Agriculture in the WTO

EXPORT COMPETITION: ISSUES AND OPTIONS IN THE AGRICULTURAL NEGOTIATIONS

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Export Competition: Issues and Options in the Agricultural Negotiations

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The views expressed should not be taken to represent those of institutions to which the authors are attached.

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# ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BSE</td>
<td>Bovine spongiform encephalopathy</td>
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<tr>
<td>CAP</td>
<td>Common Agricultural Policy (of the EU)</td>
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<td>CIRR</td>
<td>Commercial Interest Reference Rate</td>
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<td>COFACE</td>
<td>Company for International Trade Insurance</td>
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<td>CSSD</td>
<td>Consultative Subcommittee on Surplus Disposal</td>
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<td>CWB</td>
<td>Canadian Wheat Board</td>
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<td>DEIP</td>
<td>Dairy Export Incentive Program</td>
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<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
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<td>GSM</td>
<td>General Sales Manager</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>FAC</td>
<td>Food Aid Convention</td>
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<tr>
<td>MERCOSUR</td>
<td>Common Market of the South (Mercado Comun del Sur)</td>
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<tr>
<td>MFN</td>
<td>most favored nation</td>
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<tr>
<td>mmt</td>
<td>million metric tons</td>
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<tr>
<td>NFIDC</td>
<td>Net Food Importing Developing Country</td>
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<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>PL 480</td>
<td>Public Law 480</td>
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<tr>
<td>STE</td>
<td>state trading enterprise</td>
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<td>TRQ</td>
<td>tariff rate quota</td>
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<td>USDA</td>
<td>United States Department of Agriculture</td>
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<td>UR</td>
<td>Uruguay Round</td>
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<td>URA</td>
<td>Uruguay Round Agreement</td>
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<td>URAA</td>
<td>Uruguay Round Agreement on Agriculture</td>
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<td>WFP</td>
<td>World Food Programme of the United Nations</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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EXECUTIVE SUMMARY

Most members of the World Trade Organization agree that the broad goals of current negotiations on agriculture include language to further discipline export subsidies. Export subsidies may take a wide variety of implicit and explicit forms, including direct export subsidies, export credits, state trading and food aid. Agreement on specific limitations will be difficult to achieve due to the variety of institutions and programs involved.

The four broad categories of policy instruments discussed in this paper, namely, export subsidies, export credits, state trading and food aid, share many common dimensions. These dimensions include additionality, price discrimination and pooling. In addition, policy choices reflect a tension between achieving the goals of producer support and market power, and similarly, a tension between the achievement of humanitarian goals and use of implicit export subsidies. These cross-cutting issues need to be considered to understand why current policies arose and how they can be effectively disciplined in the negotiations.

Export Subsidies

Concern regarding direct export subsidies is focused on the European Union. Even in the EU, export subsidies are an unwanted consequence of other domestic policy goals. Quantitatively, EU export subsidies are large enough to influence world prices and so distort trade. However, distortions from export subsidies are small relative to those from tariffs and other trade barriers. The degree of distortion due to export subsidies varies by market and is largest for dairy. Relative to other policies influencing export competition, export subsidies are most likely to capture market share from competitors and least likely to expand demand. The reduction of export subsidies in the context of EU policy will require a much broader reform of their agricultural policy. Further reform will require changing either the extent of support to agriculture or the means by which that support is achieved. Past reform indicates this has been occurring, and it is likely that both reductions in support and changes in the means by which it is financed will continue. Reform of EU agricultural policy continues to be difficult as the EU has 15 members and farmers have political power. Various proposals to reduce export subsidies will only be effective to the extent that the EU holds reduction of export subsidies as a priority.

Recommendations include:

- Further reduce, if not eliminate, direct agricultural export subsidies;
- Maintain restrictions on both the volume and value of export subsidies;
- Consider rules to prevent circumvention (such as EU component subsidies);
- Eliminate the ability to “rollover” unused subsidies to future years;
- The issue of commodity aggregation in reporting requirements is secondary, as most commitments are already quite specific, and finally
- Also secondary, revisit the definition of export subsidies to account for consumer financed subsidies and cross subsidization between commodities.

Export Credits

Negotiations are underway in the OECD to establish disciplines on officially supported export credits, as agreed to the in URAA. In support of those negotiations the OECD surveyed the extent of export credit programs and the degree of subsidization. The estimated subsidy value of existing programs is generally very low. Country positions and economic analysis indicate
that U.S. export credit programs are the focal point of concern, since 88 percent of estimated implicit export credits are due to U.S. programs. However, even for U.S. programs the subsidy values of the program is estimated at only 6.6 percent of commodity value. In all cases, the relatively low subsidies offered through officially support export credit programs are likely to induce only small trade distortions, and in some cases, export credits may create additional demand.

Recommendations include:
- Limit the loan term length as an effective mechanism to limit the subsidy component;
- Limit government budgetary outlays for export credits; and
- Consider differential treatment for developing countries.

Exporting State Trading Enterprises

State trading enterprises pursue a broad range of policy goals and implicit subsidies can arise when these agencies seek to support producers. The Canadian Wheat Board is a focal point of U.S. concern. At this point the position papers advanced for negotiations reflect a desire to discipline, but not eliminate state trading enterprises. While many governments support increased notification requirements as a way to increase transparency, to date most proposals have lacked specific detail making it impossible to assess the actual ramifications of these disciplines in practice. New WTO notification requirements for STEs provide a substantial degree of notification and should result in sufficient data to detect potentially disguised export subsidization. Requiring STEs to report transaction level data would be onerous, and unprecedented in comparison to other WTO notification requirements. The current WTO dispute resolution system should be evaluated in terms of its ability to deal with potential violations of GATT commitments by STEs. State trading plays an important role in implementing domestic policy goals for many countries; state trading is not likely to have a large impact on international markets; and reform is not likely to result in greater competition. For these reasons negotiations should limit efforts to discipline state trading to:

- Consider market power issues in the context of broader competition policy;
- Evaluate if the current WTO dispute resolution system is adequate to investigate violation of commitments by STEs;
- If further disciplines are enacted consider differential treatment for developing countries.

Food Aid

Concerns with food aid programs expressed in country positions have focused on U.S. food aid programs. U.S. food aid donations tend to increase more in times of surplus than donations from other agricultural exporters. While new disciplines on food aid will largely impact U.S. programs, they may have an important impact on EU food aid policies in the future, particularly if export subsidies are further restricted.

Depending on the design of programs, food aid can be an implicit export subsidy. However, due to their size food aid has a small impact on world commodity markets. In addition, food aid programs are likely to create some additional demand and meet various humanitarian and social goals, factors that need to be considered in negotiations over further disciplines on food aid. As the goal of the WTO is to reduce distortions to trade, and as the effective consideration of food aid requires consideration of many other dimensions, questions exist about the role of the WTO in disciplining food aid. The danger in negotiating food aid issues in the
context of the WTO is that other and more pressing questions will remain unspoken and unanswered. These question include whether or not the level of food aid guaranteed through the Food Aid Convention is adequate, how to target aid to meet the needs and concerns of recipients as well as donors, and how to use food aid effectively in the development process. The expertise that has developed on these questions largely resides in other institutions, such as the World Food Programme, individual country development and aid agencies, and private voluntary organizations.

Recommendations include:

- Identify food aid transactions that are not widely accepted as food aid and subject those to stricter notification and consultation requirements and to overall limits;
- Improve notification protocols under the CSSD and make this information easily accessible; and
- Exercise caution in new disciplines for food aid that could result in a reduction of overall food aid availability.

**Negotiating Strategies for Export Competition**

It may be the case that the EU is willing to trade-off their relative large general subsidies for the much smaller implicit subsidies in the trade practices of its competitors in food aid, STEs and export credits. If the EU is looking to the WTO to assist in disciplining its own export subsidies in the process of reforming its agricultural policy, this trade-off allows them to achieve this discipline while at the same time gaining concessions from their competitors.

However, if trade-offs in WTO negotiations must be made on comparably valued concessions, then it may be fruitful to trade off EU export subsidies against U.S. programs to support farm income. Progress in negotiations will be facilitated by trade-offs between market access, domestic support and export subsidy issues instead of being confined to trade-offs within a particular category.

Further progress within the WTO is likely to be slow since existing institutions reflect differing circumstances and preferences across countries, and these institutions respond slowly to changes in the external environment. Existing institutions also reflect trade-offs in achieving domestic policy objectives, and as limitations are imposed, policymakers will innovate to continue to achieve those objectives in the face of WTO limitations. The challenge faced by economists in measuring distortions to world markets is increased enormously by the variety and complexity of institutions that exist. An analysis of how they work in practice, and recognition that some of these institutions achieve important domestic political or humanitarian goals while having fairly small impacts on world markets, will be more useful to the negotiating process than advancing a rigid doctrine advocating for a particular institutional form, or focusing only on trade distortions.
1. INTRODUCTION

Most members of the World Trade Organization (WTO) agree that subsidies on exports need to be further reduced and should be a high priority in current negotiations. Position statements of major players indicate that the broad goals of the negotiation include language to further discipline export subsidies, broadly defined.

Export subsidies take a wide variety of implicit and explicit forms. Examples of explicit export subsidies include the export refunds given by the EU or the U.S. Export Enhancement Program, and these will be referred to as direct export subsidies. Implicit export subsidies result from policies meeting multiple objectives, and examples include export credits and food aid. Agreement on specific limitations will be difficult to achieve due to the variety of institutions and programs involved. In this paper we discuss explicit, direct export subsidies, as well as some of the more obvious mechanisms for implicit subsidization – including state trading, publicly supported export credits and food aid – which have been linked in position papers to the export subsidy debate.

The catalyst for debate in each of these areas is one particular program in one specific region. The European Union (EU) makes extensive use of direct export subsidies and accounts for approximately 90 percent of global export subsidy expenditures (ERS 2001). The U.S. accounts for 96 percent of the subsidy value in officially supported export credit programs (OECD 2000a). While the use of state trading agencies (STEs) is more widespread, only the Canadian Wheat Board (CWB) and a few other state traders are sufficiently large to potentially distort world markets, and U.S. concerns focus on the CWB (Josling 1998). While food aid is widely used by exporters, the specific problems raised in WTO negotiations focus on U.S. food aid programs. Although debate is focused on specific national programs, the WTO must devise general, equitable rules that apply to all members. Further discipline on food aid, and to a lesser extent export credits, is difficult due to the desire not to hamper achievement of the humanitarian goals addressed by the programs, goals that may be more important than disciplining export subsidization.

Position papers from WTO members call for new disciplines, reforms and notification requirements for each of these issues. These issues have largely been raised by developed countries concerned with conditions of competition in international markets. However, the consequences will be important to developing countries that are recipients of food aid and export credits, that maintain state traders to implement agricultural policy, and are affected through international markets by export subsidies.

State trading, food aid, export subsidies, and export credits all exist to achieve both social and market objectives held by national governments. While institutions like export credit and food aid could be abused to subsidize exports, the subsidy element of export credit programs is small, and the value of food aid programs is small compared to world markets. There is a danger that further disciplines negotiated through the WTO could reduce the benefits to recipient nations. State trading and even export subsidies are also designed to achieve domestic policy objectives. Export subsidization is generally a costly and unwanted consequence.
The goals that governments hold for agricultural policy frequently attempt to meet the needs of wide-ranging constituencies, and consequently, these goals at some times are in conflict with one another. Governments innovate to resolve these inherent conflicts. Governments will create institutional innovations, namely more complex policy instruments, to try to continue to achieve their domestic policy goals in light of changes in the political and economic environment. One of the lessons learned from the implementation of the URRAA is that when faced with new rules governments will innovate, often with unanticipated consequences.

In this paper we examine export subsidies, export credits, state trading and food aid. The discussion includes a description of each institution, concerns within the WTO, how and to what extent the institution subsidizes exports, and its impact on domestic and international markets. First we examine issues that cut across all the issues discussed. We will re-examine these issues in the sections addressing each institution as well as in the concluding discussion of possible negotiating strategies.

2. CROSS-CUTTING ISSUES FOR EXPORT SUBSIDIES, EXPORT CREDITS, STATE TRADING AND FOOD AID

The four broad categories of policy instruments discussed in this paper share many common dimensions. It is useful to first consider these common underlying concepts, and the issues raised will be further discussed in following sections.

*Additionality:* Refers to an increase in demand due to use of the policy in question, since some implicit subsidies work through income rather than price effects. Food aid, targeted export subsidies and export credit may result in increased demand, benefiting all exporters due to a world price increase induced by such a demand shift. Targeted export subsidies can also in theory induce additional demand through income effects of price increases in targeted markets. The benefits from additionality need to be considered in attempts to discipline the export subsidy component of these programs. Weighing the two outcomes is complicated by difficulties in measuring additionality (the increased demand).

*Price Discrimination:* Is the practice of selling goods at different prices in different markets according to their respective elasticities of demand. For price discrimination to be effective market power must be present. Price discrimination is not prohibited by the General Agreement on Tariffs and Trade (GATT) and is commonly used by private firms. Targeted export subsidy programs realize benefits (especially to producers) to the extent that they effectively price discriminate. Price discrimination is also an issue when used in conjunction with pooling.

*Pooling:* Is the practice of purchasing commodities from producers at an unspecified price, and returning net revenue at a later time from a pool of receipts. The pool may consist of sales over time, across markets, or across commodities. Pooling is criticized as it is argued to give state traders greater ability to price discriminate. In many cases mandatory pooling is a feature of state trading, and it enables exercise of some degree of market power held by the government agency for the benefit of producers. Because pooling enables a degree of market power the issue of pooling and price discrimination become interrelated. However, private
firms are known to price discriminate without a formal system of pooling. Also, if conditions of potential market power exist, the elimination of state trading and other government agencies will result in the entry of private firms who will not pass on the benefits of market power to producers. One possible consequence of pooling in conjunction with price discrimination is that producers realize a higher price and so increase production.

