

UC Berkeley

CUDARE Working Papers

Title

Alternative strategies for trade policy reform

Permalink

<https://escholarship.org/uc/item/2vr4399k>

Authors

Rausser, Gordon C.
Wright, Brian D

Publication Date

1987-04-01

University of California, Berkeley.
Dept. of agricultural and
resource economics/
Working Paper, 441

Working Paper No. 441

ALTERNATIVE STRATEGIES FOR TRADE POLICY REFORM

Gordon C. Rausser and Brian D. Wright

DEPARTMENT OF
AGRICULTURAL ECONOMICS
UNIVERSITY OF CALIFORNIA

MAY 29 1987

California Agricultural Experiment Station
Giannini Foundation of Agricultural Economics

April, 1987

ALTERNATIVE STRATEGIES FOR TRADE POLICY REFORM*

Gordon C. Rausser and Brian D. Wright
Department of Agricultural and Resource Economics
University of California, Berkeley

*Paper prepared for the 1987 Benjamin E. Lippincott Symposium on Policy
Coordination in World Agriculture, University of Minnesota, April 22-24, 1987.

ALTERNATIVE STRATEGIES FOR TRADE POLICY REFORM

1. Introduction

The good news about agriculture is that all the major exporters are in trouble. The current state of the world market for major agricultural commodities is so critical that it offers some real incentive for coordinated long-run reform. Domestic budget pressures are adding unusually strong motivation for the major players--the United States and the European Community (EC). By reducing loan rates, the United States has imposed great pressure on foreign agricultural producers heavily dependent on agricultural exports.

The responses thus far include elements that provide opportunities rare in the international scene. The EC has reluctantly agreed to consider including agriculture, including domestic policies as well as border distortions, in the Uruguay Round of the General Agreement on Tariffs and Trade (GATT). During the Organization for Economic and Cooperative Development (OECD) ministerial meetings in Paris in May and the Venice economic summit in June of this year, there will be serious efforts to move in the direction of coordinated moves in agricultural policy reforms throughout the developed world. Some observers even hope that this effort will assume the kind of intensity that occurred with the G-5 (later G-7) coordinated actions on monetary and financial affairs. Canada and Australia have presented two fairly similar proposals for constructive, coordinated international agricultural policy reforms. Their positions suggest new willingness to modify their protectionist import policies in coming negotiations.

These opportunities have come at great cost, for the recent U. S. policy of dumping farm products has trashed the markets of some of her most important

and, thus far, loyal allies. If their perplexity, anger, and resentment continue to be ignored in this country, international bonds vital to U. S. national security may be bent or even broken.

In the past, opportunities for international agricultural reform have been squandered in ad hoc solutions overly responsive to the shortsighted concerns of domestic producers. Bad agreements will come back to haunt us. Merely removing those waivers and other licenses to violate the spirit of GATT that have been obtained in past negotiations would be a major achievement of great overall benefit to the United States. At the least, we must avoid adding a new set of distortions that will make future reform even more difficult.

Instead of repeating past mistakes, we can learn from them in responding to the promising developments arising from the current distress. In this paper we first focus on the magnitude of global distortions in agriculture to justify the view that the problem is indeed serious. We consider current institutions for reforming world agriculture, in particular GATT, in the context of the strategies that have been advanced by various individual countries for agricultural trade policy reform. Then we offer some suggestions for operationalizing coordinated reform of internal and external agricultural policies. The concept of Producer Incentive Equivalent (PIE) is proposed as a means of measuring current market distortions and coordinating multilateral market liberalization. We also sketch the type of compensation scheme that would advance the cause of liberalization without introducing additional distortions of its own.

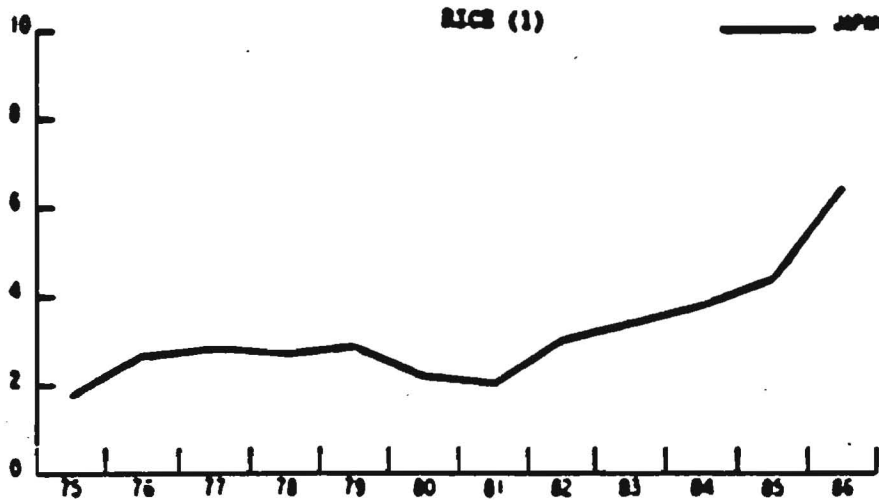
2. Global Distortions in Agriculture

Since the rapid expansion of international agricultural trade that occurred in the 1970s, the links between domestic agricultural policies and world markets have become very important for market participants. In the markets for temperate commodities of the kind produced in the United States, pricing interventions are pervasive. The means include public acquisition or subsidization of stocks; direct or indirect supply controls; two-price schemes; deficiency payments; state trading operations; and border measures including tariffs, variable levies, quotas, export subsidies, and disposal via foreign aid. The net result is that the gap between the world price and the price received by farmers in different countries is typically substantial--and occasionally outrageous.

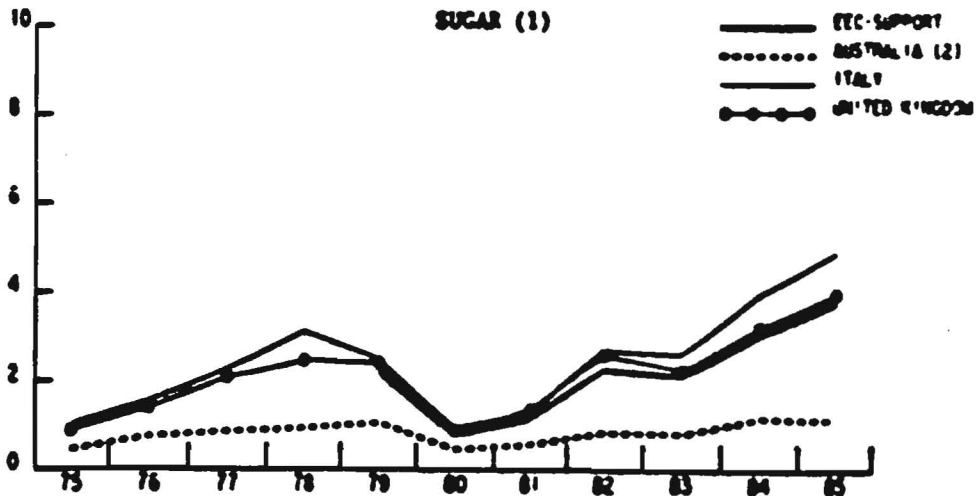
Japanese rice producers are paid over eight times the world price for the rice they produce. Japanese sugar producers receive over 17 times the world price, and U. S. and EC sugar farmers receive almost four times the world price. European beef producers get about 2.5 times the world price for their produce, and EC and U. S. butter producers get nearly three times the world price. Wheat support prices for the EC are about twice the world mark, while U. S. target wheat prices are increasingly divergent from the world price and are about 50 percent above the world price. In Egypt, on the other hand, the producer price of wheat is less than the price of straw--a fact that has interesting implications for the design of wheat threshers. Chart 1 shows the dramatic divergence of domestic support prices from world levels for a variety of countries and products.

