wheat Board (AWB) can be classified as a Type III STE because it has exclusive authority over exports, but not over imports or the domestic market. The Australian Parliament established the AWB as the sole marketer of Australian wheat domestically and for export in 1939. The AWB will undergo a National Competition Policy review of its singledesk export authority in 2000 (next year). The Australian Government publicly supports the AWB's single-desk authority until 2004, subject to a favorable National Competition Policy review. The AWB plays a pivotal role in Australia's wheat marketing since wheat exports accounted for 79 percent of Australian wheat production in the 1994-97 marketing years. Australia also held a 13-percent share of world wheat exports for the 1993/94 through 1997/98 international wheat marketing (July/June) years, ranking Australia behind the United States, Canada, and the EU. The AWB does not control imports, which accounted for less than 1 percent of domestic supplies from 1993 through 1997 but are subject to strict quarantine and transportation procedures.

The AWB lost its exclusive authority over the domestic wheat market in 1989 and now must compete with other marketers to sell wheat in Australia. The AWB holds an estimated 50 percent of the Australian wheat market. In 1989, the AWB also gained the right to market other Australian grains and grains of other origins (countries).

The AWB was an Australian Government corporation until July 1, 1999, when Australian wheat producers took over ownership of the new AWB Limited. The Australian Government also eliminated its guarantees of the AWB's initial pool payments to its growers at the same time. The new corporation, AWB Limited, will issue one set of shares valued at about A\$600 million to its member-growers and a second set of shares to other investors.

The Canadian Wheat Board (CWB) is sole among the four export STEs to be classed as Type IV because it exclusively procures and markets domestically produced Western wheat and barley in Canada for human consumption and exports all Western Canadian wheat

and barley. Exports are far more important to Canadian wheat than barley. Exports account for 75 percent of Canada's wheat production, but only 22 percent of barley production. Canada's share of world trade, which averages 19 percent for wheat and 18 percent for barley for the 1993/94-1997/98 marketing years, ranks Canada behind only the United States in world wheat trade and behind the EU and Australia in world barley trade. The CWB's marketing of Western wheat and barley for human consumption accounted for an average of 67 and 52 percent, respectively, of total domestic consumption (consumption plus feed use) from 1994 through 1997.

The CWB does not control imports of wheat or barley, but Canadian Government regulations on wheat and barley varieties, phytosanitary standards, and transportation regulations tend to restrict imports, which accounted for less than 1 percent of domestic supplies for the 1993/94-1997/98 marketing years. In a Memorandum of Understanding of December 1998, Canada and the United States agreed to work together to facilitate access for U.S. wheat into Canada.

The Canadian Government continues to support the majority of its grain producers' demands to maintain the statutory export and domestic market authorities of the CWB. The CWB relinquished its status as an agent of the Crown late in 1998 after electing 10 producers as new board members in addition to 5 government-appointed board members. However, the Canadian Government has continued to underwrite CWB operations (estimated at \$6 billion Canadian in 1998), including the CWB's initial pool payments to growers.

The New Zealand Dairy Board (NZDB) fits the description of a Type III STE because it has statutory authority to act as sole exporter of New Zealand dairy products, but does not control domestic marketing or imports. Exports accounted for 88 percent, 82 percent, and 93 percent of New Zealand butter, cheese, and nonfat dry milk production, respectively, from 1994 through 1998. New Zealand commanded 38 percent of world butter exports, 20 percent of world cheese exports, and 19 percent of world nonfat dry milk exports for the same period. In addition to basic dairy commodities, the NZDB is world renowned as an exporter of branded and higher value dairy products. Overall, New Zealand is the second largest world dairy product exporter, accounting for over 30 percent of world dairy product exports. The NZDB has no control over imports, which account for less than 1

percent of New Zealand cheese consumption. New Zealand does not import butter or milk powder.

The NZDB is owned and financed by its member dairy cooperatives. The New Zealand Government announced in its budget submission of May 1998 that its agricultural marketing boards, including the NZDB, would be required by mid-November 1998 to develop and submit for approval marketing strategies to replace the exclusive export authorities of their industries' export marketing boards. In mid-June 1999, the New Zealand dairy industry applied to the New Zealand Commerce Commission to merge the NZDB and nine New Zealand dairy companies. If approved by the Commission, the proposal would create a huge cooperative to market New Zealand dairy products at home and overseas. In a preliminary decision of August 27, 1999, the Commerce Commission rejected the dairy industry proposal. The Commission accepted written submissions on the proposal until September 17 and will hold a public conference on the issue in early October 1999. The formation of the new dairy company also will require the financial agreement of the dairy companies to be merged, the approval of New Zealand dairy farmers, and the New Zealand Parliament's implementing legislation. If approved, the new firm could be the largest corporation in New Zealand.