- **Tension between producer support and market power:** Refers to the dilemma faced by governments in decisions about the tools used to achieve their domestic policy objectives. Large exporting countries can increase their welfare through export taxes. However, the goal of producer support often dominates agricultural policy decisions, particularly in developed countries, and has lead to the adoption of other instruments, such as state trading and targeted subsidies. State trading is an institution that often funnels the benefits of power in the domestic and/or international market to producers.

- **Tension between humanitarian goals and implicit subsidies:** Food aid and export credit programs can embody a degree of implicit export subsidization. At the same time they achieve humanitarian goals valued by policymakers and their constituencies. Both programs may allow countries to import food and so feed impoverished citizens when they could not otherwise afford to do so. The dilemma inherent in devising stricter rules for these policies is that a trade-off may exist between limiting the implicit subsidy and achieving the humanitarian goals.

### Table 1. Cross-cutting Issues in Export Subsidies and Credits, State Trading, and Food Aid

<table>
<thead>
<tr>
<th></th>
<th>Additionality</th>
<th>Price Discrimination</th>
<th>Pooling</th>
<th>Tension between producer support and market power</th>
<th>Tension between humanitarian goals and implicit subsidies</th>
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<tr>
<td>Export subsidies</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Export credit</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>STEs</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food aid</td>
<td>✓</td>
<td>✓</td>
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Table 1 indicates where we will need to address each of these cross-cutting issues in our examination below of the specific policy institutions considered to be explicit or implicit export subsidies. After considering each of these issues for the specific institutions, we will return to considering implications of these issues for disciplining export subsidies in the WTO more generally.
3. EXPORT SUBSIDIES

Summary of Current Situation

Uruguay Round Obligations

The Uruguay Round Agreement on Agriculture (URAA) imposed disciplines on agricultural export subsidies for the first time and began to reduce the use of export subsidies in agricultural trade. The GATT has prohibited export subsidies for all other sectors on any product other than a primary product, when the subsidy results in an export price lower than the comparable price charged for the like product in the domestic market, since 1958. In the URAA, the twenty five GATT contracting parties with a history of export subsidies agreed to reduce the volume of subsidized exports by 21 percent over 6 years from a 1986-90 base period level (14 percent over a 10-year period for developing countries) and reduce the value of export subsidies by 36 percent over 6 years from a 1986-90 base period level (24 percent over 10 years for developing countries). Countries with no history of export subsidies agreed not to initiate them.

Commitments are on a product basis specified by the country at varying degrees of aggregation. Under the agreement, countries may not initiate subsidies for commodities that are not in their export subsidy schedules. Bona fide food aid transactions and widely available export market promotion and advisory services are exempted from the list of export subsidies. Countries also must restrict their use of other export marketing practices that could cause them to circumvent their export subsidy commitments. It was also agreed that disciplines for the use of export credit and credit guarantee practices were to be discussed in the Organization for Economic Cooperation and Development (OECD).

The URAA provided some flexibility in terms of meeting the subsidy reductions. If a country exceeded its commitments in any of the years two through five, it had to reduce subsidy levels the next year and assure that the total cumulative value of export subsidies and the volume of subsidized exports over the entire implementation period was no greater than the totals that would have resulted from full compliance with its subsidy schedules. No overruns are permitted in the final year of implementation; member countries must meet their final bound commitments in 2000/01. High world prices kept use of export subsidies well below WTO commitments in 1995 and 1996. As world prices fell, many countries carried over unused portions of their 1995 and 1996 commitments to make up for their overruns in later years. Some governments argue that flexibility provisions in the agreement are meant only to deal with situations where a country exceeds its limits and has to pay back—not as an opportunity for countries to bank and “rollover” unused subsidies. The United States originally argued that “rollover” should not be permitted. However after determining that the legal text didn’t explicitly ban the use of “rollover,” the U.S. invoked the “rollover” provision in 1997 and 1998 for skim milk powder and other dairy exports. The U.S. interpretation of the URAA is that export subsidy restrictions for 2001 will remain in effect until a new agreement is negotiated.

Countries also were permitted some flexibility in selecting the base period the initial reductions would be made from. Under the modified Blair House agreement, the reductions in quantities and expenditures on subsidized exports were to be made in equal installments beginning from the higher of either the 1986-1990 base, or the average of 1991-1992. Therefore,
some countries “frontloaded” their export subsidy schedules so that their commitments in the first few years were higher than their 1986-1990 base levels of subsidization. Regardless of which period selected, the final year’s bindings still had to meet the 21 and 36 percent reduction levels from 1986-1990 base levels. This provision allowed countries to employ more export subsidies over the implementation period than they would have been permitted to had the reductions been made from the original 1986-90 base period.

Current Use

Between 1995 and 1998, WTO members spent over US$27 billion subsidizing exports. The EU accounts for nearly 90 percent of those export subsidy expenditures, Switzerland for 5.1 percent, and the U.S. for just under 1.5 percent (Table 2). The EU is the largest user of export subsidies in both value and volume terms. According to WTO export subsidy notifications, the EU spent an average of $6 billion annually from 1995 to 1998 subsidizing exports. Over the same period, the EU’s volume of subsidized exports averaged about 28 million tons a year plus 3.6 million hectoliters (95 million gallons) of wine and alcohol. From 1995 to 1998 the EU subsidized nearly all of its exports of coarse grains, butter and butter oil, beef, and skim milk powder (Figure 1). The majority of wheat and other dairy exports also required subsidies. Switzerland subsidizes exports of breeding cattle and horses, dairy products, fruit, potatoes, and processed products. Dairy products account for 65 percent of Swiss subsidy expenditures and nearly 80 percent of subsidized export volume, averaging nearly US$230 million and 59,000 tons per year. Processed products account for 29 percent of expenditures for over US$102 million per year, on average (volumes are not notified). Nearly 98 percent of U.S. export subsidy expenditures have been for dairy products (under the Dairy Export Incentive Program, just under 2 percent for poultry, and less than 1 percent for coarse grains (which were subsidized in 1997 under the EEP).

<table>
<thead>
<tr>
<th>Expenditures</th>
<th>Percent of total</th>
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<tbody>
<tr>
<td>European Union</td>
<td>24,369,052,020</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1,402,581,988</td>
</tr>
<tr>
<td>United States</td>
<td>405,976,126</td>
</tr>
<tr>
<td>Norway</td>
<td>341,121,230</td>
</tr>
<tr>
<td>Rest of World</td>
<td>728,185,008</td>
</tr>
</tbody>
</table>

The EU and Switzerland are so reliant on export subsidies because they choose to support producers through high internal price supports, which stimulate production above domestic need and require subsidies for export of surpluses. Both must also employ import barriers to keep cheaper imported products out of the domestic market. The size of export subsidies change with world price and exchange rate fluctuations, as the price gap between the domestic and world price is the per unit export subsidy. Hence, these policy regimes operate much like the variable levies formerly employed by the EU. In the EU, there is now one intervention price for all grains, which is currently 110.25 Euro/ton (102 US$/ton), to be reduced to 101.21 Euro/ton (93.7 US$/ton) for the period 2001/02 to 2006. Given world grain prices, this common grain price gives relatively high subsidies on barley and other coarse grains compared to wheat and has
encouraged increased production of barley and other coarse grains. In both the EU and Switzerland, dairy production is supported by high guaranteed prices and production quotas that exceed domestic consumption. This is also true for sugar in the EU.

Global expenditures on export subsidies by WTO members have been highest for dairy products, accounting for 34 percent of all export subsidy expenditures from 1995 to 1998. Beef is the single commodity with the largest subsidy expenditures, accounting for 21 percent of subsidy expenditures, averaging $1.4 billion/year. Grains, sugar ($745 million/year) and incorporated products (processed products) together account for 35 percent of expenditures.

The composition of the volume of subsidized exports is far different from that of the expenditures. Grains account for 71 percent of the volume of subsidized exports, with wheat exports accounting for over 36 percent of all subsidized exports and coarse grains for nearly 35 percent. Dairy accounts for only 7 percent of the volume of subsidized exports, though it accounts for 34 percent of expenditures.

Most countries report that their export subsidies have been below their commitment levels. Over the course of the implementation period, the percentage of both volume and value commitments filled has increased, as permitted levels of subsidization have decreased and as
world prices fell. Based on WTO notifications from 1995 to 1998, members have come closer to filling their volume commitments than their expenditure commitments for most commodities, even though WTO members agreed to larger cuts in their expenditures. Although past WTO notifications have shown that the value limit has been less restrictive than the volume limit, that could change if world prices remain low.

Having both value and volume commitments constrains export subsidies in times of both high and low prices. When world prices are low, the value limit becomes more constraining because the wedge between the domestic support price and the competitive export price becomes larger. Volume limits prevent export of excess supply when there are low domestic prices. When world prices are high, the value constraint becomes less binding but the volume constraint can still be effective. Therefore, limits on both value and volume weaken the ability of export subsidies to maintain fixed internal price supports. Further restrictions on export subsidies are likely to motivate reduction of domestic price supports that encourage surplus production.

The URAA does not place explicit restrictions on per unit subsidies and consequently the size of subsidies vary greatly across countries and commodities. Subsidy expenditures on a dollar per ton basis have been largest for such high-value products as alcohol, wine, and fresh flowers. However, those commodities account for less than 1 percent of subsidized export expenditures and subsidized export volume. In terms of sectors, dairy has had the largest dollar-per-ton subsidies. One would expect dollar-per-ton subsidies to decrease over the period of the URAA, because both permissible volume and value limits are declining over time during the implementation period. The use of the rollover provision has mitigated this decline and in some cases subsidies have increased overtime. Generally export subsidies have trended downward, but it is unclear whether this is due to market conditions and exchange rates, or to actual subsidy reductions.

Overall, countries have abided by their export subsidy commitments, and as discussed below, some countries have changed domestic policies with the intention of meeting their export subsidy commitments. As of the 1998 notifications, 10 countries have exceeded some of their export subsidy commitments. For the most part, it is too soon to be certain which of these countries are experiencing difficulty meeting commitments, as most countries have not yet notified 1999 and 2000 export subsidy use. It is possible that some countries in danger of exceeding their commitments may have used minimal subsidies in those years. As previously mentioned, countries must meet their commitments in 2000 (the final year of implementation) and can exceed commitments in years 1995-99, as long as the cumulative total of their subsidies from 1995-2000 does not exceed the total of their commitments for that period. If a country exceeds its commitments it is subject to a dispute settlement panel.

Two countries exceeded their cumulative volume commitment levels for one commodity for the full URAA implementation period by 1998. This includes Colombia for confectionery items not containing cocoa, and South Africa for wine. Cyprus is very close to exceeding its value commitment for cheese. Though a couple of commitments were violated, they had a negligible impact on world markets. The overall accomplishment of limiting export subsidy use during the URAA implementation period should be recognized.
Policy Changes Due to Export Subsidy Commitments

Export subsidy commitments have resulted in policy changes in a number of countries, most significantly, the European Union. The EU’s 1992 Common Agricultural Policy (CAP) reform was necessary for it to comply with the first phase of implementation of the URRAA. The EU recently expanded on its 1992 reforms, by enacting its Agenda 2000 reforms to lower internal market prices for grains and beef, so that it could try to meet its URRAA final bindings on export subsidies. Mid-term reviews were built into Agenda 2000, to monitor whether the reforms were sufficient for the EU to meet their WTO commitments and meet the budget constraint set by Agenda 2000. The mid-term reviews could result in additional EU policy reforms. Additionally, the EU cut its sugar quota by 500,000 tons in December 2000 to meet its commitments on subsidized sugar exports and reduced export subsidies for incorporated (processed) products in 1999 to meet its export subsidy expenditure restrictions.

The Agenda 2000 reforms, aided by a weakened euro, allowed the EU to export wheat and barley without subsidies from July to December 2000. It is likely that EU wheat and barley will be competitive on world markets starting in July 2001, when Agenda 2000 further reduces support prices for grains (assuming the euro does not appreciate beyond euro/dollar parity). Further cuts in export subsidy limits could provide incentives to further reform sectors such as dairy and beef (likely a moot point until the current BSE and hoof and mouth disease crises settle down) which are highly reliant on export subsidies.

Other countries also changed policies to meet export subsidy limits. Canada eliminated its rail subsidies for grains in 1995. Switzerland began dairy reforms in 1999 to eliminate state trading of dairy products, and Australia replaced dairy export subsidies with rebates of a new dairy production levy and eliminated it in 2000.

Not all binding restrictions have led to policy reform. Some countries have responded to binding restrictions on export subsidies by devising schemes to circumvent their commitments. For example, the EU has started to export some processed cheese claiming that it is an amalgamation of butter, skim milk powder and natural cheese and applying the export subsidies for skim milk powder and butter to the cheese exports. This has resulted in greater EU subsidization of cheese than was agreed upon in the URRAA.

Issues of Concern for Negotiations

Export subsidies are extensively used in agricultural trade, and were permitted to continue under the WTO in spite of their high costs and market disrupting effects. They have significant, direct impacts on trade in some markets, and can create unfair competition that strains trade relationships. Export subsidies permit countries to sell goods on world markets at prices lower than prices in their domestic markets. However, in the case of large exporters, they can be extremely costly to employ. If the countries employing export subsidies are large, the subsidies can drive down world prices. An export tax, rather than an export subsidy, may have benefited national welfare, but at the expense of producers – highlighting the tension cited earlier between the achievement of producer support and the exercise of market power.
One means to resolve the dilemma between the exercise of market power and producer support is price discrimination, accomplished by targeting subsidies or by subsidizing via a state trader. A pre-condition for price discrimination is market power. Without market power, one cannot effectively price discriminate.

Export subsidies create a wedge between the price of a good in an exporting country and that in an importing country, where the exporting country’s price is higher than the importer’s price. The lower price in the importing country increases demand for the good and reduces domestic production. Consequently, imports rise, and domestic producers suffer a welfare loss, while consumers experience a welfare gain. Producers in the exporting country experience a welfare gain as well, as prices rise and quantity supplied consequently increases. Consumers in the exporting country experience a welfare loss as prices rise and consumption declines. Consumers, as taxpayers, experience an additional loss as they have to help fund the subsidies. In the large country case, the decline in world price means much of the subsidy is paid to foreign consumers rather than producers.