CHART 1

Ratio of Domestic Support Prices to World Prices
For Selected Agricultural Products

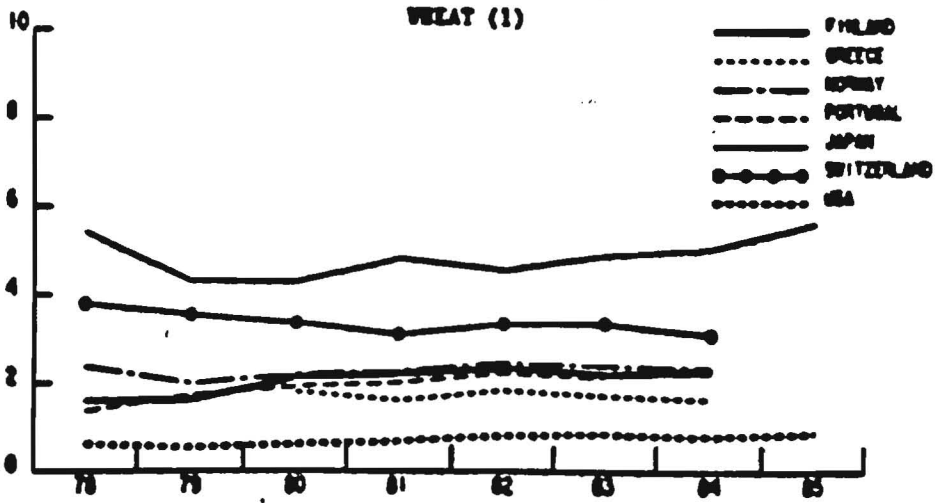


1. The world price is the Thai export price (f.o.b. Bangkok).

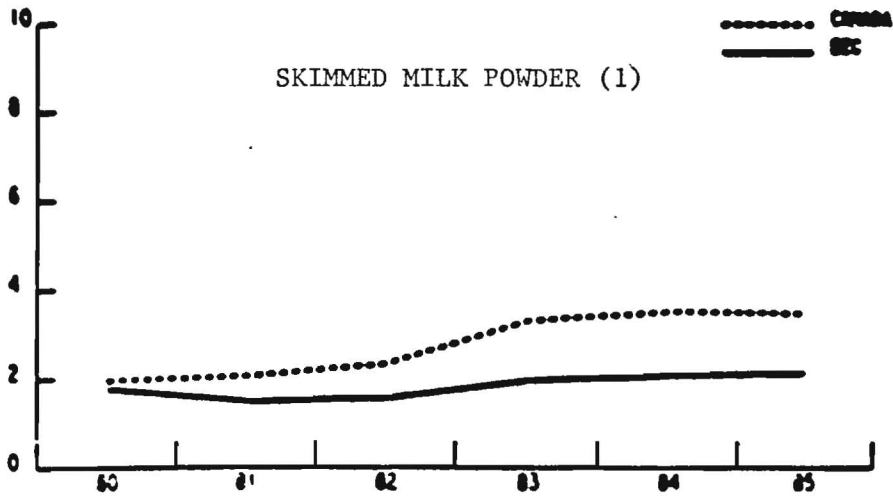


1. The world price is the bulk basis sugar price (f.o.b. Caribbean ports).
2. The Australian sugar cane producer price was divided by 0.13 to obtain the refined sugar equivalent price.

CHART 1--continued.

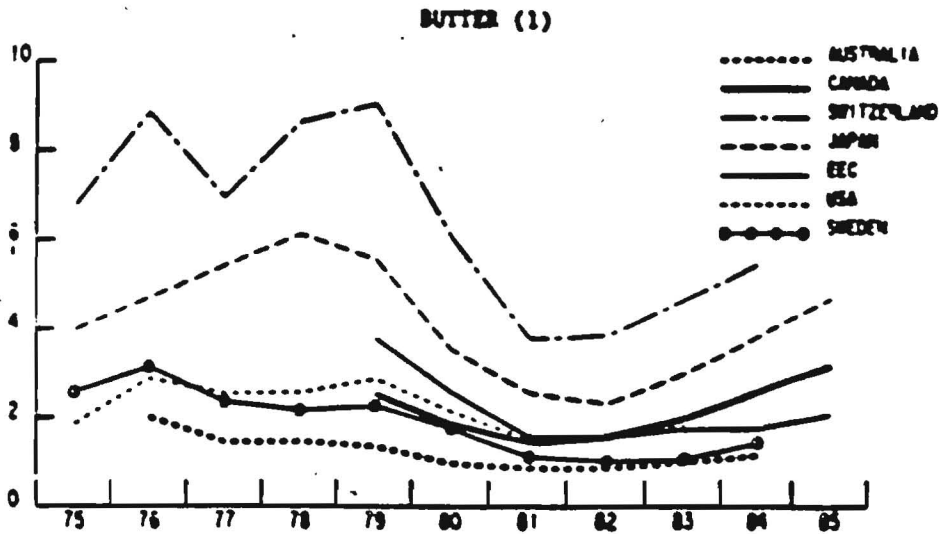


1. The world price is the U. S. export price for hard winter wheat No. 2 (f.o.b. Gulf ports).

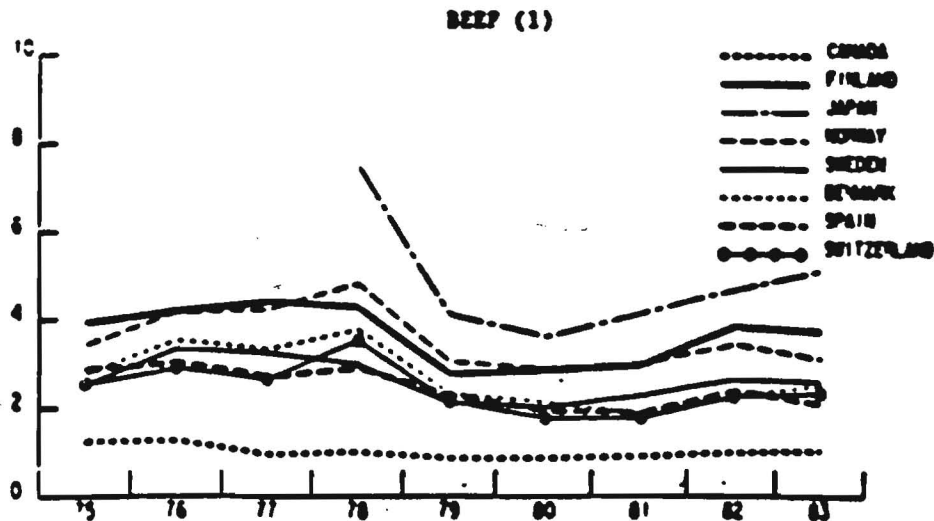


1. The representative world price is the f.o.b. Western European ports export price.

CHART 1--continued.



1. The world price is an indicative price of internationally traded butter published by GATT.



1. The world price is the Argentina export average unit value for beef, f.o.b.

Source: Organization for Economic and Cooperative Development (OECD), "Effects of Agricultural Policies in OECD Countries: Main Issues for Discussion," February, 1987, Working Paper No. 1, Economic Policy Council, pp. 11-12.