The Queensland Sugar Corporation (QSC), a state-level marketing board, is classed as a Type III STE because the Queensland government has given the QSC a statutory monopoly over Queensland raw sugar exports. The QSC exported all Australian raw sugar until 1996, when New South Wales and Western Australia began to export very small quantities of raw sugar. The QSC also has exclusive authority to market Queensland raw sugar to Queensland refiners. However, it has no exclusive control over raw sugar marketing in other Australian States. Producers from New South Wales also sell raw sugar to domestic refiners, although Queensland continues to produce 95 percent of Australia's raw sugar.

The Australian Government lifted its embargo on sugar imports in June 1989. Imports climbed to 13,716 tons in 1992, fell sharply between 1993 and 1995, and stabilized at 2,000 to 3,000 tons from 1995 through 1999. After lifting the embargo in 1989, the Australian Government imposed a tariff on imported sugar. Australia maintained the tariff on raw sugar imports until July 1997. The tariff permitted the QSC to main-

tain two price pools—one for sales to the domestic market and a second for export sales. The removal of the tariff has allowed Australian sugar refiners to access raw sugar at export parity (world) prices. Queensland sugar growers own and finance the QSC.

Import-Oriented STEs

Japan's Food Agency would be classed as a Type III STE for rice because it controls rice imports, but not the marketing of domestically produced rice. For barley and wheat, the Food Agency would be classed as a Type IV STE because it controls imports and the marketing of domestically produced barley and wheat.

Until 1995, Japan granted the Food Agency exclusive authority to import and export rice. The Food Agency imported rice only if domestic production failed to satisfy consumption needs. In the Uruguay Round (UR), Japan agreed to provide minimum access for rice equal to 4 percent of the average consumption in the UR base period, 1986 through 1988. This would rise in annual increments of 0.8 percent of the base period consumption until it reached 8 percent in the final year, 2000, when Japan agreed to import 758,000 tons of rice. ¹⁶

Food Agency rice imports are subject to a markup of 292 yen per kilogram. However, most rice imported by the Food Agency is used for feed, by industries, or for food aid. The Japanese Government also initiated a Simultaneous Buy-Sell (SBS) system for rice imports in 1995. In the Japanese rice SBS, buyers and sellers propose a quantity of rice to be transacted, a cif import price (basically, the seller's price), and a price for purchase by the buyer. The Food Agency then examines all the bids and chooses those that have the widest margin between the selling and the buying price. The Food Agency keeps this margin, which can

¹⁶Japan established an over-quota tariff for rice on April 1, 1999, in accordance with Annex 5 of the Uruguay Round Agreement on Agriculture, which allows a developed country (Japan) to 'tarrify' its barriers at the beginning of any year. According to Annex 5, Japan must continue to meet its existing minimum access amount (in this case, 606,000 tons in 1998), but annual increases in 1999 and 2000 are allowed at 0.4 percent of base period consumption, rather than 0.8 percent. This means that imports in 1999 will be 644,000 tons (instead of 682,000) and in 2000, they will be 682,000 tons (instead of 758,000). Until another agreement is made, Japan's annual minimum access after 2000 will remain at 682,000 tons (Dyck, Childs, Ackerman, Skully, and Hanson, *Agricultural Outlook*, April 1999, pages 13-16).

also be considered the markup. Japan's use of the SBS for rice has risen from 3 percent of rice imports in 1995 to almost 20 percent in 1998.

The Food Agency also imports most of the wheat and barley under Japan's tariff-rate quotas (TRQ's) for those commodities. Japan does not apply an in-quota tariff to imports of wheat or barley, but the Food Agency applies a markup of up to 53 yen per kilogram to wheat imports, which will be reduced by 1.3 yen per kilo annually through 2000, and up to 34 yen per kilogram for imports of barley, to be reduced by 0.9 yen per kilo annually through 2000. Private firms are free to import barley and wheat at extremely high tariff levels above the quotas. Import data show few imports outside the quotas. ¹⁷

Imports are important to Japan's wheat consumption, but less important to barley and rice consumption. Wheat imports averaged 98 percent of Japan's wheat consumption, 48 percent of Japan's barley consumption, and only 4 percent of Japan's rice consumption from 1994 through 1997. Japan held an 8-percent share of world barley imports from 1993 through 1997, but only 5 percent of world rice and wheat imports for the same period.