There can also be significant, indirect effects of export subsidy reforms because they help set the stage for reforms in other areas. Constraints on export subsidies that are used to dispose of surplus production will create pressures to restructure domestic subsidies in ways that are less distorting of production and trade. If countries that employ high support prices and import barriers are required to reduce or eliminate their export subsidies by reducing support prices, they may be more willing to reduce tariffs at the same time. For example, the EU’s variable levy for grains would decrease with a decline in support prices, increasing market access to other countries.

There is a wealth of literature examining why governments continue to employ export subsidies. Though export subsidies can be welfare enhancing, due to political pressures the programs are often not targeted in such a way to achieve those benefits. Studies from the late 1980s and early 1990s tended to focus on the implications of targeted in-kind subsidies such as the U.S. Export Enhancement Program. Sharples (1984) found that the subsidizing country could enhance its welfare by subsidizing, provided the world price impact was larger than the cost of the subsidy, and that the more elastic the market the larger the welfare gain. Abbott, Paarlberg, and Sharples (1987) found that both the subsidizing country and competing exporters may benefit from an increase in world price if targeting is effective. However, the realization of benefits depends on the impact of the targeted subsidies on spatial trade relationships. If competitors incur higher transportation costs due to a change in spatial trade relationships then they may not benefit from induced increases in the world price.

Brander and Spencer (1985) found that given imperfect competition, the terms of trade move against the subsidizing country, but its welfare can increase because price exceeds the marginal cost of exports. Bohman, Carter, and Dorfman (1991) analyzed the welfare effects of targeted export subsidies and found that the ability for a targeted subsidy to be welfare improving is inversely related to the size of the subsidized market, as well as the relative sizes of income elasticities.
Many other studies found export subsidies to reduce welfare in the exporting country, often because the parameters of the program differed from what theory would suggest as optimal policy. For example, Anania, Bohman, and Carter (1992) found that no exporting country benefited from the U.S. Export Enhancement program and that the EU, the intended target, was barely harmed. At the same time, U.S. exports increased only minimally at a great cost to the U.S. government.

Due to evidence that brand loyalty exists in international wheat markets (Wilson, Koo, Carter and Tedros 1987) Kallio and Abbott (1998) analyzed U.S.-EU competition for Moroccan wheat imports. They found that if markets are imperfect and there are costs associated with switching suppliers, the welfare of the subsidizing country can increase by expanding market share using export subsidies. This result confirms that countries experience trade advantages through the use of export subsidies. The key is that targeted export subsidies can only work if they expand the market and increase the subsidizing country’s market share. Thus, targeted export subsidies which generate additional demand can potentially benefit all exporters, but those which only capture market share hurt competitors. The outcome depends on how well subsidies are targeted.

The Economic Research Service (ERS) of the USDA (Leetmaa 2001) analyzed the impact of EU export subsidy elimination on world markets. Results indicate the EU would continue to have exportable surpluses of all grains, while it would to be unable to export beef. The world price of most goods would increase between 5 and 10 percent. As mentioned earlier, the single support price for all grains supports barley and rye. The ERS study finds that the world price of wheat would decline roughly 5 percent, as EU exports would increase following production shifts out of lower priced crops such as barley and rye.

The OECD (2000b) also analyzed global export subsidy elimination. They too find that export subsidy elimination results in fairly modest world price impacts, altering non-dairy commodity prices by 1–5 percent. They found that world wheat and oilseed prices would decline slightly. The largest impacts in the OECD study were on world dairy markets, which were omitted from the ERS study, increasing world prices 6–30 percent. The OECD study found that EU exports of butter and skim milk powder would be severely reduced by 2005, while EU cheese exports would increase. In the case of cheese, the EU internal price would fall by 5 percent and the world price would increase 10 percent on average. They also found that EU milk price changes would not be large enough to cause EU milk producers to underfill their quotas, so the production quota would continue to be binding.

Issues Requiring Clarification

One problem encountered while analyzing the export subsidy notifications is that there is a lack of consistency across the notifications. Though there are 25 commodity groups (including one called other), aggregation within those groups differs significantly across countries. Switzerland notifies all dairy products as one category, whereas all other countries break dairy out into cheese, milk powder, butter, and other dairy products. The larger, or more general, the subject category is, the easier it is to shift subsidies among products. Many countries narrow commodity groups to include 4 or 5 six-digit HS codes. If countries negotiate a more specific
commodity specification, that would limit the ability of countries to transfer unused subsidies across commodities.

Schluep and de Gorter (2000) argue that export subsidies are inadequately dealt with in the URAA, as the current definition omits an implicit export subsidy in the form of price discrimination and revenue pooling in the form of a “consumer only financed” export subsidy and poorly defines “producer financed” export subsidies. They argue that consumer only financed export subsidies are more trade distorting than the same sized taxpayer financed export subsidies, as domestic price discrimination drives down domestic consumption, increasing the trade distortion. They also argue that the WTO panel ruling on Canadian dairy policy was erroneous in that it ruled that class Ve and Vd milk was subsidized, whereas class Vabc milk, whose price is pooled, should have been classified as subsidized, but was not. These misclassifications arise because of the weakness in the definition of export subsidies. But establishing such definitions can be problematic for several reasons discussed below – since world price is difficult to measure, especially for differentiated products, and we can observe market structure more clearly than conduct or performance.

Sumner (1996) argues that a consumer only financed export subsidy exists when a non-traded good such as fluid milk faces domestic price discrimination, but the dairy products produced from that milk are traded at world prices. High domestic prices reduce consumption of fluid milk, however if revenues are pooled farmers’ production increases, and the pooling acts as an export subsidy. The WTO panel decision against the Canadian Dairy Board demonstrates that the WTO is not in favor of price pooling – a form of market structure which can lead to price discrimination. However there are many programs where the producer receives a pooled price that combines a higher domestic price and lower world price (for example, the California Raisin Board) which have not been subjected to WTO discipline.

The component of price pooling that categorizes it as an export subsidy is price discrimination. In the case of joint products, such as fluid milk and processed dairy products, it is often difficult to determine whether price discrimination actually occurs. For example, it is possible that the exporting country doesn’t consume the product that it exports, or it exports a lower quality product than it domestically consumes. In those cases, it would be difficult to prove that they are price discriminating. Agricultural commodities are not homogeneous (Haley 1995); there is much variation in quality characteristics of similar goods. In fact, products are becoming more and more differentiated over time. Therefore it is often difficult to prove price discrimination or to determine an appropriate world price from which to measure the level of export subsidy.

**Export Taxes**

The URAA did not discipline export taxes. Export taxes had not been used by major exporters for many years, and it is likely that negotiators believed they wouldn’t be used any time in the future. However, in 1995-96, world wheat and barley prices rose above the EU support price for grains. EU exports were drawing down domestic stocks and the EU instituted export taxes to prevent domestic prices from rising, thereby, disadvantaging end-users such as livestock feeders and/or millers. The consequence was a reduction in EU exports. This was the first time the EU taxed grain exports since 1974. Since the EU is a large player in world grain
markets, reducing exports in a time of scarcity resulted in a larger global price increase than would have occurred without the export taxes.

The Czech Republic, Hungary and Poland also have employed export taxes on grains during the URAA implementation period. While support for restrictions on export taxes is widespread, developing countries in particular support disciplines on export taxes to prevent countries from forcing the burden of adjustment solely onto world markets. An argument could also be made that discipline on export taxes would limit the exercise of market power in trade, but that has not been an important element of current debate.

Developing countries also employ export taxes. The use of export taxes on primary products is, for many of the poorest developing countries, a major means of generating tax revenue. Egypt used to maintain domestic cotton prices below the world price, taxing its producers, and until 1994 Argentina taxed exports of wheat, sometimes at levels of 25 percent or more. Developing countries are in favor of employing export taxes to raise revenue for themselves. However, they are not in favor of large exporters with market power using them to distort world markets by increasing world prices.

*Market Promotion Activities*

Some countries argue that U.S. market promotion activities should be subject to export subsidy disciplines. However, Article 9, Section 1d exempts widely used export promotion and advisory services from export subsidy reduction commitments. At this point U.S. market promotion activities are exempt from WTO disciplines.

*Zero for Zero*

One proposal that some commodity and interest groups have been pushing is the so-called “zero for zero” proposal. Under zero for zero, all support would be eliminated for a single commodity or a group of commodities by all members of the WTO. Some commodity groups have called for a zero for zero program for their commodity. Based on WTO notifications, the only commodity group for which a zero for zero program is unlikely to face much opposition in the way of export subsidies is oilcakes. Not one country notified subsidized exports of oilcakes from 1995 to 1998. Other commodities where zero for zero would be feasible in terms of export subsidies would be cotton (S. Africa subsidized exports in 1995, but has since abandoned its export subsidy program), and oilseeds (which were subsidized by S. Africa in 1995 and Hungary in 1995 and 1996). However, countries may be reluctant to give up the possibility of subsidizing their exports in the future. Unless countries are given the opportunity to select one or two commodities that they would be willing to give up the possibility of export subsidies for, a zero for zero program would most likely not be viable in the WTO. As the EU dominates the use of export subsidies, zero for zero is unlikely to offer many opportunities where countries can trade-off existing subsidies.

*Negotiating Positions*

In the past year, countries have been submitting position papers on their goals for the Millennium Round to the WTO. In terms of export subsidies countries fall largely into two camps, those that want to eliminate export subsidies and those who stress that all export disciplines should be treated in a comprehensive matter. Only Mauritius has come out in favor of
export subsidies, stating that “export subsidies as well as export credits do facilitate economic access to food in the case of net food importing developing countries” (WTO 2000a). The Cairns Group and the United States are leading the charge for the elimination of export subsidies. A number of developing countries are also in favor of export subsidy elimination because they depress their domestic prices and discourage domestic production. \(^1\) There are also a number of developing and middle income countries that as exporters of agricultural products would benefit from higher world prices if competitors’ subsidies were removed.

The European Union and Japan (which does not employ export subsidies) are in favor of reducing export subsidies provided all export measures are disciplined. The programs they are looking to discipline are export credits and food aid, which are covered later in this paper. Japan is also in favor of banning “rollover,” binding export subsidy unit values and reducing them progressively, strengthening disciplines on export subsidies for products and markets in which developing countries are participants, and disciplining domestic support policies that have the effect of export subsidies. Potential tradeoffs and suggestions to reconcile the differences are discussed in conclusions to the paper.

**Options for Reform and Conclusions**

The inclusion of disciplines on export subsidies was a major accomplishment of the URAA. Some argue that base period levels from the URAA may not have been representative of subsidized export flows in the early 1990s and may have permitted an increase in subsidized exports during the implementation period. However, these initial bindings encouraged countries, such as the EU, to sign the URAA. It is likely that future cuts will be made from the final 2000–01 bound levels, therefore permitted expenditures and volumes are likely to decrease from the initial bound rates. Some economists have argued for additional cuts at the same pace of the URAA reforms. If export subsidies were cut by an additional 21 and 36 percent from the original base values, permitted volumes would be 58 percent of those in the base period and expenditures 28 percent of those in the base period. Though export subsidies would still exist, such cuts would require severe policy reforms in the countries that employ export subsidies, and would be a serious step on the way to export subsidy elimination.

To date, members of the WTO have voiced support for the reduction of export subsidies in the upcoming round of agricultural negotiations. Additionally, members have tried to meet their export subsidy commitments and many have made domestic policy changes to ensure that the commitments are met.

The EU would be the region most impacted by further reductions in direct export subsidies as it would require further policy changes. There are forces at work within the EU that are moving toward such policy change, though it may be gradual, and positions taken in trade negotiations usually reflect domestic priorities for change. This is evidenced by Franz Fischler’s original Agenda 2000 proposal, which called for larger support price cuts to happen sooner than those agreed to by the Heads of State in the final agreement. Agenda 2000 also fixed the

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\(^1\) Among the developing and transition economies advocating for further restrictions on export subsidies are Thailand, Korea, India, Cairns group, Cuba, Dominican Republic, Honduras, Pakistan, Egypt, Haiti, Nicaragua, Kenya, Uganda, Zimbabwe, Sri Lanka, El Salvador, and Poland.
agricultural budget at 40.5 billion euros per year in real terms for the period 2000–06. Hence, there is budgetary pressure to reduce agricultural spending. In light of the budget constraint and possibly the EU’s WTO commitments, Agenda 2000 also included a mid-term review to assess whether the program was meeting the EU’s objectives. The mid-term reviews are scheduled to begin shortly and could result in further reforms. The impending enlargement of the EU to Central and Eastern Europe and the EU’s current BSE crisis, which is proving to be very costly, will also create pressure to reform EU agriculture.

Future EU reforms are likely to follow the paths of the 1992 MacSharry and Agenda 2000 reforms, which reduced support prices and supplemented farmers’ incomes through direct payments. As the EU makes a transition from use of export subsidies to direct payments to support EU producers, there will be less distortion to world prices. Key options for reform follow in Box 1.

**Box 1: Export Subsidy Options for Reform**
- Further reduce, if not eliminate, direct agricultural export subsidies;
- Maintain restrictions on both the volume and value of export subsidies;
- Consider rules to prevent circumvention (such as EU component subsidies);
- Eliminate the ability to “rollover” unused subsidies to future years;
- The issue of commodity aggregation in reporting requirements is secondary, as most commitments are already quite specific, and finally
- Also secondary, revisit the definition of export subsidies to account for consumer financed subsidies and cross subsidization across commodities.

### 4. EXPORT CREDIT

**Summary of Current Situation**

Short-term export credit is viewed by the trade as essential to many international transactions, and is necessary for doing business in international agricultural markets. Governments are commonly involved in export credit activity, both for agriculture and for many other commodities. This government involvement is now referred to in the OECD and in the WTO as “officially supported export credit.” Government involvement in export credits include:

- Public and parastatal agencies directly offer credit (including state traders);
- Interest rate subsidies may be offered by a government;
- Governments may assume default risk for private loans; and
- Publicly supported or subsidized insurance may be offered to private lenders.