However, the diverse pricing interventions listed above, and reflected in Chart 1, by no means exhaust the set of instruments used to intervene in agricultural markets. Inputs are often explicitly subsidized and/or implicitly taxed by trade protection in other sectors, and exchange rate management also affects domestic terms of trade. Direct income supports include payments for disaster relief, conservation and other input diversions, and tax relief; governments also supply public intermediate goods such as research and extension, education, marketing programs, etc.

Given the diversity of agricultural interventions, to make meaningful international comparisons of support levels one must go beyond price comparisons to consider producer subsidy equivalents (PSEs)--a concept developed by Josling (see United Nations, Food and Agriculture Organization, 1973 and 1975). PSEs are the ratio between the total value of policy transfers to producers and total producer agricultural income (cash receipts plus net direct payments). A positive PSE indicates a net producer subsidy; and the closer the PSE is to 1.0, the greater is the policy-generated distortion. Measures of PSEs include more than just the price gap received by producers. They also incorporate other policies that benefit farmers such as trade restrictions and direct income support and programs that affect variable production costs, marketing costs, and longer term production considerations.

Tables 1 and 2 indicate PSE for certain commodities and countries for 1982-1984. Developed countries subsidize farmers for nearly every commodity. For example, the PSE for the United States and EC in dairy products is between .25 and .49. This means that between one quarter and one half of the income of dairy farmers is due to policy measures. The weighted average of PSEs

Table 1--Ranking of producer subsidy equivalent levels, commodities by country, 1982-84

Ratio 1/	United States	Australia	Canada	New Zealand	EC	Japan	
Producer tax:							
-.01 to -.09		Pork* Poultry*				Citrus	
Producer subsidy:							
0 to .09	Soybeans* Pork Poultry* Beef	Wheat* Barley* Beef* Sheep meat* Wool* Cotton*	Corn Oats* Soybeans Beef Pork*	Wheat Barley*	Corn		
.10 to .24	Barley*	Rice* Cane sugar*	Wheat* Rapeseed* Flaxseed* Poultry Barley* Rye*	Beef* Manu. milk*	Common wheat* Pork*	Poultry	
.25 to .49	Sorghum* Corn* Wheat* Dairy Cotton*	Fluid milk Manu. milk*	Sugar	Sheep meat* Fluid milk Wool*	Durum wheat* Dairy* Sheep meat Rapeseed Soybeans Barley* Rice Poultry*	Pork	
.50 to .74	Sugar Rice*		Dairy prods.*		Sugar* Beef*	Beef Soybeans	
.75 to .99						Fluid milk Manu. milk Rice	
1.00 or more						Wheat Barley	
	Taiwan 2/	South Korea 2/	India	Argentina	Nigeria	Mexico 2/	Brazil
Producer tax:							
More tax than -.50					Cocoa*		
-.26 to -.49			Wheat Cotton (LS)*				
-.10 to -.25			Rice Cotton (MS)* Peanut meal	Wheat* Corn* Sorghum* Soybeans*			
-.01 to -.09			Rapeseed meal Soybeans Soymeal	Soymeal* Soyoil*	Rice Cotton	Soybeans* Manu. milk	
Producer subsidy:							
0 to .09	Pork*				Corn		Beef*
.10 to .24	Corn Soybeans Sugar*	Poultry	Rapeseed Peanuts*			Cotton* Sorghum Wheat	Poultry*
.25 to .49	Rice* Beef Poultry Dairy prods. Tobacco	Pork	Soy oil Peanut oil		Wheat	Soybeans Corn	Cotton*
.50 to .74	Wheat Sorghum Barley	Rice Wheat Corn Barley Soybeans Beef Fluid milk	Rape oil				
.75 to .99							
1.00 or more					Sugar		Wheat

* = Net exporter during 1982-84.

1/ Ratio of policy transfers to gross domestic value of production including direct payments.

2/ Impacts of input subsidies not included.

Source: Economic Research Service, U. S. Department of Agriculture, "Government Intervention in Agriculture: Measurement, Evaluation, and Implications for Trade Negotiations." January, 1987, p. 31.

Table 2--Ranking of producer subsidy equivalent levels, countries by commodity, 1982-84

Ratio <u>1/</u>	Wheat	Rice	Corn	Sorghum and barley	Soybeans	Other oilseeds	Sugar	Cotton	Dairy products	Beef	Pork	Poultry
Producer tax:												
More tax than -.50												
-.26 to -.49	India							India (LS)* Sudan (MS)				
-.10 to -.25	Argentina*	India	Argentina*	Argentina*	Argentina*			India (MS)* Sudan (ELS)				
-.01 to -.09		Nigeria			India Brazil*			Nigeria			Australia*	Australia*
Producer subsidy:												
0 to .09	Australia* New Zealand	Thailand*	Canada EC Nigeria	Australia* New Zealand*	Canada United States*			Australia*		Brazil* Australia* United States	United States Canada* Taiwan*	United States
.10 to .24	Canada* EC (Common)* Mexico	Australia*	Taiwan	United States* Canada* Mexico	Taiwan Mexico	India (rape) (peanuts)* Canada (rape)* (flax)*	Taiwan* Canada Australia*	Mexico*	New Zealand*	New Zealand* Canada	EC*	Canada Japan S. Korea Brazil*
.25 to .49	EC (Durum)* United States* S. Africa Nigeria	Taiwan* EC	United States* Mexico S. Africa	EC*	EC Mexico	EC (rape)		Brazil* United States	Taiwan United States* EC* Australia*	Taiwan	Japan S. Korea	Taiwan EC*
.50 to .74	S. Korea Taiwan	S. Korea United States*	S. Korea	S. Korea Taiwan	Japan S. Korea		EC* United States S. Africa*		S. Korea Canada*	Japan S. Korea EC*		
.75 to .99		Japan							Japan			
1.00 or more	Japan Brazil			Japan			Nigeria					

* = Net exporter during 1982-84.

1/ Ratio of policy transfers to gross domestic value of production including direct payments.

Source: Economic Research Service, U. S. Department of Agriculture, "Government Intervention in Agriculture: Measurement, Evaluation, and Implications for Trade Negotiations." January, 1987, p. 29.

indicate the aggregate importance of government assistance to domestic producers. From 1982 to 1984, this was 0.70 for Japan, 0.41 for the EC, 0.24 for Canada, and 0.22 for the United States as is shown in Table 3.

Most of this support is directly tied to production. Agricultural output has increased dramatically as price incentives have risen, while demand has grown slowly. Where consumer prices have been maintained via public acquisition, the result has been enormous stocks of unused surplus produce (Chart 2). Wheat stocks have risen nearly 70 percent since 1980-81, sugar stocks are 45 percent higher since then, and cotton stocks have doubled over the past decade. For the United States, many of these stocks nearly equal a year's amount of consumption, and world stocks as a whole amount to a significant proportion of world consumption in recent years. The structural surplus that has resulted is a direct consequence of government-induced excess capacity and the continuing incentives to maintain resources devoted to agricultural production. Resources are wasted in carrying excess stocks, and deterioration of the stocks themselves is an additional source of social loss. Enormous EC butter stocks deteriorated to such an extent that they had to be sold as butter oil, which sold for only 14 percent of what farmers were paid to produce as butter.