The Food Agency does not control the domestic marketing of rice. The Ministry of Agriculture and Foreign Affairs announces annual procurement prices for farmers' rice, but rice is marketed to consumers through thousands of retail stores. The Food Agency does control the pricing and marketing of domestic wheat and barley. In May 1998, the Food Agency announced several changes to its wheat and barley policies to be implemented in the 2000 to 2002 crop years. The Food Agency will allow private firms to purchase domestically produced wheat, and introduced an SBS for imported wheat and barley for feed use.

Until September 1998, *Indonesia's Badan Urusan Logistik (BULOG)* would have been classed as between a Type III and a Type IV STE. The Indonesian Government granted exclusive authority to BULOG in the 1960's to import rice, wheat, wheat

flour, soybeans, and sugar and to export rice. BULOG licensed private firms to act as its agents and, in 1998, conducted public tenders for wheat imports. Indonesia applied very low tariffs to imports of agricultural commodities, but was able to control imports through BULOG's exclusive control. Indonesia agreed in the Uruguay Round to establish a TRQ for rice of 70,000 metric tons with an over-quota tariff bound at 160 percent in 2004. From 1994 through 1997, Indonesia's shares of global rice, soybean, sugar, and wheat imports averaged 12, 2, 2, and 4 percent, respectively.

BULOG did not have a monopoly in the domestic rice market, but stabilized domestic rice prices by procuring some domestically produced rice (less than 10 percent) for government stocks and selling them in the domestic market or for export. BULOG also owned grain storage facilities and controlled the milling or processing and retail of other commodities through the licensing of approved firms. BULOG's management of the processing and sales of imported commodities went hand-in-hand with government price controls on wheat, wheat flour, sugar, soybeans, and garlic.

In September 1998, however, the Government of Indonesia terminated BULOG's exclusive authorities over imports and exports and ended price subsidies for wheat, wheat flour, sugar, soybeans, and garlic. BULOG continued to import rice in September 1998, but, instead of choosing its own suppliers, conducted its first public tender for imports. Despite the termination of its exclusive trading authorities, BULOG continues to manage the stocks it accumulated prior to September 1998, and continues to import rice as needed to stabilize prices. The private sector has begun to import sugar, wheat, and other commodities previously controlled by BULOG. It is not clear what BULOG's role will be in the future.

Prior to 1998, CONASUPO would be considered a Type III STE for milk powder since it was Mexico's designated importer of milk powder. CONASUPO used the markups it obtained from selling the imported milk powder to private firms to finance the Government's other operations, including the processing and distribution of milk powder to low-income populations. After the Mexican Government established TRQs under the North American Free Trade Agreement and Uruguay Round Agreement on Agriculture, it continued to award almost all import licenses for milk powder to CONASUPO. Mexico's

¹⁷The Food Agency announced on June 7, 1999, that it would introduce an SBS tender system for wheat for feed and barley for feed in the April 1999/March 2000 Japan fiscal year. The 1999/2000 SBS import tenders will cover 80,000 tons of wheat and 360,000 tons of barley.

imports of milk powder averaged 31 percent of world trade from 1994 through 1997.

In 1998, CONASUPO's monopoly ended when the Mexican Government issued import licenses equal to about 20 percent of Mexico's milk powder imports to a multinational firm for its dairy product processing plant in the State of Chiapas. CONASUPO was the largest single milk powder importer in the world until March 31, 1999, when the Mexican Government closed its doors. In July 1999, the Mexican Government began conducting auctions of import licenses to private sector importers. CONASUPO's sister agency, LICONSA, will import milk powder for the Government's social programs.

The Republic of South Korea's Livestock Products Marketing Organization (LPMO) had not had monopoly control of Korea's beef imports since the early 1990's. The LPMO became Korea's exclusive beef importer and enforcer of its import restrictions in 1988. In the following years, the Korean Government agreed to reduce its protection for beef producers by increasing beef imports and allowing the private sector to import increasing quantities of beef through special industry groups (Super Groups). The LPMO share of Korea's beef import quota averaged about 80 percent from 1993 through 1995, but was reduced to 40 percent in 1998. The LPMO will be phased out as an importer in 2001. However, the LPMO was the largest Korean beef importer in 1998 when the private sector allocation of the import quota was not filled.

Some critics of the LPMO argue that the organization continues to control all imports of beef, despite TRQ allocations to specific industry groups through the SBS import system. ¹⁸ If true, this would imply that the LPMO would be classed as a Type III importer. Otherwise, the LPMO would be classed as a Type I STE. Korea is an important beef importer, accounting

for 3 percent of world imports of beef and veal on average from 1994 through 1998.