For agricultural commodities, default risk guarantees are the most common form of officially supported export credit. Insurance schemes and credit offered by state trading agencies are also found. Explicit interest rate subsidies are not commonly used for agricultural trade.

Officially supported export credits are a subject for WTO negotiations because “Government supported export credits are seen as a way of circumventing export subsidy commitments because interest rates and repayment terms can be easier than under normal
commercial conditions” (WTO 2001a). Hence, in past and future negotiations concerning export subsidies, disciplines on officially supported export credits have been considered, and the European Union asks that export credits be disciplined as well as other forms of subsidies.

**WTO and OECD Negotiations on Export Credit**

The possibility that officially supported export credits could act as subsidies was recognized during Uruguay Round GATT negotiations. Article 10.2 of the Uruguay Round Agreement on Agriculture instructed WTO members to work toward disciplines to govern provisions of officially supported agricultural export credit programs. The Ministerial Decision on Measures Concerning the Possible Negative Effects of the Reform Program on Least-Developed and Food Importing Developing Countries also addressed the export credit issue, stating that “any agreement relating to agricultural export credits makes appropriate provision for differential treatment in favor of least developed and food importing countries (WTO 1995).”

Negotiations on officially supported export credit for agriculture have ensued in the OECD rather than in the WTO. The OECD's December, 2000 deadline for a negotiated outcome on this issue was missed, and those negotiations continue. One issue in this process is whether the OECD is the appropriate forum in which to negotiate this issue, and whether an outcome in the OECD would be the basis for any future WTO agreement on this issue. While most OECD members have insisted that the OECD outcome be binding, the European Union has at times held the position that this issue must eventually be negotiated under WTO auspices. Developing country WTO members have also stressed that OECD outcomes cannot be forced on WTO members, since many of those countries are not members of the OECD, however this practice is largely a OECD country activity.

OECD negotiations on officially supported export credits for trade in goods other than agricultural and military goods have a long history, and resulted in a new 1998 Arrangement on Guidelines for Officially Supported Export Credits (OECD 1998). Those guidelines are voluntary, and apply to loans greater than two years and less than either five or ten years in duration, depending on the good in question. Guidelines require a minimum 15 percent cash down payment, and minimum interest rates must be charged based on reference commercial interest reference rates (CIRRs) adjusted for country risk premiums. These disciplines seek to minimize the extent to which officially supported export credits can act as export subsidies, and try to ensure that the terms of these loans are similar to commercial terms. Since loans are often longer term loans for investment goods, minimum interest rates are set to reduce their subsidy element.

Rude (2000) has argued that most existing agricultural export credit programs do not meet these OECD guidelines. Down payment requirements are not met, and interest rates are often below OECD minimums, since default risk is largely eliminated by government

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2 Countries with the status of least-developed (designated as such by the United Nations) include: Angola, Bangladesh, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Democratic Republic of the Congo, Djibouti, Gambia, Guinea, Guinea Bissau, Haiti, Lesotho, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Niger, Rwanda, Sierra Leone, Solomon Islands, Tanzania, Togo, Uganda, Zambia. In addition, net food importing countries include: Barbados, Botswana, Côte d’Ivoire, Cuba, Dominican Republic, Egypt, Honduras, Jamaica, Kenya, Mauritius, Morocco, Pakistan, Peru, Saint Lucia, Senegal, Sri Lanka, Trinidad and Tobago, Tunisia, and Venezuela.
guarantees. But most agricultural export credit programs are for a term of less than one year, so that these OECD guidelines typically are not applicable. The longer-term for goods other than agriculture is appropriate because they are often investment goods. Since trade in agricultural commodities generally involves consumption goods, and future income streams are not generated, longer-term credit is less appropriate. This is reflected in the typical design of existing programs, which support short-term credit arrangements. These shorter terms limit the extent to which the more favorable terms under officially supported export credit constitute subsidies.

In support of the ongoing negotiations, the OECD (2000a) conducted an extensive survey on the use of officially export credit subsidies for agricultural commodities by its members, and issued a report on the extent and nature of existing programs. This information is far more up-to-date than data that has been available to researchers analyzing this issue previously. The OECD report evaluates export credit programs for a wide range of commodities and estimates that the subsidy element of most programs is quite low.

**Export Credits as Subsidies**

Officially supported export credits can serve as subsidies if the terms of loans under those programs are more favorable than the terms which would have been available from private market conditions. For example, if the interest rate charged under the program does not adequately reflect country risk premiums, then a subsidy element from the program would be present. The extent of the subsidy depends on interest rates charged relative to market rates (appropriately reflecting risk), the fees charged, down payments required, and the term of the loan. The longer the term of the loan for a given interest rate, down payment, and fee structure, the greater is the subsidy element of the program. Since risk premiums reflect default risk (at least in theory), the subsidy element of programs which involve default risk guarantees can also be gauged by the extent to which government budgetary allocations are required to pay off guarantees.

Several methodologies have been established to estimate the subsidy value of particular credit arrangements (Hyberg et al. 1995; Raynaud 1992; Baron 1983; Baricello and Vercammen 1994). These methodologies typically assume risk premiums in country specific market interest rates fully reflect default risks of loans, and are appropriate in gauging the value to importers of guarantees. A net present value calculation of the cost of the loan relative to the cost that would be incurred under market conditions is utilized to estimate the subsidy value.

Establishing market interest rates to be used in the estimation of program subsidy values can be problematic. Market interest rates must reflect risk premiums associated with these loans, and Wilson et al. (1987) have argued that comparable short-term loans are not common. Current practice, including the methodology used by the OECD, as well as by Scully (1992) and Wilson and Yang (1996) have based importers’ market interest rates on that country’s Moody's rating (or an equivalent rating), and the interest rate which would typically apply to a borrower of that rating.

One of the concerns with calculating the subsidy value is that in some cases importers might have been unable to obtain credit at any interest rate, corresponding to a situation described as a “liquidity constraint.” If liquidity constraints are binding for an importer, then the
subsidy value of the officially supported export credit program could be substantially greater than the standard methodology calculates, but it is conceptually difficult to establish their value in such situations.

In calculating the subsidy element of official credit programs, it would be useful to include all of the components of those programs. For example some programs include credit on transportation costs while other programs deal with exchange rate risk. Neither of these are treated in the standard methodology, nor were they addressed in the OECD's efforts to estimate subsidy values for existing credit programs.

The alternative approach to estimate subsidy values, as used by the General Accounting Office (GAO 1995), and in WTO rules for export subsidy and producer support limitations, estimates the subsidy element of export credit programs as the extent of public monies expended to run the programs. For example, in the GAO's calculation of export subsidies under the Commodity Credit Corporation's GSM 102 and 103 programs, the subsidy was estimated as the payouts to cover defaults. This estimation of the subsidy value of the U.S. export credit program was somewhat higher than the OECD estimate (around 9 percent rather than 6.6 percent), reflecting the fact that default rates under this program have been higher than would be predicted by market based country risk premiums.

The extent of subsidies are often expressed as a price subsidy equivalent of the export subsidy arrangement. Baron established the methodology for estimating that as the subsidy value as a fraction of export value. That method does not consider whether subsidies alter marginal costs or relieve budget constraints of importers. If export credit programs work through income rather than price effects, and create additional demand, this method will overstate the distortionary effects of this form of subsidy.

**Empirical Facts about Export Credits for Agriculture**

The OECD report describing the outcome of its survey provides the most up-to-date information on the extent and nature of officially supported export credit programs. This report indicates that the use of export credits expanded from $5.5 billion and 1995 to $7.9 billion in 1998. These credits represented 3.6 percent of total agricultural exports in 1995 and increased to 5.2 percent of agricultural exports in 1998. The expansion in use of officially supported export credits was likely to have been caused by deteriorating financial market conditions, especially the Asian financial crisis in 1997. The OECD report shows substantially different interest rates, and hence subsidy values for the beginning of 1998 versus the end of 1998, reflecting this continuing crisis.

The OECD's estimate of the subsidy value for these programs in 1998 averaged 3.6 percent of export value. There were only four countries for which subsidies exceeded one percent: 6.6 percent in the U.S., 3.8 percent in Norway, 3.8 percent in France, and 1.2 percent in Canada. Given these relatively small subsidies, the extent of distortions to trade patterns are likely also to be relatively small.

Less than half of the loans offered under officially supported export credit programs are for a term of more than one year. Greater than 96 percent of loans for more than one year are from the United States. As a consequence, most of subsidy value estimated for these programs is
from U.S. programs (88 percent). The European Union accounts for seven percent of credit subsidies, Canada accounts for 4 percent, and Australia accounts for one percent. Thus, export credits as subsidies is viewed as largely a U.S. problem. It should be noted, however, that since the 1995 Uruguay Round Agreement the United States has continued the use of export credits rather than direct export subsidies (such as Export Enhancement Payments), whereas the European Union has relied on direct export subsidies rather than credit subsidies.

Bulk cereals are the most important commodity group subsidized. More than one-third of subsidies in 1996-97 went to cereals, and up to 14.5 percent (in 1997) of cereals exports received credit subsidies. However, officially supported export credit programs exist for a wide variety of commodities. The OECD also notes that most subsidized credits are applied to trade between OECD countries. The least developed countries received only 0.2 percent of export credits, and food importing developing countries receive only 8.9 percent of credits. The OECD concludes the disciplines on agricultural export credits would not greatly harm poorer food importing countries, because they have not historically been substantial beneficiaries of these programs. They suggest this is indirect evidence both that liquidity constraints for these countries are not being relieved, and the concerns raised in the Uruguay Round Agreement Ministerial Decision are moot. But this same study shows increasing use of export credits during the Asian financial crisis, when liquidity constraints were likely to be binding.

Most research has focused on agricultural export credit programs that potentially subsidize international cereal trade (Dahl, Wilson, and Gustafson 1995a; Dahl, Wilson, and Gustafson 1995b). Thus, better descriptions are available for cereals programs, and little is known about the operational details for the other two-thirds of export credit programs. In the U.S., the Commodity Credit Corporation of the Foreign Agricultural Service in the U.S. Department Agriculture offers credit guarantees through GSM 102 and 103. Those programs provide government guarantees on private loans. The U.S. also offers export credit for cereals as part of its food aid program – Title I of Public Law 480. The aid element of that program is due in part to the concessional terms on loans. In Canada, the Canadian Wheat Board offers a Credit Guarantee Sales Program through the AgriFood Credit Facility. In Australia, the Export Finance Insurance Corporation provides insurance on private loans. In France, the Company for International Trade Insurance — COFACE, a semiprivate entity that may not be included in the OECD study — insures loans on cereals trade. In each of these programs, the most important subsidy derives from the guarantee against default risk offered to private lenders. Typically, interest rates charged then do not include a risk premium, providing a substantial cost saving to the importer.

**Issues of Concern for Negotiations**

Research on officially supported agricultural export credits has raised and examined several issues. These issues relate to the extent to which export credit programs contain subsidies, the extent to which those subsidies distort trade, and how disciplines of credit programs would limit those distortions. Understanding these issues should condition any negotiations concerning disciplines on these programs.
**Additionality or Market Share?**

If export credits contain subsidies, by making the terms of one exporter more favorable than those of another, they may shift market share to that exporter in the manner similar to a direct price subsidy. However, export credits may relax importer budget constraints rather than changing marginal prices on transactions, and so may shift demand for a commodity outward. The extent to which export credit programs expand demand rather than compete for market share is addressed in the issue labeled “additionality.” Additionality was better defined when applied to the food aid debate in the 1960-1980s than it appears to be now in much of the research on export credit programs. This latter research utilizes a vague definition relating additionality to any imports associated with an export credit program. In the food aid debate there was explicit attention to determining the extent to which credit programs expand demand (Fisher 1963). This concern has been raised in some recent literature on export credit programs as well as export subsidies (Paarlberg 1999), who notes that export credits might better be represented as income subsidies rather than price subsidies. If an income subsidy expands demand, it can potentially raise the world price and benefit all exporters. Price subsidies are more likely to lower the price received by competing exporters, and so distort trade more. The mechanism by which export credits could expand demand and improve welfare for all exporters is similar to the way in which targeted agricultural export subsidies expand demand and at the same time potentially raise world price and producer welfare (Abbott, Paarlberg, and Sharples 1987). If export credit programs create additional demand, disciplining them is unlikely to benefit either competing exporters or importers. The standard practice of treating export credits as a price subsidy equivalent is also likely to overstate the extent to which they distort trade.

**Liquidity Constraints**

One of the reasons why researchers believe export credit programs can expand demand is because they believe that at times agricultural importers may face liquidity constraints. Countries may lack sufficient foreign exchange to import desired foodstuffs, and under certain market conditions may be unable to obtain credit on any terms. In periods of financial crisis, such as the Asian financial crisis in 1997, or when developing countries face financial crises leading to the need for structural adjustment programs, binding foreign exchange constraints may limit food imports. If officially supported export credit programs permit short-term loans to be made when no credit would otherwise be available, then they enable imports which would not have otherwise occurred. In this case those imports are additional to those which would have occurred in the absence of the program, and world market demand has been expanded. In such cases the methodology used by OECD underestimates the subsidy equivalent of a publicly supported export credit program. The larger subsidy would not disadvantage other exporters since it is likely to create additional demand.

The standard procedure for estimating the subsidy value of agricultural export credits does not consider the possibility of liquidity constraints. The subsidy element is largely determined by the difference between market interest rates adjusted for the country risk premium and interest rates under official programs. Establishing those market interest rates is problematic, as noted above, and some evidence cited here suggests those market interest rates may be underestimated. The subsidy element also strongly depends on the term of the loan. Subsidy components become larger as the term for the loan is longer. Since agricultural commodities are consumption goods, justification for longer-term loans is weak, and when the term is longer than
a year, suspicion that the credit program involves a subsidy is high. Only the U.S. offers a substantial amount of agricultural export credit for a term longer than one year.