The subsidies to agriculture throughout the Western developed world have become toweringly expensive. The costs not only include direct government outlays (i.e., taxpayer support) but also the costs to consumers in the form of higher prices. Table 4 gives the division of costs between taxpayers and consumers for a sample of countries. In the United States, federal government

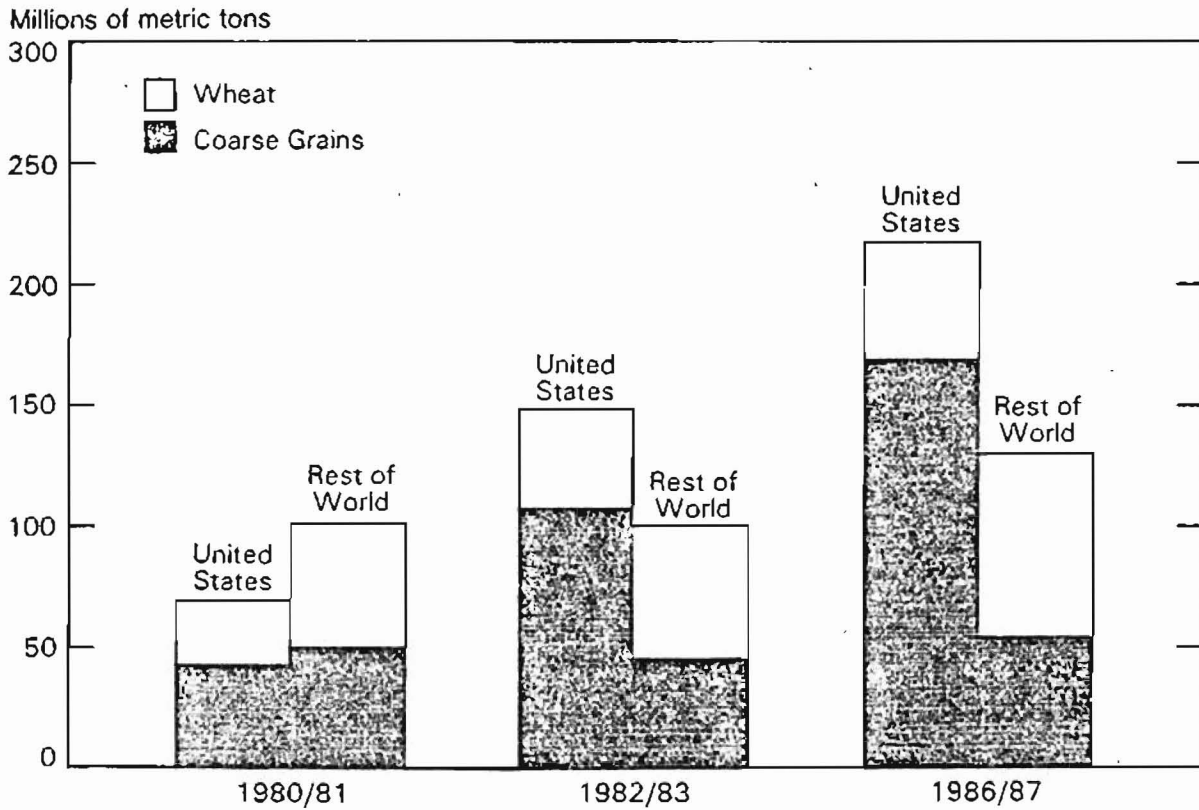
Table 3 --Weighted average PSE and major sources of assistance, 1982-84

Country and region	Weighted average PSE	Major sources of assistance to producers			
		Grains and oilseeds	Dairy	Livestock	Sugar
	Percent				
Japan	70	Grains: State trading Oilseeds: Deficiency payments	Price support through government stock-holding and border restriction. Also some deficiency payments	Beef: Quotas, tariff, and domestic price stabilization scheme Pork: Variable levy Poultry: Tariff	Not currently available
EC	41	Grains: Variable levy and export refunds Oilseeds: Deficiency payments	Variable import levies and export refunds	Variable import levies and export refunds	Variable import levies and export refunds
Canada	24	Wheat and barley: Transport subsidies and income stabilization payments Corn: Tariff Oilseeds: Transport subsidies and income stabilization payments	Domestic price support (maintained with import quotas) and direct payments	Beef and pork: Tariffs, inspection services Poultry: Quota, price support, and tariff	Tariff, stabilization payments
New Zealand	24	Marketing board controlled trade and set prices	Interest rate concessions (farm improvement loans and loans to marketing board)	Direct income payment	Not applicable
United States	22	Grains: Deficiency payments, PIK entitlements, CCC inventory operations, and commodity loans Oilseeds: CCC inventory operations and commodity loans	Price supports maintained by tariffs, quotas, and government purchases	Beef: Tariff Other: General (R and D, inspection, etc.)	Price supports and quotas
Australia	6	Domestic consumption pricing	Domestic consumption pricing	Input subsidies and inspection services	Domestic consumption pricing

Source: Economic Research Service, U. S. Department of Agriculture, "Government Intervention in Agriculture: Measurement, Evaluation, and Implications for Trade Negotiations." January, 1987, p. 33.

CHART 2

Carryover Stocks of Coarse Grains and Wheat



Note.—Data are for crop years; 1986/87 data are preliminary estimates.

Source: Department of Agriculture.

Table 4--Cost of producer support by contributor, 1982-84

Country and region	Wheat	Beef	Manufacturing milk
<u>Percent</u>			
European Community:			
Consumers	67	92	77
Budget contribution	34	8	23
Canada:			
Consumers	4	20	67
Budget contribution	99.6	80	33
Japan:			
Consumers	63	76	58
Budget contribution	37	24	42
United States:			
Consumers	29	42	95
Budget contribution	71	58	5
Australia:			
Consumers	52	0	84
Budget contribution	48	100	16
New Zealand:			
Consumers	45	7	0
Budget contribution	55	93	100

Source: Economic Research Service, U. S. Department of Agriculture, "Government Intervention in Agriculture: Measurement, Evaluation, and Implications for Trade Negotiations." January, 1987, p. 35.

spending for farmer support in fiscal year 1986 reached nearly \$27 billion from about \$4 billion in the early 1980s. This is a contribution of nearly \$700 from each nonfarm family in the United States. Consumers are paying an additional estimated \$6 billion because prices for products are administered at above-world levels. (For 1985, the World Bank study recently put the consumer cost figure at about \$20 billion.)

The direct subsidy costs of the Common Agricultural Policy (CAP) of the EC have doubled in five years and have now reached \$23 billion in 1986-87, not including an additional \$2 billion-\$3 billion spent on surplus disposal (Miller, 1986). But this figure ignores the direct costs to consumers from policy-induced price increases. Where these are added to the budget costs, the total EC subsidy to farmers has been estimated at \$40 billion for 1984--or about \$900 from every nonfarm family in the Common Market. The World Bank (1986) estimates the figure at about \$65 billion for 1985. Japan's taxpayers subsidized their farmers by over \$10 billion in 1985, but consumers spent many magnitudes above this in terms of higher prices. A background study for the World Bank (1986) put the consumer cost of Japan's distortions at \$57.5 billion (for 1985 in 1985 dollars).

Tyers and Anderson (1986), in a paper for the World Bank, estimated that in 1985, for the OECD countries, consumers and taxpayers would have registered a net gain of over \$100 billion from liberalization of agricultural policies. Agricultural producers would have lost about \$55 billion, but the OECD as a whole would be better off by about \$50 billion nonetheless (World Bank, 1986, p. 131). These figures would probably be higher today. In addition, because current policies in the OECD reduce world agricultural prices, the Soviet Union and the East European nonmarket economies would lose by \$11 billion if

the West were to liberalize. With global liberalization, they would lose \$23 billion. But the poorer developing countries which are heavily dependent on food imports could also lose from trade liberalization. Tyers and Anderson's simulation suggests that liberalization would also contribute substantially to price stability in commodity markets.