Characterizing China's State Trading of Grains

Since 1978, China has dismantled many of the large foreign trade enterprises that were directed by the national government. Despite massive reforms throughout its economy, however, China maintained its state control of basic agricultural products, particularly grains. Prior to rural reform in 1978, China's specific agricultural policy goals were to "produce ample and cheap food for urban residents and to export farm products as planned to earn hard currency for imports of advanced technology and equipment to develop industries in urban areas" (Tuan and Ke, 1998). Over time, China's national government shifted its policy objectives to long-term food security and self-sufficiency in agriculture. Recently, China's national government shifted its food policy objectives to domestic price stability.

China's state control of grain markets qualifies China as a Type IV state trader in those commodities, but no one government agency controls all aspects of domestic marketing and trade. In the domestic market, the Chinese Government controls domestic production, procurement, storage, transportation, milling, and sales of grain to urban residents and the military. Central and Provincial governments set purchase prices for wheat, rice, and corn procurement quotas.

Each year, government-owned and managed grain bureaus, which are located within each administrative unit (province, prefecture, or county) organize grain supply and use tables to determine grain availability and needs for each administrative unit. These tables signal whether grain is in surplus, balance, or deficit. For administrative units with surplus, the grain bureau fixes the amount of grain to be purchased from farmers at the fixed quota price (about 10 percent of total grain production). The Grain Bureau also purchases an additional 10 percent of each unit's production at above-quota prices for storage and planned distribution. Grain is transferred from surplus to deficit areas, first from surplus counties within a Province (if applicable) and then from other Provinces.

¹⁸The United States filed a complaint with the WTO against Korea's beef import regime on February 1, 1999. The complaint alleges that Korea discriminates against imported beef by confining imported beef sales to specialized stores and by limiting the display of imported beef. The United States also alleges that Korea imposes a markup on sales of imported beef, limits import authority to certain Super Groups (industry organizations) and the LPMO, and provides domestic support to the cattle industry in amounts that cause Korea to exceed its aggregate measure of support as reflected in Korea's WTO schedule (WT/DS161/1). Australia also will ask the WTO to establish a dispute settlement panel to examine its complaint over import restrictions on beef exports to South Korea.

¹⁹The description of China's state control over grain marketing is summarized from F.W. Crook, S. Langley, F.C. Tuan, and H. Colby, "State Trading and Management of Grain Marketing in China," *Agricultural Outlook*, U.S. Dept. Agr., Econ. Res. Serv., June-July 1999, pp. 27-30.

The national government determines import needs and export opportunities. To plan imports and exports of grains, the State Planning and Development Commission (SPDC) consults with the State Council; the Ministry of Foreign Trade and Economic Development (MOFTEC); the Ministries of Agriculture, Internal Trade (Commerce); Foreign Trade; and the Administration for Grain Reserves (SAGR), an arm of the State Planning and Development Commission. The SPDC passes the import and export plans to MOFTEC, which delegates the trading process to China's National Cereals, Oil and Foodstuffs Import and Export Corporation (COFCO).

MOFTEC orders COFCO to import specified quantities of grain and transfer the imported grain to the grain bureaus at government-fixed import prices. MOFTEC also orders COFCO to export specified quantities of grain from specific provinces.²⁰ Both import and export transfer prices are based on the domestic government's procurement prices.

COFCO exports corn and rice and imports wheat and rice.²¹ China is a large but erratic trader in world markets, controlling an average of 6 and 21 percent, respectively, of world rice and corn exports from 1994 through 1998. China also accounts for an average of 6, 10, and 4 percent, respectively, of world wheat, barley, and rice imports.

China's state control of domestic marketing and trade is strongest for grains. COFCO once was the sole agent for imports of soybeans and soybean products. In 1997, however, China's leaders broke up COFCO's monopoly and allowed four other companies to import soybean oil within the import quotas announced by the national government. China's national government does not control the domestic soybean market, although individual Provincial governments have restricted the movement of soybeans from one Province to another. Thus, China's state control of soybeans and soybean products would be classed more as a Type III than as a Type IV STE.

COFCO's role as import and export agent for the Chinese Government's grain and oilseed imports represents only a small part of its commercial activities. COFCO, a diversified conglomerate, also has investments in hotels, food processing, and other industries.

²⁰Prior to 1989, COFCO had exclusive authority to export and import grains for the central government and exercised autonomy in the logistics and pricing of traded commodities. COFCO also maintained branches throughout China to carry out its marketing activities. After 1992, some of the Provincial governments began to direct their Provincial branches of COFCO to import grains. As provincial COFCOs began to compete with the central COFCO, tensions arose. In 1998, China's central government sought increased control of its grain production and marketing operations and has allowed only the central COFCO to trade.

²¹In March 1999, China's central government allowed the Jilin Province to set up its own export company to export corn from Jilin and possibly other Provinces. The Chinese Government will cap exports even once the company is established since China's high domestic corn prices require the Government to subsidize exports.