Who Benefits?

In order to meet their goals, officially supported export credit programs must be structured so that recipient countries, not banks, capture the benefits. If WTO disciplines include setting interest rates at full market levels (i.e., not subsidized) then researchers have argued that that banks are likely to benefit rather than importers. The possibility of the export credit program generating additional demand would be lost as it is unlikely that liquidity constraints would be relaxed.

Linkages to STEs and Food Aid

Issues related to additionality derived from officially supported export credits, and implications of institutional arrangements on the nature of subsidy provided, hence the extent of trade distortions, are also relevant to other forms of export subsidies, including state trading, food aid and direct export subsidies. State traders may make loans. If those loan terms are more favorable than commercial terms, that practice constitutes an export subsidy, and yet the lack of transparency of operations by state traders may make that practice hard to detect. Some food aid is also given as loans rather than as grants, although there is pressure under food aid conventions to convert terms to grants rather than loans. To the extent that terms under a food aid loan are concessional, and yield a grant component, those credit terms may constitute a subsidy derived from an export credit program similar to those discussed above. A more difficult problem with food aid, and for foreign aid more generally, concerns tied aid. Under some foreign aid programs, recipients of “tied-aid” may be required to purchase export commodities from the donor. To the extent that that foreign aid is given as concessional loans rather than grants, the tied-aid constitutes a subsidy on those exports from the donor. The OECD negotiations are explicitly considering disciplining this practice. The overlap of these practices is likely to be of concern in establishing any rules governing export subsidies more generally, and food aid in particular.

Empirical Research on Export Credits

Beyond the OECD study cited above, most research by agricultural economists on credit programs has focused on the cereals programs cited above for the United States, Canada, France, and Australia, and has examined wheat trade more than trade in other commodities. The general finding of those studies is that export credits have increased demand for agricultural commodities. The programs are effective in expanding demand, if expensive. Data constraints have limited research in this area. Relatively few empirical studies have been conducted, and those that are available generally used data on credit programs prior to 1995, before adoption of the Uruguay Round Agreement.

The standard practice for estimating the trade distorting effects of export credit subsidies has been to follow Baron’s procedure and then to treat export credits programs as a price subsidy equivalent. These price equivalent subsidies are introduced into market simulation models to estimate the distortionary effects of credit programs. But recent studies have found that credit programs, EEP subsidies, and direct price subsidies have quantitatively different impacts on trade, suggesting that credit subsidies may act differently from price subsidies (Koo and Karema.
Therefore, income effects rather than price effects may be driving trade impacts from export credit programs, so that additionality rather than (or in addition to) competition for market share is the more likely consequence. Also, credit programs may be relieving liquidity constraints, something that authors in this area believe could be important.

As noted above, the General Accounting Office has also measured the subsidy value and cost of U.S. agricultural export credit programs. Their approach bases subsidy estimates on budgetary outlays under programs and is more consistent with existing WTO rules. It also avoids the problems of estimating country risk premiums and corresponding market interest rates that would apply to loans under these programs. Moreover, it finds greater subsidy value for those programs due to the relatively high default rates under the United States GSM programs. The practice of estimating subsidies based on program outlays, and disciplining the use of government budgetary allocations to such programs, is likely to be more easily implemented in the context of WTO negotiations. To the extent that credit programs offer subsidies they are likely to generate costs to the government. Moreover, default risk may be enhanced by participation in these programs, so country risk premiums are a lower bound on that cost.

The GAO has recognized that disciplining government budgetary costs of officially supported export credit programs may be infeasible, since programs cannot control the actual default rates experienced. Other WTO disciples on agricultural trade, notably export subsidy and producer support limitations, are also potentially infeasible, since governments cannot control the world market conditions which determine program expenditures. Such limitations are practical, in that program scope and parameters are altered when conditions cause spending to approach or exceed commitments, as is the case for the EU Agenda 2000 reforms, which are in part intended to insure that the EU remains within its WTO commitments.

**Negotiating Positions**

Differences of opinion appear to remain on whether or not this issue can be resolved within the OECD or must be part of a new WTO agreement. National positions appear to be in flux on this concern. The European Union had wanted negotiations to go to the WTO, but became more accepting of an OECD outcome as the December 2000 deadline neared. Non-OECD members, however, want negotiations on export credit issues to be explicitly part of agricultural negotiations now continuing under the WTO. Developing countries are especially concerned about being disenfranchised by the OECD process.

The export credit issue is most explicitly evident in the European Union negotiating position in the WTO on agricultural export subsidies. Their position paper explicitly states that export subsidy negotiations must address the export credit issue, as well as other forms of implicit and indirect subsidies.

The CAIRNS group includes Canada and Australia, two countries that historically utilized state trading agencies and have offered export credit programs through those agencies. Hence, the position of the CAIRNS group on export credits is brief, and some dissension exists within the group. The official position is that the term length for export credits should be limited to one year. It was interesting to note that in our discussions with the Australian agricultural representative in Washington D.C. on this issue that limiting the term of programs was their most
important concern, and the question of interest rates under programs never came up. Both the OECD evidence and analysis of programs suggests that limiting the terms of loans appears to be a sufficient means for substantially disciplining the subsidy component of any officially supported agricultural export credit program.

The U.S. position on export credits is mostly devoted to linking this issue to state trading. It asks that any loans by state traders be classified as officially supported export credit and so be reported to the WTO as well as subject to WTO disciplines. The United States appears reluctant to give up its export credit programs and would prefer not to discuss them in WTO negotiations, rather addressing them in the OECD. Evidently, the United States has indicated a willingness to reduce its term length for its export credit programs to 18 months, but balks at constraining the term to one year. This, after all, is the most important export subsidy-like program pursued by the United States following Uruguay Round GATT agreement.

Conclusions on Export Credits
The estimated subsidy value of existing programs is generally very low. Only for U.S. programs are subsidy values above four percent, and credit terms are longer than one year. In all cases, these relatively low subsidies are likely to induce only small trade distortions. Evidence from the literature suggests that these programs may create additional demand, and to the extent that this is true their negative impact on competing exporters are minimal.

Disciplining officially supported export credit programs is more likely to be accomplished by limiting the term of loans offered, and by constraining government budgetary outlays for programs, rather than by constraining program parameters such as minimum interest rate requirements. This political compromise is likely to adequately limit the extent of implicit subsidies from credit. Constraining interest rates or other program parameters risks interfering with commercial relationships, may negate the value of the program to the importers, and limit additionality.

Difficult issues arise where credit programs overlap other forms of subsidies, such as food aid. Special and differential treatment of credit programs for developing countries is mandated in the Uruguay Round Agreement and could more effectively target relief of liquidity constraints and generate additional demand. Key options for negotiations are summarized in Box 2.

Box 2: Export Credit Options for Reform
- Limit the term length of export credits;
- Limit government budgetary outlays for export credits; and
- Consider differential treatment for developing countries.

5. STATE TRADING

Summary of Current Situation
State trading is used in a variety of forms by both importers and exporters of agricultural commodities. The primary function of these agencies is to implement domestic agricultural policy. In doing so these agencies must address multiple and conflicting goals including producer support, consumer subsidization, marketing system efficiency, and the exercise of market power in both domestic and international markets (Table 3).
Table 3. Conflicting Objectives of State Trading Enterprises

**Market Power (Exercise or Control)**

*International Market*
- Optimal tariffs, taxes and subsidies
- Price discrimination
- Countervailing negotiating power

*Domestic Market*
- Collect rents from market position
- Prevent distortions from private agents

**Policy Objectives**

*Income Redistribution*
- Producer support and farm income
- Consumer subsidization

*Sectoral Policy*
- Price stabilization
- Food security
- Efficient market functioning

*Foreign Policy*
- Meet WTO commitments
- Supply sourcing based on politics

The definition of STEs is hotly debated, largely because many variations exist. The definition is important because it determines which countries must notify the WTO that a particular agency is a state trader and so is subject to WTO disciplines. Three issues arise in establishing a definition — ownership, special privileges of the government entity, and whether the state trader must make purchases and sales of the commodity (Ackerman and Dixit 1999). Differences of opinion exist about whether certain institutions are state traders. The Commodity Credit Corporation (CCC) of the U.S. was initially notified as a state trader in 1995, yet when the U.S. stopped utilizing EEP subsidies it withdrew its notification, although it may be argued that it continued acting as a state trader due to other programs (such as DEIP). Sorenson (1991) has argued that EU control of agricultural markets constitutes state trading, but since no public entity physically handles commodities, it has never been notified as a state trader. Thus, the WTO definition of state trading is narrower than simply including all public entities that can influence trade.

Some WTO members are concerned with state trading because market activities by state traders may not be transparent and so countries utilizing state trading may not abide by their WTO commitments. State traders may be able to subsidize exports in a disguised manner and so
exceed export subsidy commitments. It is also alleged that the privileged status of an STE may permit implicit subsidization of exports. Advantageous access to finance, preferential tax treatment, and the ability to negotiate long-term trade agreements are all examples of advantages of state traders which derive from their privileged status as public institutions.

Importing state traders may be able to protect markets beyond their tariff reduction commitments to the WTO. STEs may also not behave like private firms in international markets, violating other commitments to the WTO such as non-discrimination and equal treatment of trading partners, as when politics influences import market share.

This discussion of state trading focuses on exporting STEs due to our concern with export competition. Importing STEs are briefly examined as WTO disciplines are likely to affect both importers and exporters.

*State Trading Under the WTO*

State trading is explicitly permitted under WTO rules. State traders have historically been required to notify GATT, and currently the WTO, of their existence. Until the Uruguay Round Agreement reporting requirements were minimal and many countries failed to notify agencies which were clearly state traders. Article XVII of the Uruguay Round Agreement established a working party to address state trading issues. Out of that effort came stricter notification requirements including a more detailed questionnaire and a new definition of state trading. The URRAA continues to explicitly permit state trading.

The new definition established by the WTO addresses the three issues raised above. The definition is “Any governmental and nongovernmental enterprises, including marketing boards, which have been granted exclusive or special rights or privileges, including statutory or constitutional powers, in the exercise of which they influence through their purchases or sales the level or direction of imports or exports” (OECD 1998).

A broad interpretation of ownership criterion, explicitly recognizing marketing boards as STEs, is part of this definition. The definition also explicitly notes the importance of special rights or privileges granted to STEs, and requires that state traders are able to influence trade through purchase and sales, hence requiring that STEs physically handle the commodity.

Obligations under the WTO of state trading agencies include:

- Nondiscrimination: commonly referred to as most favored nation (MFN) treatment;
- No quantitative restrictions;
- Preservation of tariff concessions;
- Transparency; and that
- Sales be made in accordance with commercial practices.

Governments are also obligated to meet their export subsidy commitments under the URRAA in cases where STEs export a commodity.
The United States has been the most vocal advocate for reform of state trading. Its position at the end of the Uruguay Round was that this institution should be eliminated. Recognizing the broad support for this institution, the United States has modified its position, emphasizing a need for greater transparency and elimination of the exercise of market power by STEs. A recent institutional innovation for many STEs, strongly supported by the United States, is the coexistence of an STE with private traders, so that the state no longer has monopoly control over either imports or exports. The United States and other WTO members have expressed concern that many of the potential new entrants to the WTO use STEs extensively to implement agricultural policy. They argue that continued use of STEs makes it difficult to ascertain if WTO commitments are being upheld.

The Prevalence of STEs

Thirty countries have notified the WTO of the existence of nearly 100 state trading enterprises. Because of differing interpretations and ambiguities in definition it is likely that not all STEs have been notified to the WTO. STEs are generally found for politically sensitive commodities — grains, sugar, and dairy. This commodity coverage reflects the importance of domestic agricultural policy objectives as the raison d’être for this institution.

The prevalence of STEs has been declining. While nearly 90 percent of both rice and wheat trade in 1970s were handled by state traders (Schmitz et al 1981; Falcon and Monke 1979-1980) that share has fallen to between 33 and 50 percent today (Abbott and Young 1999; Young 1999). The decline in STEs is largely due to requirements of structural adjustment programs. The redistributional objectives of these agencies are costly, both in terms of domestic resources and foreign exchange, and were factors behind the macroeconomic imbalances that led to structural adjustment programs. Cost and pressure from international institutions prompted reform of these institutions more often than a change in the domestic agricultural policy goals held by these countries. Many Asian countries avoided structural adjustment programs imposed by the World Bank and the International Monetary Fund through better management of debt and foreign exchange and so less reform occurred in that region. To date, the WTO has had very little to do with reform or elimination of STEs.

Countries have resisted the elimination of STEs as they are used to implement domestic policy. A common reform has been to permit private trading entities to coexist with public agencies. In some cases importing STEs will continue to manage a lower quality product targeted for poor consumer subsidization, while private agents handle trade for the higher quality products. The coexistence of private traders with STEs is likely to lead to a reduction in the potential monopoly power of the state trader. However, the state trader may retain certain special privileges. Reform of STEs has also been accomplished through privatization of existing entities, so that the STEs have autonomy from the government. An example of this is the reform of the Australian Wheat Board. These agencies become similar to producer cooperatives, and may be required to operate without government subsidization.

Issues of Concern for Negotiations

Definition

Concern continues over the interpretation of the definition of an STE because some countries have not notified agencies considered to be STEs. Several researchers have questioned
whether the legal definitions hold economic significance. One of the lessons from the literature is that institutions evolve as they reform in order to continue to achieve important domestic objectives. For example, simply because the ownership status of an STE changes does not imply a lower level of protection (Abbott and Young 1999). It is important to remember that state trading, with the requirement to physically handle grain, is not the only means by which governments can influence price or quantity at their borders.