The policies behind these distortions generally have a predominantly domestic focus. The large gaps between domestic and world market prices exist to increase farmer incomes. Attempts to raise domestic prices above world levels to assist domestic farmers must fail unless imports can be controlled through some kind of trade barrier, or (if the country is already self-sufficient) exports or other forms of disposal can be encouraged. The incentives given to excessive domestic production have made many formerly large importers self-sufficient, shrinking available markets for trade and reducing the gains from trade. Some net importing countries have even turned into net exporters as domestic supplies grew. For example, the EC used to be a large net importer of grains, importing about 20 million tons (a fifth of world trade) during the early 1960s and a similar amount as late as 1976. By 1985, the EC was exporting 16 million tons, a reduction in the size of the world market available for exports of 35 million tons within a single decade. The EC also became a significant net exporter of sugar only in the late 1970s but by the early 1980s had captured fully one quarter of the world free-market at prices well below producer returns and was the second-largest sugar exporter. (A similar policy promises to turn the U. S. from a net importer to an uneconomic exporter very soon.) In beef, the EC was a net importer before 1980 but now rivals Australia as the largest exporter.

These huge reversals of the market posture of the EC have been bought with expensive export subsidies. But the EC is by no means the only subsidizer of exports. Japan periodically dumps its excess rice stocks overseas at a loss. Also, the United States, under the Food Security Act of 1985, has begun heavily subsidizing exports of cotton and rice--a policy which may soon be extended to other major crops.

The expansion of exports as an instrument of essentially domestic agricultural policy would be less costly and disruptive if the world market had evolved since the early 1970s as many had expected. But income growth in the last decade has been low worldwide, and international debt problems and balance-of-payments difficulties have depressed imports where they might otherwise have grown fastest.

Less widely recognized, and perhaps more enduring as a market depressant, is the impressive performance of China and India in agriculture. Whereas widely quoted studies predicted very large grain deficits in India by the 1980s, strong production growth has kept the country essentially self-sufficient. In China, the recent performance has been astonishing. Wheat production, for example, increased 44 percent between 1981 and 1985, or 26 million tons--an amount equal to 40 percent of U. S. or EC wheat production in 1985. Rice production in China increased by about the same amount, equivalent to the total recent production of the major exporters, Thailand and the United States.

In the current context, subsidy competition (including deficiency payments) between the EC and the United States is very costly to them in budget terms and is impoverishing other producers who are more dependent on the export markets. Thus, the major producers have ample motivation for policy changes; the challenge is to ensure that the new policies move toward reform.

Thus, the challenge is not to convince the major producers of the need for reform. The challenge is to propose changes in policy that improve the overall benefits available to major producers from the international markets and to package and implement them in such a way as to ensure that their adoption will not be blocked by those interests receiving benefits from the current policy structure.

The choice of reform strategies obviously depends on the positions of the participants. We now turn to a thumbnail sketch of the attitudes of the major players.

United States

Agriculture policy in the United States has been vexed by two different concerns. For some products, the United States has clear production and cost advantages; and, for them, world trade liberalization would be advantageous. Other less competitive products are beset by import penetration. Both groups (for example, sugar producers as well as wheat producers) lobby for Political Economic Seeking Transfers (PESTS) (Rausser, 1982). While such transfers are pervasive in U. S. agriculture policy, a strong confidence remains that U. S. agriculture would flourish if only the international market was cleared of other countries' distortions (except, of course, the distortions in the Eastern Bloc that make it such a major customer).

Budget pressures have led to growing domestic recognition that current farm programs are costly and inefficient. There is also growing concern regarding the inequity of their distributional effects. The Administration is moving toward reform of domestic agricultural programs by decoupling farm support from production and targeting compensatory benefits, although it is currently relying on huge acreage cutbacks to control excess supply.

The U. S. Administration has four main objectives to achieve at the multi-lateral talks. First, it aims to phase out import restrictions on agricultural products, the market access issue. Second, it hopes to amend the GATT to control agricultural export subsidies. Third, it strives to eliminate unnecessary health and sanitary regulations that impede market access in other countries. (These objectives are similar to the broad objectives that the ministers at the Punta Del Este meeting agreed to consider in the current GATT round.) Finally, it wants to persuade competing exporters to "uncouple" income supports from production incentives.

These objectives appear to satisfy the demands of the export interests in moving agricultural trade to one based on comparative advantage, not on extensive government support. Conflict between the reform-minded Administration and legislators who are receptive to special interests adds to the uncertainty with respect to the actual U. S. position.

European Community

The EC acknowledges the problems of world agriculture but repeatedly resists attempts to put domestic, trade-distorting policies at the mercy of a strict, liberal international agreement. The common agricultural policy of the EC is very distortive and covers one of the largest world markets. Farmer interests appear to weigh heavily on the objective functions of both the national governments and the EC apparatus itself. There are differences between EC governments on agriculture, however. Britain is the most favorable to agricultural reform, but France and Germany staunchly oppose major changes in CAP. Both the French and German governments currently depend on the farm vote, and the power of the French farmers is visible due to their inclination

to engage in massive and sometimes violent demonstrations when their interests are threatened.

The EC reluctantly agreed to the agriculture agenda approved at the Punta del Este conference and will probably be the key obstacle to new trade and subsidy rules in the new GATT round. They oppose fast track negotiations and will act to brake movement toward fundamental international reforms. They do not regard agriculture as having a top priority and especially will not allow the basic structure of CAP to be open to GATT challenge.

Free trade is not seen as the natural reference point by EC negotiators (Petit, 1985). They regularly suggest managing trade by sharing markets in line with their global cartel proposed during the Kennedy Round talks. Although the EC does not object to the principle of market access (mainly because it sees potential outlets for its surpluses in markets such as Japan), it has serious reservations about other proposed actions. The EC relies heavily on export subsidies to dispose of its massive surpluses and, consequently, would not like to see export subsidies restricted by international accord.

Despite its intransigence, the EC's approach on agriculture has changed over the years. Food security concerns, ripe after World War II, have faded in recent years. Environmental conservation has become an important issue. The objective of enhancing farm income has been modified. Also, the EC does face several constraints--most importantly, its budget constraint. As discussed above, budgetary outlays for the EC on agriculture have mushroomed. As it increasingly becomes a net exporter, the EC, instead of collecting revenue, must spend it on export restitutions to make its surpluses price competitive on world markets. This balance sheet change has forced increases in the

value-added tax base allocated to agriculture despite previous mandated limits to that proportion. The budget growth is an important force for change in the EC and may have reduced the political sway away from the farming interests. However, sympathy for farmers appears strong; and one has yet to see these forces substantially change the EC's negotiating position. Though there have been recent reductions in CAP output incentives, a notable weakness of the EC position is that there is no overall proposal for control of exported surplus beyond stockpiling. The EC has taken a free ride on U. S. acreage reductions to increase its share of export markets. [This year, U. S. idled acreage (about 75 million acres) exceeds the cropped area of Western Europe.]

Japan

Japan is the world's largest net importer of agricultural products. It shields its domestic farmers from world agricultural prices perhaps more than any other nation. In the negotiations, Japan will be exceedingly reluctant to offer any liberalization of policies and will probably attempt, with the EC, to stall and delay progress. Japan especially wants to divert attention away from domestic agricultural subsidies. It also feels that it should be exempt from adjustments because it is not an agricultural exporter. For the same reason, there is little that Japan can be offered in terms of agricultural concessions by trading partners as a carrot to elicit trade reforms.