**Market Power**

The power held by state traders in their domestic and in international markets is of concern to many governments, and is frequently mentioned in WTO position statements. State traders may regulate domestic prices, enact supply controls, and regulate procurement and domestic marketing. Several researchers have noted that the ability of the state trader to distort trade results from the combination of control over the domestic market and whether or not the STE is large in international markets and so may be able to exercise some degree of market power (Dixit and Josling 1997; Ackerman and Dixit 1999; Veeman, Fulton, and Larue 1999).

Only a very few of the many state traders have sufficient market share to significantly alter world prices. Table 4 lists the largest exporting and importing STEs, indicating the commodities they trade as well as the magnitude of their operations. Only two exporting STEs have a market share greater than 10 percent, and another six hold market shares in excess of 5 percent. No importing STE holds a market share in excess of 10 percent, and only three importers hold market shares above 5 percent. Relatively low market shares lead to the conclusion that concern with the exercise of market power by these entities may be misplaced. If products are differentiated, or if markets are highly segmented, the market power of these entities may be greater. It should be remembered that implementation of domestic policies by small country STEs lacking market power, however, can also alter trade patterns much in the same way that small traders can reduce imports with tariffs or NTBs.

The CWB has received the bulk of attention by researchers examining exporting STEs and several studies find evidence of market power exercised by the CWB in international markets, and that CWB export sales command premiums. Some researchers attribute that entirely to market power, while others conclude that Canada exports higher quality wheat, and so premiums reflect quality differentials.

Importers have argued that that STEs are necessary to maintain countervailing market power in situations where markets are segmented and they face large exporting entities. In addition, exporting and importing STEs can exhibit economies of scale in trade. The institutional arrangements for export subsidies, such as EEP subsidies, have also been a justification for maintaining STEs so that government to government negotiations can establish subsidy levels.
<table>
<thead>
<tr>
<th>Agency (Country)</th>
<th>Commodities</th>
<th>Trade Value ($ millions)</th>
<th>World Market Share (%)**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large Exporters</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canadian Wheat Board</td>
<td>Wheat, Barley</td>
<td>3,213</td>
<td>18.1</td>
</tr>
<tr>
<td>New Zealand Dairy Board (export monopoly under negotiation)</td>
<td>Dairy Products</td>
<td>1,805</td>
<td>6.8</td>
</tr>
<tr>
<td>Australian Wheat Board</td>
<td>Wheat</td>
<td>1,401</td>
<td>9.2</td>
</tr>
<tr>
<td>COFCO (China)**</td>
<td>Corn, Rice, Sugar</td>
<td>1,332</td>
<td>4.9</td>
</tr>
<tr>
<td>Queensland Sugar Corp. (Australia)</td>
<td>Sugar</td>
<td>925</td>
<td>8.2</td>
</tr>
<tr>
<td>New S. Wales Rice Marketing Board (Australia)</td>
<td>Rice</td>
<td>361</td>
<td>5.8</td>
</tr>
<tr>
<td>South African Deciduous Fruit Board</td>
<td>Fruits</td>
<td>286</td>
<td>4.4</td>
</tr>
<tr>
<td>New Zealand Kiwifruit Board</td>
<td>Kiwi</td>
<td>237</td>
<td>38.2</td>
</tr>
<tr>
<td>Soil Products Office (Turkey)</td>
<td>Wheat</td>
<td>194</td>
<td>1.3</td>
</tr>
<tr>
<td>South African Maize Board</td>
<td>Maize</td>
<td>194</td>
<td>2.1</td>
</tr>
<tr>
<td>New Zealand Apple and Pear Marketing Board (revoked 10/2001)</td>
<td>Apples, Pears</td>
<td>192</td>
<td>5.7</td>
</tr>
<tr>
<td>South African Citrus Board</td>
<td>Citrus Fruits</td>
<td>184</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Large Importers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COFCO (China)*</td>
<td>Wheat, Corn, Rice, Oils</td>
<td>2,883</td>
<td>3.1</td>
</tr>
<tr>
<td>Japanese Food Agency</td>
<td>Wheat, Rice, Barley</td>
<td>2,003</td>
<td>8.4</td>
</tr>
<tr>
<td>BULOG (Indonesia)</td>
<td>Wheat, Flour, Sugar</td>
<td>1,335</td>
<td>4.3</td>
</tr>
<tr>
<td>Chinatex (China)</td>
<td>Cotton</td>
<td>758</td>
<td>8.2</td>
</tr>
<tr>
<td>GASC (Egypt)</td>
<td>Wheat</td>
<td>713</td>
<td>4.7</td>
</tr>
<tr>
<td>Japan Tobacco Agency</td>
<td>Tobacco</td>
<td>593</td>
<td>2.8</td>
</tr>
<tr>
<td>Korean Livestock Marketing Board</td>
<td>Beef</td>
<td>432</td>
<td>7.6</td>
</tr>
<tr>
<td>Ministry of Food (Pakistan)</td>
<td>Wheat</td>
<td>378</td>
<td>2.5</td>
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<tr>
<td>CONASUPO (Mexico)</td>
<td>Milk Powder</td>
<td>329</td>
<td>4.7</td>
</tr>
<tr>
<td>Tunisian Grain Board</td>
<td>Wheat, Barley, Maize</td>
<td>227</td>
<td>0.8</td>
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<tr>
<td>National Sugar and Tea Office (Morocco)</td>
<td>Sugar</td>
<td>125</td>
<td>1.1</td>
</tr>
<tr>
<td>Bernas (Malaysia)</td>
<td>Rice</td>
<td>121</td>
<td>2.0</td>
</tr>
</tbody>
</table>

* This table is adapted from Ackerman and Dixit (1999), who report STEs and their import or export commodities and values, typically for 1993-95.
** World market share is export or import value, from Ackerman and Dixit, divided by total world trade value for the commodities managed, from FAOs AGROSTAT database.
*** COFCO (China) both imports and exports agricultural commodities.
Since market conduct may be difficult to assess, contestability has been suggested as a criterion for judging whether the exercise of market power by an STE is truly a relevant concern (Veeman, Fulton, and Larue 1999). Markets are contestable when the possibility of market entry preclude the exercise of market power, even though market share might suggests market power might exist. Veeman, Fulton and Larue use contestability and other criteria to classify state traders into green, amber and red categories, with a higher level of disciplines, largely through increased reporting requirements, proposed for STEs in the red category.

One of innovations with state trading aimed at elimination of power over the domestic market is to require that an STE coexist with private traders. In the case of exporters, producers may then have a choice about whether to use the STE or a private company to market their grain. The loss of an STE in the export market may result in a loss of competition by reducing the number of sellers in some markets.

In some cases, producers question whether or not they are well served by state trading agencies that control a variety of aspects of marketing. A vigorous internal debate continues within Canada concerning whether or not farmers are well served by this institution, and many studies have examined the marketing costs and efficiency of the Canadian Wheat Board (Carter and Loyns 1996; Kraft, Furtan, and Tyrchniewicz 1996; Schmitz, Furtan, Brooks, and Gray 1997).

The reform of STEs may difficult for developing countries whose infrastructure is unable to support a competitive private sector fulfilling the many roles of importing and distributing agricultural and food products. Tangermann and Josling (1999, pg. 25) note that “For some time to come, parastatals may therefore still have a place in developing country food trade and marketing in order to provide stability, administer nutritional programs and prevent the abuse of market power by private firms. This is another case where ‘special and differential treatment’ may play an important role.”

Josling (1998) suggests that state trading be considered as a part of broader WTO discussions on competition policy, and applying goals to ensure that governments operate in contestable markets may be the appropriate long term goal for the trading system. However, Abbott (1998) notes STEs have traditionally been exempted from competition policy discipline. For non-agricultural commodities the trade-off between market power and competition with economies of scale has been resolved by permitting competition to be compromised when the public interest is served. That justification suggests competition policy, even if further developed by the WTO, is unlikely to be rigorously applied to agricultural STEs.

Transparency

Lack of transparency is the most often voiced concern with state trading enterprises. If the public agency handles imports or exports, it can either disguise the level of protection, and so avoid tariff reduction commitments, or it can subsidize exports in a manner difficult to measure. While disguised protection generates rents equivalent to tariff revenue, export subsidies either require government budgetary support or some form of cross-subsidization or price
discrimination to finance the subsidy. The problem is a more general one as lack of transparency confounds the investigation or discipline of export subsidies in general, as well as other practices providing implicit subsidies, such as officially supported export credit. One solution to this problem is elimination of the institution in favor of more transparent alternatives. A more transparent public institution which does not physically handle grain, but which makes public information on terms of terms of trade, could improve transparency. An example is the Commodity Credit Corporation, which reports transaction information. However, widespread use of STEs makes their elimination unlikely in the current negotiations. Abandoning STEs in favor of private traders does not insure an increase in transparency as private traders are not required to disclose information on cross subsidization or price discrimination, and it is widely recognized that private traders may engage in these practices.

An alternative solution is that notifications to WTO require that these institutions give sufficient information to insure that commitments are met. The WTO has recently (during the drafting of this paper) implemented revised notification requirements that require a substantial degree of notification (WTO 2001b), including description of the operation of the STEs and annual data. Data required includes yearly average import price, representative domestic sales and procurement prices, mark ups, export prices, as well as volume information. This data should assist in the detection of potentially disguised export subsidies.

Consideration of more detailed reporting requirements need to balance an STE’s need to compete with the private sector, and the concern of other agricultural exporters that STEs may engage in price discrimination beyond that which is possible by the private trade, dump or engage in cross-subsidization of commodities. Requiring STEs to report, on a regular basis, the transactions level data necessary to detect these practices would greatly exceed the level of notification currently in use in other areas. STEs compete with private firms, and, depending on the commodity, they may also compete with other STEs. As Veeman, Fulton and Larue note “It would not be in the spirit of GATT/WTO to impose higher reporting requirements on a STE than those that are customarily applicable to its competitors in any market. Such a requirement would place the STE at a competitive disadvantage” (1999, pg.31).

Perhaps a balance between the needs of STE’s to protect market information and concern over their ability to circumvent their GATT commitments is met through a nation’s ability to press a complaint through the WTO dispute resolution system. A complaint is most likely to arise from observations on the part of private trade, who are informed observers of the market, and who suspect that commitments are being violated. The investigating process then requests data needed to evaluate the complaint.

**Price Discrimination**

One of the mechanisms by which STEs may distort markets is to price discriminate, or to sell exports to different countries at different prices. This practice allows subsidization of sales to lower priced markets, in principle without net government budgetary support, as well as the exercise of market power in a manner that increases producer income, and raises national welfare of the exporter. This is an example where the institutional innovation, state trading, resolves the conflict between producer support and the exercise of market power (Abbott and Young 2000). Pooling is another institutional innovation that is argued to enable price discrimination.
Pooling

One of the most hotly debated issues related to STE behavior is whether or not “pooling,” a common practice of some of the large grain trading STEs, enables export subsidies. Pooling occurs when a state trader purchases commodities from farmer an undetermined price and returns net revenue to producers at a later time, after sales have occurred, allowing pooling of receipts to all farmers across multiple sales. With pooling cross-subsidization can occur overtime and across commodities. When state traders handle multiple commodities, and especially when state traders control joint products, as in the case of dairy, prices can be altered for each product to maximize net profit of the board, or achieve whatever objective the STE is pursuing. It is argued that pooling and cross subsidization enable greater “discretionary pricing” by state traders than is possible by private firms.

Much of the work on agricultural export subsidies has examined price discrimination because that is how export subsidies have been implemented in practice and these issues have already been discussed in Section 3. In that work, price pooling and other forms of cross-subsidization have been investigated as vehicles for facilitating discrimination. It is alleged that STEs utilize price discrimination and cross subsidization to implicitly subsidize exports. Work on export subsidization by the CWB often focuses on these practices. Whether the privileged status of an STE more easily permits implicit subsidies is another issue receiving attention.

Pooling and price discrimination need to be treated as somewhat independent problems, however. It is possible to price discriminate in the absence of pooling, and pooling does not automatically imply price discrimination. Moreover, there is evidence that private firms engage in discriminatory pricing. Pooling is principally a vehicle intended to help farmers cope with risk. Other institutions exist in different countries as alternative mechanisms for coping with risk, including domestic support policies, future markets and insurance schemes in the United States. Even under the CWB, alternatives to price pooling are emerging (such as the fixed-price contract) for farmers who prefer some of these alternatives or desire to bear more of the risk in the market.

Importer Issues

Whatever is done in the WTO to deal with STEs will concern both importers and exporters. Specific issues focused mostly on importing STE behavior include whether or not STEs allocate market share according to commercial considerations, whether they can avoid WTO commitments and achieve higher levels of protection, and whether specific institutional arrangements, such as TRQs administered by STEs, can exacerbate these concerns.

If STEs allocate market share based on political considerations, they do not behave according to commercial practices and violate nondiscrimination (MFN) requirements of the WTO. Weak evidence suggests there may be some difference in the determination of market share, with private trade regimes more responsive to market forces than state trading agencies. Lack of transparency in their operations can make this practice difficult to detect.

Research has also found that agricultural policy objectives often outlive state trading enterprises. That is, protection levels are often more dependent on world price than on the
institutions through which protection is achieved (Abbott and Young 1999). This is a consequence of the stabilization objective, which persists as an important goal. No significant difference in protection levels have been found, either between countries where state trading is practiced and where it is not, and more importantly before and after reforms of this institution. It is probably more effective to regulate behaviors in international markets than to eliminate particular institutions.

Some new state trading agencies emerged following the Uruguay Round Agreement to implement TRQs. A general finding is that since TRQs can act like quotas and so generate rents, administration mechanisms often seek to allocate those rents to domestic producer groups in one fashion or another. Once again, domestic objectives dominate. Since TRQs can act like quotas, they can limit contestability in markets.

TRQ administration has been seen as a vehicle for implementing disguised protection. But a survey of the administration of TRQs in developing countries (Abbott and Morse 2000) found that when STEs administer TRQs, underfill has occurred substantially less often than under other arrangements, and overfill — imports in excess of minimum access commitments — is a common outcome. Abbott and Morse (1999) also argue that an endogenous quota regime may apply, and may explain this outcome. The STE determines imports based on national needs (demand), and has set minimum access commitments well below likely needs. Imports are often in excess of the minimum access commitment, and yet higher tariffs are not applied. It is also common for STEs administering quotas to coexist with private traders, with the STE managing low tariff imports.

Negotiating Positions

Within the context of WTO negotiations, the reform or elimination of state trading agencies has largely been a U.S. concern. The current U.S. position on reform of state trading agencies includes the following actions:

- End exclusive import or export rights to ensure private sector competition in markets controlled by single desk traders;
- Establish WTO requirements for single desk exporters to notifying acquisition costs, export pricing and other sales information; and to
- Eliminate the use of government funds or guarantees to support or ensure the financial viability of STEs.

Japan argues that exporting STEs have not been disciplined to the same extent as importing STEs and advocates for:

- Quarterly notification of the amount and price of exports, the procurement price and so forth;
- Prohibition of financial assistance from the government; and
- A contribution to the stabilization of the international market through, for example, obligating minimum exports and stockholding in preparation for unforeseen circumstances.

The EU position argues that cross-subsidization and price pooling, and other unspecified unfair trade practices be abolished, that STEs be subject to mandatory notification with respect to
acquisition costs and export pricing, and that disciplines to limit the anti-competitive effect of STEs be enacted. The EU does not call for the elimination of STEs.

MERCOSUR, Chile and Columbia also called for disciplining the activities of governmental and non-governmental enterprises and marketing boards that benefit from monopoly import or export rights.

Canada has argued in an OECD paper that contestability is the appropriate criterion for determining whether an STE has market power and so can distort trade. Since they believe on the basis of this criterion the CWB does not have significant market power, and so does not distort trade, they argue against the need for disciplining this institution.

**Options for Reform and Conclusions**

At this point the position papers advanced for negotiations reflect a desire to discipline, but not to eliminate state trading enterprises. Disciplines that are likely to be discussed in negotiations include increased notification requirements on the part of STEs and efforts to reduce or prevent their exercise of market power. To date, most proposals have lacked specific detail on notification requirements or market power disciplines, making it impossible to assess the actual ramifications of these disciplines in practice.

STEs are an institution in many countries that are charged with achieving a broad set of domestic policy goals. To the extent that domestic constituencies support these goals there can be high political costs associated with national governments being forced to abandon these institutions. In some observed cases the outcome of the politically costly process of reform has been the implementation of new methods to achieve the same domestic policy goals. In some other cases, private monopolies have entered the market so that concerns with market power, transparency and price discrimination have not been alleviated. If this occurs, any rents from market power have been captured by private firms, and are not passed on to producers.

The difficulties in effectively disciplining state trading are evident by the lack of concrete proposals from the United States government who has expressed concern over this institution since the conclusion of the Uruguay Round negotiations, in 1994. State trading plays an important role in implementing domestic policy goals for many countries; state trading is not likely to have a large impact on international markets; and reform is not likely to result in greater competition. Negotiations should focus on restricting government support and evaluation of if mechanisms currently embodied in the dispute resolution system are adequate for investigating possible violations by STEs of their countries GATT commitments. Recommendations for negotiations are summarized in Box 3.

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3 In the Canadian case support exists on the part of some Canadian producers for elimination of the Canadian Wheat Board.
Box 3: State Trading Options for Reform

- Consider market power issues in the context of broader competition policy;
- Evaluate if the current WTO dispute resolution system is adequate to investigate violation of commitments by STEs;
- If further disciplines are enacted consider differential treatment for developing countries.

6. FOOD AID

Summary of Current Situation

Food aid is used to alleviate hunger due to the occurrence of natural disasters or political unrest. Food aid is also used in a wide variety of development projects such as food-for-work in agricultural projects, and human resource projects including school feeding, health and nutrition programs. Food aid programs began in the 1950s due to the simultaneous existence of agricultural surpluses in the United States and Canada and both sporadic and systemic food shortages in many developing countries. Since the 1950s other countries have become important food aid donors, and donors differ in the importance of humanitarian, producer support and political objectives in their food aid programs.

A mix of national and multilateral agencies provide food aid. The United States continues to be the largest donor of food aid, and in the 1990s provided 40 to 60 percent of total donations. Multilateral agencies delivered 28 to 42 percent of food aid since 1994. Almost all multilateral food aid is delivered through the United Nations World Food Programme (WFP 2000). Cereal food aid averaged less than 0.5 percent of world cereal production, or around 9 percent of cereal imports by low-income food deficit countries (WFP 2000). Actual deliveries of food aid are illustrated in Figure 2 and exhibit a great deal of variability. Food aid was nearly 13 million metric tons (mmt) in 1994, declined to 7.2 mmt in 1996, and doubled to 14.5 mmt in 1999. While an increasing variety of foods are used as food aid, cereals continue to account for around 87 percent of total food aid.

Food aid has become a concern for WTO negotiations because food aid levels increase in periods of surplus, and decline when there are shortages in world markets. Also, food aid can be used as an export subsidy. Tying food aid receipts to commercial imports would be a blatant export subsidy, and was forbidden in the URRAA. The extent to which food aid in practice may be used as an export subsidy is more subtle, and is related to the tendency for food aid to vary with surpluses.
Figure 2. Food Aid Shipments and Minimum Commitments (million metric tons)

Source: FAO
Note: FAO and WFP data on total food aid shipments varies to a degree. FAO data is used for this graph as a longer time period was available.

Figure 3. Wheat Prices and Wheat Food Aid Shipments
The importance of agricultural surpluses in food aid programs has presented a problem for both donors and recipients. As donors are largely agricultural exporters, their concern has been to use surpluses as food aid and to deliver food aid in a manner that would minimize disruption to world markets. In 1954, the Consultative Subcommittee of Surplus Disposal of the U.N. Food and Agriculture Organization was charged with developing protocols for food aid with the goal of achieving minimal disruption to commercial agricultural trade.

For recipients, the importance of surplus disposal in donor food aid programs has resulted in less food aid during times of global food shortage when prices are high and stocks are low (Figure 3). In short, the delivery of food aid has been, and to some extent continues to be, greatly influenced by availability. The first food aid convention was negotiated in 1967 in an attempt to better address recipient needs. The Food Aid Convention (FAC) is a forum in which donors commit to provide a minimum amount of food aid for a specified period of time, and the 1967 convention guaranteed minimum donor commitments of 4.5 mmt of food aid. This minimum commitment rose to 7.5 mmt in 1986, although actual donations have exceeded minimum commitments in many years. In 1999, donors to the FAC decreased their pledged commitment to 4.8 mmt, the lowest level since the initiation of the program 33 years earlier (Figure 2). It should be borne in mind that actual donations were nearly three times commitments in this year when there were substantial surpluses. Current donor obligations under the FAC are in terms of tons of food, not dollars, which should assist in maintaining minimum food aid levels regardless of cereal prices in the future. However, in recent years the United States has continued its historical pattern of increasing its food aid donations when wheat and other cereal stocks are high.

The Economic Research Service (Shapouri 2001) estimates for 1997-2000 that a substantial gap existed between food aid deliveries and food levels required to maintain the level of consumption that occurred over the past three years (the status quo) or the level of food required to meet nutritional needs. Figure 4 compares estimated needs with food aid deliveries and indicates that food aid has fallen short of estimated needs. Looking to the future, the ERS (1999) estimates that food aid required to maintain per capita consumption at 1996-98 levels in 67 developing countries is 13 mmt, while the food gap to meet minimum nutritional requirements is estimated to be 15mmt. In meetings of the Agriculture Committee of the WTO, representatives of the FAO have repeatedly emphasized that the food security of least-developed and net food-importing countries remains precarious. Other analysts have concluded that developing countries have or will experience a decline in food security (IFPRI 1998; WTO 1999a; WTO 1999b).

Another factor impinging on the question of the adequacy of food aid is that emergency aid more than doubled between 1990 and 1999, growing from 19 percent to 43 percent of total food donations. The increase in complex and long lasting emergencies means that fewer tons of food aid is available for food aid to support development objectives.
Major Issues for Food Aid

Food aid issues can, in general terms, be characterized by the tension that exists between fulfillment of the humanitarian goals held by donors and their political and (most relevant to our concerns) producer support objectives. Further disciplines need to be cognizant of the issues involved in providing adequate food aid while restricting aid that serves solely political goals.

Achievement of the humanitarian and development goals of food aid requires evaluation of the following questions:

- How effective are current institutions and programs in anticipating and alleviating hunger caused by natural disasters and political strife?
- Under what conditions does food aid promote economic development in general, and development of the agricultural sector in particular?
- What level of food aid is sufficient to meet needs and how can it be effectively targeted?
- What impact have reforms under the Uruguay Round Agreement had on the food security of developing countries?

Achievement of the producer support objective requires an evaluation of the impact of food aid on international markets:

- Does food aid create additional demand for agricultural commodities? Additionality exists at a point in time if food aid expands demand by reaching consumers who would not have been in the market. Additionality can also exist over time, as food aid increases the economic wealth of developing countries and simulates imports in the future. Additionality is important, as it is one determinant of the impact of food aid on world prices.
- What is the impact of food aid on the market share of agricultural exporters in recipient nations? How effective is the market development component of U.S. food aid programs?
What is the impact of food aid on U.S. producer incomes, and how effective is it compared to other producer support policies?

A vast literature has addressed these questions and few clear conclusions have emerged. Much research has been extremely critical of past food aid programs, and donor and multilateral agencies have invested heavily in improvement of their programs. Widespread disagreement exists over how effective aid programs are despite a desire on the part of governments – both donors and recipients – to end hunger and promote development.

Food Aid in the Uruguay Round Agreement

The URA addresses food aid in the Agreement on Agriculture and in a Ministerial Decision. Article 10.4 of the URAA states that (1) food aid shall not be tied to commercial exports of agricultural products to recipient countries; (2) that food aid must be carried out in accordance with the FAO’s “Principles of Surplus Disposal and Consultative Obligations,” and (3) that food aid be provided fully in grant form or meet the terms for concessional food aid as provided in Article 4 of the 1986 Food Aid Convention. These rules incorporate the use of protocols and multilateral institutions that developed over a long period of time.

Food aid was one of the concerns held by Least-Developed and Net Food-Importing countries who anticipated difficulties in importing adequate supplies of food on reasonable terms during the implementation of Uruguay Round reforms. These concerns were addressed in a ministerial decision4 (subsequently referred to as the NFIDC Decision) that was adopted as a part of the URA. The NFIDC Decision committed the WTO to:

• Review the level of food aid established by the Committee on Food Aid under the Food Aid Convention 1986 and to initiate negotiations in the appropriate forum to establish a level of food aid commitments sufficient to meet the legitimate needs of developing countries during the reform programme;
• Adopt guidelines to ensure that an increasing percentage of basic foodstuffs is provided to least-developed and net-food importing developing countries fully in grant form and/or on appropriate concessional terms in line with Article IV of the Food Aid Convention 1986;
• To give full consideration in the context of their aid programmes to requests for the provision of technical and financial assistance to least-developed and net food-importing countries to improve their agricultural productivity and infrastructure.

An obvious difficulty presented by the NFIDC Decision is the ambiguity of the language used making it difficult for all parties to agree whether or not these commitments have been met. The WTO did review food aid levels and did initiate negotiations under the Food Aid Convention, resulting in the 1999 FAC Agreement. The result of the convention may be considered unsatisfactory by food aid recipients as the level of commitment by donors declined. For that reason and many others, statements by many developing countries indicate that they do not consider that commitments made by the WTO have been met. Eleven developing countries state in their position paper 4 Despite the promises, there has been no political will to activate the Marrakesh Decision in order to address the problems of net-food-importing developing countries

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4 Ministerial Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least Developed and Net Food Importing Developing Countries
(NFIDC). This had been the avenue developing countries had expected to receive compensation for the negative effects of liberalization” (WTO 2000b). This failure is one reason for reluctance on the part of many developing countries to negotiate for further reforms (Bridges Weekly Trade Digest 2000a; Bridges Weekly Trade Digest 2000b; WTO 2001a).

**Negotiating Positions**

While food security and agricultural development are prominent concerns in position papers, food aid is specifically addressed by only a few countries and trading blocs. Proposals reflect the concern of exporting nations that food aid may be used by exporting nations to circumvent their export subsidy restrictions.

The European Union’s position asks that in conjunction with export subsidy disciplines, that other implicit subsidies such as food aid also be disciplined. It includes these specific proposals concerning food aid (WTO 2000c):

- Food aid should be given only in grant form and only to least developed and net food importing developing countries;
- A code of conduct covering food aid operations be established;
- The type of operations to be considered as food aid be clearly defined;
- Notifications be mandatory and *ex ante* not *ex poste*; and
- A list of recipients is established and criteria for emergency situations are developed.

The United States has not advanced specific proposals for food aid (WTO 2000d) beyond:

- Continuing current disciplines in Article 10.4;
- Renewing donor commitment to food aid; and
- Strengthening WTO rules on export restrictions.\(^5\)

India discusses food aid within the context of food security (WTO 2001c) and:

- Supports criteria on food aid to ensure that food aid is distinct from export subsidies; and
- States that food aid should be offered regardless of the world market price.

Egypt proposes (WTO 2001d) that:

- The NFIDC Decision be reviewed and strengthened;
- A fund be created for NFIDCs and LDCs, which would obtain a rebate on their food import bills after they have purchased their requirements on the open market at unsubsidized prices. The Fund would be financed from a number of sources, prominent amongst which would be international financial organizations, specialized UN agencies, developed country donors, and major exporters.\(^6\)

A group of developing countries including the MERCOSUR countries (Argentina, Brazil, Paraguay, and Uruguay), and Chile, Bolivia and Costa Rica (WTO 2000e) propose that food aid to NFIDCs should be given without commercial conditions and fully in grant form. Finally, the

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\(^5\) This statement is taken verbatim from the U.S. position and its meaning is unclear. However, it is possible that it means the U.S. wants to discipline export taxes.