The political influence of agricultural producers has been especially strong in Japan due to gerrymandering of election districts which favors rural voters. Food security, especially for rice, has been a sacred issue for older Japanese with memories from World War II. One long-held objective of Japan has been to get international agreements on food security, such as a ban on agricultural embargoes, and one introducing international buffer stocks. These

concerns are natural in a country with a self-sufficiency rate of 45 percent (U. S. Department of Agriculture, 1987, p. 13). The influence of the farmers may decline over time, but substantial sympathy for farmers and their programs is reported in the nonfarm population. However, internal discussion of agricultural reform has been initiated and some import quotas are slowly being increased in response to extreme pressure from the United States; but in some instances, including beef and, perhaps, oranges (see Wright, Stamoulis, et al., 1987), the de facto result appears to have been a bilateral deal favoring the United States at the expense of other exporters rather than a true liberalization of market access.

The Cairns Group

The Cairns group of 14 self-proclaimed nonsubsidizing nations, led by Australia and Argentina, demand that agricultural reform and dramatic liberalization be a top priority in international negotiations. The group includes both developed and developing countries and are partly responsible for sustaining momentum on agriculture in the Uruguay Round and for demanding the elimination of subsidies and market access. These countries have competitive agricultural establishments that have been hurt with the closing of potential export markets and the use of export subsidies in third markets.

Australia strongly advocates a commitment to halt subsidy escalation and a reduction, with decoupling, of administered internal prices. It also wants strengthened GATT rules on agriculture to preserve any such international agreement. An end to export subsidies is considered a top priority, though not a long-run solution, to current problems, because European subsidized imports have displaced Australian products in Southeast Asian markets. Argentina, for its part, is willing to make concessions in GATT negotiations on services,

which the United States wants dearly, in order to gain an effective agreement on agriculture. Australia has a substantial system of industrial protection that may be subject to negotiation in exchange for liberalization of agriculture in other countries.

Canada, like Australia, is very much concerned that international subsidy wars are ruining its export market. They each have proposed guidelines for agricultural reform. These are summarized in Table 5 along with an institutional initiative proposed by Carmichael (1986) which is discussed below. In general, the Australian and Canadian proposals are quite consistent with the U. S. objectives. However, in the details of the Australian proposal, there is a one-for-one matching of domestic supply reductions with subsidized export units. This policy is not supported by the United States which wants to see less (not more) intervention in supply decisions.

3. Overall Strategy: Alternative Avenues For Reform

For countries interested in reform of world agriculture, several alternative courses of action are possible. These include:

- A. Multilateral negotiations within GATT
- B. Multilateral negotiations outside GATT
- C. Bilateral negotiations outside GATT
- D. Unilateral reform of domestic and trade policies

These alternatives are not mutually exclusive. Alternative A is obviously one route that will be pursued because the Uruguay Round is already underway. But because the desirable reforms are fundamental and go beyond traditional GATT trade issues and because it is to some extent true that GATT negotiations

TABLE 5

Proposed Guidelines

AUSTRALIA PROPOSAL	CANADA PROPOSAL	CARMICHAEL PROPOSAL
<ol style="list-style-type: none"> 1. Commitment to halt subsidy escalation and freeze and progressively reduce the gap between administered internal prices and international market prices for farm products. 2. An early reduction in internal administered producer prices for 1987-88. The 7 economic summit countries should provide the leadership. 3. Narrowing of price gap be expedited by interim measures aimed at containing supplies and quarantining stockpiles in those countries where internal administered prices remain significantly higher than international prices. 4. Farm income support measures be separated wherever possible from producer prices for farm output. 5. Development of an accepted set of principles to liberalize world agricultural trade through reform of domestic agricultural policies by national governments. 	<ol style="list-style-type: none"> 1. Increase role of international market signals in everyday economic decisionmaking in the farm sector. 2. Formulate and implement agricultural policies in such a way as to reduce their adverse trade effects. 3. Holding and gradually reducing the spread between internal support levels and world prices. 4. Targeting farm support measures increasingly in such a way as to avoid production incentives, while providing for appropriate income support as adjustment proceeds. 5. Progressively reducing the linkage between support measures and production. 6. To introduce no new import barriers not mandated by existing legislation. 	<ol style="list-style-type: none"> 1. Institutional Vehicle: An independent statutory body should be established within each member country to prepare regular reports (say annually) to their national governments on the assistance given to domestic interests. 2. Charter: Its reports should supply information regularly and systematically on the structure of all forms of public assistance, including regulatory trade measures, to all domestic industries. They should be public, so that they are a vehicle for domestic scrutiny of changes in structure and distribution of industry assistance. 3. Focus of Guidelines: The code of objectives negotiated to provide a frame of reference for such bodies should be related to <u>domestic welfare</u> and not international <u>trade liberalization</u>. (They are of course two sides of the same coin.) <p style="text-align: right; margin-right: 50px;">(continued on next page)</p>

TABLE 5

Proposed Guidelines
(continued)

AUSTRALIA PROPOSAL	CANADA PROPOSAL	CARMICHAEL PROPOSAL
<p>6. An accord on international agricultural reform be agreed at the summit in Vienna in June.</p> <p>7. Negotiations on agriculture within Uruguay Round of: effective disciplines on operation of direct and indirect agricultural subsidies and price support programs, and increased market access.</p>	<p>7. To freeze and to seek to reduce government assistance measures which artificially distort world prices.</p> <p>8. To accept collective responsibility and affirm need for collective action in both short- and long-run to redress current supply/demand imbalance.</p>	<p>4. Status in Domestic Institutional Arrangements: While it is essential that the independence and industry neutrality of these bodies be guaranteed by statute, they should have only an informational role in domestic policy environment. They should have no judicial, executive or direct policy role and they should be accountable solely to national governments.</p> <p>5. Status in International Negotiations: Informational outputs of such bodies could provide a basis for domestic constituents of governments to be satisfied that domestic objectives of international reform are achieved in GATT negotiations. Their use in preparing for international negotiations however, would be totally informational and they would not commit governments to any particular course in those negotiations.</p>

have structural problems and give disproportional weight to producer interests, significant progress is unlikely to be made in GATT without other parallel initiatives.

Alternative B, multilateral negotiations outside GATT, are possible in several fora, including OECD meetings and special meetings such as the Italian Economic Summit coming this June. The attraction of the latter is that a meeting of the heads of the state holds some hope of avoiding some of the structural problems of GATT and of addressing more effectively the general national interests of each participant.

Bilateral negotiations (alternative C) have been pursued energetically by the United States with both of the main parties of concern--the EC and Japan. A very real danger exists that bilateral deals can end up as mechanisms for trade diversion rather than trade reform. For example, an agreement between the United States and Japan on beef trade appears to have been perceived as a de facto increase of access of the United States to the Japanese market at the expense of Australia and other exporters. This type of perception can lead to a breakdown of the trust that must exist between reform-minded parties if multilateral efforts are to succeed.

Alternative D, unilateral reform, has been advocated on the grounds that the domestic gains are worthwhile even if other countries do not participate in the process (see, for example, Economic Report to the President, Chapter 5, 1987). The effects on domestic benefits and on the policies of other countries depend in part on the nature of the reform policies. For the United States, it is clear that planning on changes in agricultural policy is necessary, regardless of the outcome of ongoing negotiations. It is important that planned policies and the timing of their adoption be designed to further the

progress of ongoing multilateral negotiations. Studies indicate that coordinated international reform tends to be more beneficial to the participants than unilateral actions (see, for example, World Bank, Chapter 6, 1986, and the background paper by Tyers and Anderson). Indeed, Congressional support for needed domestic reforms is unlikely in the absence of international cooperation.

One coherent overall strategy for reform consists of a combination of alternatives A, B, and D: GATT negotiations; multilateral negotiations outside GATT; and long-run planning and implementation of domestic reforms--if necessary, unilaterally. Let us consider first the role of GATT.

4. The Role of GATT in Distorting and Reforming World Agriculture

For nearly the entire postwar period, the institution advanced to furnish a binding code on domestic policy that interferes with international trade has been GATT, a world agreement that provides a legal framework for international trading relations. After the uncertainty and turbulence of the world economy in the 1920s and 1930s when export subsidies, tariffs, and quotas were prevalent, the United States and Western Europe resolved to negotiate international constraints to prevent a recurrence of the trade wars which contributed to the Great Depression. Because the trade interventions were taken at the behest of domestic pressure groups, the GATT was specifically designed to be a binding, external constraint useful in resisting domestic pressures for increased protectionism.

In successive negotiating rounds, members of GATT have been successful in reducing barriers to trade in manufactured goods--perhaps more successful than one would have anticipated given the structure of negotiations and the nature

of the negotiation process. However, there has been no comparable progress in agricultural trade. Attempts in recent rounds to impose some systemic structure on agricultural trade have failed. In many cases the price of progress in manufactures has been abandonment of reform in agricultural trade. The most prominent fact concerning GATT actions in agriculture is its failure, time and time again, to bring trade in the sector under any set of consistent liberal rules.

But why were such rules not in place from the start? GATT codes generally prohibit the use of any trade measure except tariffs. The answer contains lessons for current negotiators. The United States can claim credit for negotiating the initial exemptions that led to the current disorder in international markets. Paragraph 1 of Article XI states, "no prohibitions or restrictions other than duties, taxes, or other charges . . . shall be instituted or maintained by any contracting party" (Dam, 1970, p. 407). Over the objections of developing countries, the U. S. negotiators drafted a second paragraph in the form of an exemption which is worth quoting at length¹ (Dam, 1970, pp. 407-408):

"2. The provisions of paragraph 1 of this Article shall not extend to the following:

- (a) Export prohibitions or restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party;
- (b) Import and export prohibitions or restrictions necessary to the application of standards or regulations for the classification, grading or marketing of commodities in international trade;
- (c) Import restrictions on any agricultural or fisheries product, imported in any form, necessary to the enforcement of governmental measures which operate:
 - (i) to restrict the quantities of the like domestic product permitted to be marketed or produced, . . .

- (ii) to remove a temporary surplus of the like domestic product . . . by making the surplus available to certain groups of domestic consumers free of charge or at prices below the current market level;
- (iii) to restrict the quantities permitted to be produced of any animal product the production of which is directly dependent, wholly or mainly, on the imported commodity, if the domestic production of that commodity is relatively negligible.

Today, this U. S.-backed exemption looks like a laundry list of the trade complaints of American producers. But for provision 2(a), the 1973 export embargo (and, perhaps, the 1974 and 1975 moratoria on sales to the Soviet Union and Poland) that grain producers still bitterly resent would have violated GATT (for a detailed description of these measures, see U. S. Department of Agriculture, Economic Research Service, 1986a). The widespread use of grading and packaging restrictions exempted in 2(b) are a prominent bone of contention for many speciality crop exporters (Wright, Stamoulis, et al., 1987); and 2(c), parts (i) and (iii) obviously legitimize the use of import restrictions to complement domestic measures that raise consumer prices above world levels, subject to only one substantial proviso:

" . . . any restrictions applied under (i) above shall not be such as will reduce the total of imports relative to the total of domestic production, as compared with the proportion which might reasonably be expected to rule between the two in the absence of restrictions."

(Due regard could, however, be given to relative changes in productive efficiency of different producers.)

The fact that quantitative restrictions were allowed if government measures operated to restrict the production or marketing of agricultural products meant that GATT would not operate in agriculture as a counterweight to domestic producer pressures for distortionary favors (as it does in industry). This

exception was clearly designed to fit the American case because the United States was the only major agricultural producer with acreage and marketing controls (in addition to price supports). Section 22 of the Agricultural Adjustment Act of 1933 already permitted tariffs and quotas on agricultural imports that interfered with domestic programs. And the Article XI loophole became the first indication that GATT would, by design, be ineffective in reforming domestic production restrictions that required trade barriers for their operation.

In 1951 Congress amended Section 22 adding subsection (f): "No trade agreement or other international agreement heretofore or hereafter entered into by the United States shall be applied in a manner inconsistent with the requirements of this section" (see Hillman, 1978, p. 211). In an amendment to the Defense Production Act, Congress also authorized the Secretary of Agriculture to restrict imports of a number of products for which there were no production controls. Both were severe blows to the constraint on the exemptions in Article XI noted above. As the Secretary-General of GATT commented, although Article XI was "largely tailor-made to U. S. requirements . . . the tailors cut the cloth too fine" (White, 1960, quoted in Dam, 1970, p. 260). In the same year, the GATT Contracting Parties held that injured parties were entitled to compensation from the United States. (Thus, in 1952, the Netherlands was allowed to impede wheat flour imports from the United States in response to measures affecting their cheese exports.) Subsequently, the United States sought, and was granted in 1955, a "waiver" from the already weakened obligations in Article XI of GATT. This waiver sanctified the full range of United States interference in agricultural trade.

Having legitimized its own distortion of agricultural trade, the United States now turned to using GATT to ensure market access for U. S. exports to other countries. The United States was concerned that the unification of European agricultural policies, required by the Treaty of Rome in 1957, could greatly affect U. S. exports. The CAP of the EC involved the imposition of variable import levies. A variable import levy acts as a sliding tariff to ensure that no foreign goods are ever imported below a certain price--an ideal and highly protective arrangement to validate domestic price-support programs in European agriculture. Because GATT does not prohibit variable levies, there was no legal basis for the strong objections of the United States to the practice. The United States reluctantly decided to conclude the Dillon Round of trade-liberalizing negotiations (held from 1960 to 1962) with its progress on reducing industrial tariffs and with no formal agreement on trade in agriculture. It only had the EC's assurance that it would not use the variable levy to damage U. S. exports.

The U. S. position at the start of the Kennedy Round of trade talks (1963-1967) was that agriculture for the first time would be a major part of the liberalization negotiations, equal in importance to progress on reducing trade barriers in manufactured goods. The United States was anxious to deal with CAP. But neither the United States nor the EC was amenable to fundamental compromises on their domestic policies. In fact, instead of liberalizing policies, cartelization of world trade in agriculture was broached at these talks when the Europeans proposed a "montant de soutien" that would bind the margin of government agricultural support and create a rigid world market in agricultural products. The United States flatly rejected this plan which would have, in effect, created a worldwide CAP. At the end of the Kennedy

Round, the United States was again faced with the dilemma of whether or not to abandon the gains in reducing industrial tariffs in response to the lack of progress on the agricultural front; given its own historically rather compromised negotiating stance, its decision to accept the outcome was not surprising.

The Tokyo Round (1973-1979) negotiations tried again to gain some ground in opening world agricultural markets. The United States did get some enlargements in Japan and EC import quotas for certain products, but attempts to reinforce the rules in the export subsidies code did not achieve much. Because world agriculture flourished during the 1970s, economic pressures did not provide any incentives to reach an agreement.

The provision dealing with subsidies is another gaping hole in the GATT framework. Although Article XVI generally prohibits the granting of export subsidies, there is an exception for primary products. While GATT members "should seek to avoid the use of subsidies on the export of primary products," such subsidies are not forbidden. "If . . . a contracting party grants directly or indirectly any form of subsidy which operates to increase the export of any primary product . . . such a subsidy shall not be applied in a manner which results in that contracting party having more than an equitable share of world export trade in that product. . . ." This exception, adopted with U. S. support (Harris, Swinbank, and Wilkinson, 1983, p. 275) with its ambiguous restriction, has permitted excess domestic stocks to be dumped onto world markets through subsidies. This subsidization has accelerated through the 1980s and is the most visible symptom of the problems in agricultural trade today. Thus, there has been a systematic failure on the part of GATT to reform world agricultural practices, or indeed it seems to contain the growth or protectionism and domestic distortions.