\(^6\) See Trueblood and Shapouri for a discussion of an import insurance program that could provide a replacement for food aid programs.
only point on food aid made by the CAIRNS (WTO 2000f) group is that additional disciplines are needed on “non-commercial transactions,” and export credits and credit guarantees. Some donors and recipients share the desire for food aid to be distinct from export subsidies and market development programs and that it be given as aid in grant form. Other position papers have stated that that as recipient country food aid needs and circumstances are diverse that limits on the form of food aid may not serve a useful purpose.

The EU proposal seeks to clarify when transactions are bone fide food aid and when they constitute export subsidies. The difficulty is that many transactions do a bit of both and the danger is that limiting export subsidies may limit donations of food that could be useful to NFIDCs. Given the host of government agencies, multilateral agencies and private voluntary agencies involved it will be difficult to conduct negotiations within the structure of the WTO.

Options for Reform

Criteria for Food Aid and List of Recipients

Proposals from the EU and some developing countries advocate for criteria to define food aid. This proposal is likely motivated by past and potential abuse of food aid by donors. In addition to its humanitarian goals, food aid has been used by many donors to achieve political and commercial objectives (Ruttan 1996; Barrett 1999; Christensen 1999). Particularly in the United States, food aid has been used as a mechanism to dispose of excessive commodity stocks and as a tool for market development. Criteria for food aid need to address the types of transaction (terms and conditions) that are considered food aid and criteria for selecting recipients.

One criteria for food aid advanced by some countries and blocs is food aid should be given solely in grant form. The NFIDC Decision moves in this direction, but is limited to stating that an increasing percent of food aid should be on grant terms (or on a concessional basis as in the FAC Article 4). Under the 1999 Food Aid Convention, donors agreed that all food aid to least-developed countries through the FAC will be in the form of grants. With the exception of the United States, all donors through the Food Aid Convention currently provide 100 percent of their food aid on grant terms. For the United States this figure varied between 83 percent and 93 percent of U.S. food aid between 1995/96 and 1998/99 (WTO 1999a; WTO 2000g).

The most prominent food aid program that operates on a concessional basis, (subsidized credit) is the U.S. PL 480 Title I Program, which has a stated goal of promoting U.S. agricultural exports. Negotiators should consider moving Title I from food aid to export credits. As mentioned in the discussion on export credits, those programs are also mandated to provide terms favorable for least-developed and net food-importing countries. Negotiating PL 480 Title I in the context of export credit negotiations may meet both donor and recipient country desire to eliminate unclear distinctions between some food aid programs and export credit programs.

As criteria for food aid has been a troublesome issue in the past (FAO 1992) it may be useful for negotiations to categorize transactions that are clearly food aid and those where disagreement exists. The Consultative Committee on Surplus Disposal (CSSD) has operated since 1954 under the Food and Agriculture Organization of the United Nations. This committee
has a comprehensive list of transactions that could serve as a basis for negotiations on the types of transactions that constitute food aid. Transactions that are widely agreed upon as constituting food aid could be unrestricted and free from challenge. Another category of food aid could include transactions that are not uniformly considered food aid, such as programs with overriding market development objectives, and these could be subject to tighter consultation and notification requirements, and to overall limitations.

Some protocols already exist to ensure that a greater percentage of food aid is directed towards countries with the greatest need. Under the 1999 FAC, donors agree to give priority to least-developed and lower-income developing countries, and other eligible recipients are lower middle income developing countries and all others on the WTO list of NFIDCs when they are experiencing food emergencies or when food aid operations are targeted at vulnerable groups. Further WTO criteria for recipients would need to involve negotiations between donors and recipients within the WTO, the World Food Program, the FAO, the Food Aid Convention and a large number of non-governmental organizations.

A tighter definition of food aid is not likely to make a significant difference in the degree to which food aid disrupts world markets (unless it ensures additionality). However, if all donors abided by common definitions of food aid, it may be easier for agricultural exporters to tolerate a small price-depressing effect associated with food aid. If criteria are successfully used to effectively target food aid to countries in need, then countries receiving food aid may benefit from a more effective use of available supplies.

**Notification of Food Aid**

The EU wants to establish stronger notification requirements for food aid. Notification requirements are important in many areas covered by the URAA. For example, notification is required by countries who maintain state trading enterprises, or who administer tariff-rate quotas for imports. Notification and consultation requirements for food aid occur quarterly and are useful in increasing knowledge of other countries actual and proposed actions that may affect the market. In turn, this knowledge is useful in working through conflict during its initial stages.

Since 1954, the Consultative Subcommittee on Surplus Disposal has been the primary international vehicle for notification and consultation over food aid and concessional transactions (FAO 1992). Protocols govern what transactions must be notified, some on an ex ante and others on an ex post basis. Over the last ten years an average of 62 percent of food aid shipments have been notified through the CSSD. One course of action would be for the WTO to use the expertise embedded in this organization, adjust notification requirements, and bring this existing institution within the purview of the WTO. Alternatively, the WTO could simply make more widely available the information reported to CSSD.

**Conclusions**

The multiple objectives held for food aid by many donors means that food aid may at times be used as an export subsidy to reduce unwanted surpluses. The most explicit form this could take would be to tie donation of food to a requirement that the recipient will import agricultural commodities from the donor. The URAA prohibited this. However, the Agreement did not discipline more implicit subsidies, disciplines that are currently being sought by the European Union. Adequate (higher than current levels) food aid guaranteed in advance by donors
and delivered through the World Food Programme would solve some problems. For recipients this would further weaken the link between surplus production and food aid, and result in food aid being available in times of shortage when it is most needed. For countries concerned with the impact of food aid on world markets it would divorce food aid from sporadic surplus disposal. The problem with this solution is that donor governments, particularly the United States, rely on food aid achieving both producer support and humanitarian objectives in order to gain the political support necessary to sustain the cost of food aid programs. While food aid’s current situation is not ideal, insisting on the ideal solution could result in further reductions of the amount of food aid supplied by the United States. U.S. support for foreign aid has declined, as indicated by a decrease in U.S. official development assistance from 0.20 to 0.09 percent of GNP between 1992 and 1997 (OECD 2001). A diversity of food aid programs meeting multiple objectives appears to be necessary to sustain current levels of food aid. This means that the WTO should proceed cautiously in attempting to devise further food aid disciplines.

This brings up the question of the role of the WTO in food aid issues. First and foremost, the goal of the WTO is to reduce distortions to trade. The danger in negotiating food aid issues in the context of the WTO is that other and more pressing questions will remain unspoken and unanswered. These question include whether or not the level of food aid guaranteed through the Food Aid Convention is adequate, how to target aid to meet the needs and concerns of recipients as well as donors, and how to use food aid effectively in the development process. The expertise that has developed on these questions largely resides in other institutions, such as the World Food Programme, individual country development and aid agencies, and private voluntary organizations.

In summary, there are two immediate difficulties facing the discussion of food aid in the WTO. First, disciplines for food aid need to be discussed in a venue that recognizes the tradeoffs between the adequacy of food and the need for disciplines on the export subsidy element of food aid. Secondly, food aid issues need to be discussed in a venue where food aid recipients share power over the decisions. Neither the WTO, nor existing multilateral institutions concerned with food aid, appear to fulfill both requirements.

It is unlikely that exiting institutions will be changed to accommodate these concerns before negotiations begin in earnest. Given that limitation, WTO negotiations should err on the side of meeting the interests of recipient nations. Governments receiving of food aid do, at times, have urgent concerns in meeting the nutritional needs of their people, and these needs are more pressing than donor country concerns over potential small impacts on market share and prices. Recommendations for negotiations are summarized in Box 4.

**Box 4: Food Aid Options for Reform**
- Identify food aid transactions that are not widely accepted as food aid and subject those to stricter notification and consultation requirements and to overall limits;
- Improve notification protocols under the CSSD and make this information easily accessible; and
- Exercise caution in new disciplines for food aid that could result in a reduction of overall food aid availability.
7. CONCLUSIONS

Examination of country position papers submitted to the WTO to date indicate a high level of commitment to reduce the level of export subsidies in all forms, and to regulate institutions through which implicit subsidies could be offered. Quantitatively, EU export subsidies are large enough to influence world prices and so distort trade. The other implicit subsidies examined here are small in magnitude and are unlikely to be currently having significant distorting effects on trade.

Theory tells us that direct export subsidies are among the most expensive ways to support producers, and have few redeeming benefits. Relative to other policies they are most likely to capture market share from competitors, and least likely to expand worldwide demand. In theory, targeted export subsidies through price discrimination can benefit both producers and competing exporters. All practical export subsidy programs rely to a substantial degree on export targeting.

Most common complex institutional arrangements (like export subsidies) address multiple policy objectives. These institutions have evolved to meet numerous and conflicting objectives – including resolving the tradeoff between the exercise of market power and supporting producers. Several of the institutional mechanisms that can result in export subsidies are also designed to achieve multiple social and humanitarian goals. For example, food aid not only is intended to dispose of surpluses, but also alleviate hunger and malnutrition in poor countries, and has also been used as a tool to develop and expand export markets. Credit programs can be an essential tool in doing business in international markets and credit can be required when importing countries face financial crises and hence liquidity constraints. Credit programs are also used by governments to encourage domestic firms to enter international markets.

Export credits and food aid best illustrate the need to be careful in the development of WTO rules disciplining implicit export subsidies. For example, Australia proposes limiting term lengths on loans to discipline adequately but does not eliminate the subsidy elements of the export credit program. If further disciplines requiring interest rates on loans to fully reflect country risk premiums are enacted, the likely consequence of these programs is that benefits entirely accrue to international banks instead of poor developing countries, or that loans are not forthcoming and food consumption declines.

While export credit programs may be a device to compete for market share, when they relieve liquidity constraints, they are likely to bring additional demand for commodities to world markets. Similarly, some forms of food aid can increase demand by providing food that would not otherwise be consumed. Whenever an implicit subsidization program brings additional demand, there is the potential for all exporters to benefit from the market impact. Export credit and food aid programs now have a small impact on world markets, are likely to create some additional demand, and meet various humanitarian and social goals. Efforts to discipline them need to take this into account.
If food aid is disciplined in a manner to prevent its use as a surplus disposal tool, there is a risk that food aid levels will fall to even lower magnitudes, such as was evident in years of shortage like 1995/96. In an ideal world, it would be desirable for donors to commit to substantial levels of food aid regardless of market conditions, however, limiting the disposal of surpluses could have a negative effect on hungry populations in some years. In an ideal world it would also be desirable for WTO to develop rules that distinguish between food aid programs that generate additional demand and programs that capture market share. However, in reality this is difficult to do, and many programs achieve a bit of both objectives.

It is also difficult to write rules that identify and measure export subsidies. This is especially true for joint differentiated products, where defining a world price to compare to a domestic price is difficult. The problem of writing rules is similar to the problem faced in competition policy, where rules are based on observed market structure rather than on conduct and performance, where it is extremely difficult to ascertain the use of market power. The discussion of export subsidy issues indicates that difficulties exist in the practical application of WTO discipline. The WTO ruling on Canadian dairy policy indicates that consumer-financed export subsidies are unacceptable. Further questions exist over the potential for cross-subsidization between commodities. This could occur when STEs, marketing boards, or private firm’s pool returns for a variety of products, and raises additional questions over the definition of a product. As private firms are likely to also engage in cross-subsidization, it is important that the WTO apply the same discipline to public entities and private firms.

It has been observed that when reforms are forced on state trading agencies, that many times institutional innovations will occur so that the domestic government can continue to achieve the same domestic policy goals using different institutional forms. This is a problem with disciplining an institutional form rather than a behavior, and may make effective action within the WTO difficult.

General subsidies are largely an EU problem, and their reform will require reform of domestic support measures, as well. The EU has a history of reform of its agricultural policy and has indicated further willingness to reduce export subsidies. Historically, the EU has financed their domestic support to some extent by taxing consumers as well as through the treasury. Political scientists have recognized the political difficulty of 15 countries agreeing on budgetary allocations to support farmers, especially when collecting tax revenue on an EU basis is difficult.

The reduction of export subsidies in the context of EU policy will require a much broader reform of agricultural policy. Further reform will require changing either the extent of support to agriculture or the means by which that support is achieved. Past reform indicates that this is what has been occurring, and it is likely that both reductions in support and changes in the means by which it is financed will continue.

It may be the case that the EU is willing to trade-off their relative large general subsidies for the much smaller implicit subsidies in the trade practices of its competitors in food aid, STEs and export credits. If the EU is looking to the WTO to assist in disciplining its own export subsidies in the process of reforming its agricultural policy, this trade-off allows them to achieve this discipline while at the same time gaining concessions from their competitors.
It must be born in mind that the overriding objective of export subsidies is the achievement of domestic policy goals. This is also true of STEs who exist to achieve domestic goals beyond the exercise of market power in international trade. Domestic support policies, such as U.S. loan deficiency payments and emergency payments to farmers, address these same objectives in a different manner. Some economists have labeled these polices as export subsidies due to their effect on international markets. If trade-offs in the WTO must be made on comparably valued concessions, then we need to look at trading off EU export subsidies against US programs to support farm income. Progress in negotiations will be facilitated by trade-offs between market access, domestic support and export subsidy issues instead of being confined to trade-offs within a particular category.

Further progress within the WTO is likely to be slow since existing institutions reflect differing circumstances and preferences across countries, and these institutions respond slowly to changes in the external environment. Existing institutions also reflect trade-offs in achieving domestic policy objectives, and as limitations are imposed policymakers will innovate to continue to achieve those objectives in the face of WTO limitations. The challenge faced by economists in measuring distortions to world markets is increased enormously by the variety and complexity of institutions that exist. An analysis of how they work in practice, and recognition that some of these institutions achieve important domestic political or humanitarian goals while having fairly small impacts on world markets, will be more useful to the negotiating process than advancing a rigid doctrine advocating for a particular institutional form, or focusing only on trade distortions.
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