Thus, although as the GATT Secretariat (1983) states, "It was the original purpose of the GATT . . . to strengthen governments against the particular pressures emanating from national economies," agriculture was largely excluded from this process by arrangements dictated by the U. S. Congress and trade negotiators who responded to the short-run concerns of special interests. They did not foresee that, without stronger GATT constraints, the EC would adopt a structure of agricultural protection in its CAP that would eventually cause severe disruption of international markets. Harris, Swinbank, and Wilkinson (1983, p. 275) observe that "Ironically the Community's creation of the CAP in its current form, with its use of variable import levies and export refunds as its principal agricultural trade measures, was only possible as a result of earlier measures by, principally, the USA." As U. S. agriculture has become increasingly dependent on exports for its continued prosperity, the lack of discipline in agricultural policy abroad has become increasingly detrimental to the interests of the United States.

What sets the Uruguay Round apart from the previous negotiations is a more widespread acknowledgment now that domestic agricultural policies need reform as much as the trade and border measures. Thus, the Ministerial declaration from Punta del Este that launched the new round stated that the negotiations would ". . . aim to achieve greater liberalization of trade in agriculture and bring all measures affecting import access and export competition under strengthened and more operationally effective GATT rules and disciplines." In addition to "improving market access through the reduction of import barriers," one object of the negotiations would be to increase "discipline on the use of all direct and indirect subsidies and other measures affecting directly or indirectly agricultural trade, including the phased reduction of their negative effects and dealing with their causes."

Three broad objectives (U. S. Department of Agriculture, Economic Research Service, January, 1987, p. 7) were identified for consideration:

- ... Improve market access through reduction of import barriers
- ... Increase discipline on the use of all direct and indirect subsidies and other measures affecting agricultural trade, reduce their adverse trade effects, and deal with their causes.
- ... Minimize the adverse effects that unnecessary health and sanitary regulations can have on trade in agriculture.

Though there is a notable distinction between consideration and adoption, this constitutes a comprehensive negotiating mandate. Note that the second objective goes well beyond the GATT tradition of dealing with import barriers alone. It represents the priority that both the United States and the Australian-led exporting nations (Cairns group) placed on agriculture in the upcoming round. The first objective would limit the trade restrictions permitted under Article XI and its exemption, while the second would, among other things, mitigate the havoc currently being visited on world markets via subsidy contests between itself and the EC which are permitted under the exemption to Article XVI. Ironically, the United States must now struggle to control the damage done under provisions that it helped to write. Unfortunately, removing negotiated distortions tends to be much more difficult than initiating them if the distortions confer benefits that have been capitalized as valuable assets of vocal producer groups.

The U. S. Administration, in supporting the above broad objectives, must contend with strong opposition from noncompetitive sectors, such as dairy and

sugar, in which producers risk losing greatly from liberalization. It also is bound to face strong opposition from the EC (which only reluctantly agreed to the agenda adopted at the Punta del Este conference) and from Japan.

Two severe structural problems with GATT must be recognized. First, GATT negotiations are poorly designed for countering the blockage tactics of organized interest groups. In effect, interest groups can deny concession-making authority to negotiators and then use the slow progress of negotiations abroad as one more reason to resist reform at home. The decentralization of the EC consensus process in CAP reform leads to particularly severe problems in this regard (see Petit et al., 1986, for an illuminating discussion of the process of incorporation of milk quotas in CAP). The separation of powers between the President and Congress similarly increases uncertainty about the strength of the negotiating stance of the United States.

Second, as Paarlberg argues:

"Because of the unfortunate idiom of GATT procedures, a sensible reform that ought to be undertaken for its own sake at home can be damned with the appearance of being a 'concession' offered to nonco-operative foreign nationals abroad."

Is there, then, any reason to expect progress on agriculture in the current GATT round? One should guard against naive pessimism. The structural problems, though serious, also apply to negotiations on nonagricultural trade; and they have not prevented extensive progress in that area in the past. GATT has had some substantial positive influence on trade and resource allocation in world agriculture in spite of the weakness of its agricultural provisions. For example, the EC has, in spite of strong internal pressure to "complete the CAP," respected its agreement in the Dillon Round to bind the tariff on

nongrain animal feeds. Direct U. S. pressure has been important in this case, but the desire of the EC to work within GATT rules has obviously influenced the outcome.

Furthermore, it should be clear to all participants that the negotiations are a game with an unusually large positive sum to be shared by the players. As noted above, estimates suggest that agricultural trade liberalization could reduce the benefits of the Eastern Bloc by between \$11 billion and \$23 billion annually. Though these figures are only about one third of the total gains to be had by GATT members, the knowledge that a large transfer is available from outsiders might increase the motivation of the players to reach an agreement. With respect to the current GATT negotiations, the challenge is to find the strategy most likely to move the negotiations in the direction of reform in a politically feasible fashion and to facilitate further movement as time goes by.

5. Strategies for the GATT Uruguay Round

Choice of a GATT strategy includes issues of structure and issues of substance. Structural issues include:

- (a) Separation of agriculture negotiations from negotiations in other fields.
- (b) Choice of a product-by-product approach versus an approach centered on general rules.

Obviously, (a) is encouraged by the adoption of "fast track" status for agriculture at Punta del Este. Speed is desirable, but separation of agriculture negotiations from those in other fields is unhelpful. Countries like

Japan and Korea, which have no significant amount of agricultural exports, have little to gain from concessions offered by the EC or the United States on agricultural imports. Conversely, Australia can be more persuasive to such countries if it can offer concessions in manufacturing or services. For similar reasons, negotiations covering multiple products offer more opportunities for persuasive deals.

Issues of substance include everything from the overall negotiating position to the identification of the selling points that will persuade important participants. Every effort should be made to preserve and strengthen the cooperation between the United States, Canada, and Australia and other members of the Cairns group. There is no doubt that these countries face an uphill task in extracting concessions from the EC and Japan. In the eyes of these countries, the United States has a credibility problem, given the history sketched above. Although Section 22 remains a continuing handicap, a bold step to increase confidence would be an offer to relinquish the GATT waiver (see above) which is, after all, contrary to the letter and the spirit of the broad reform goals of the United States. With respect to the EC, the United States could recognize the equivalence of its deficiency payments to export subsidies. One agricultural concession it could offer Japan would be a ban on all economic embargoes currently permitted under the Article XI exemption.²

The United States and its negotiating allies must also decide on the liberalization programs that it will propose. Among the (not necessarily exclusive) alternatives that have been suggested (U. S. Department of Agriculture, January, 1987, p. 7; Paarlberg, 1987, Chapter 2) are:

- (a) In the spirit of past GATT achievements in nonagricultural products, comprehensive conversion of trade barriers to tariffs. The tariffs could then be bound and gradually reduced multilaterally.
- (b) Classification of types of policy instruments, including domestic policy instruments, as consistent or inconsistent with GATT.
- (c) Multilateral measurement of the PSEs of the aggregate of all policy interventions affecting each commodity in each country. Once established, these could be bound and gradually reduced.
- (d) Piecemeal reform involving strengthening and tightening of the contents of Articles XI and XVI.

The first of these approaches has the advantage of consistency with normal GATT procedures. It was formally proposed by the United States to the GATT Committee on Trade in Agriculture (CTA) in February, 1975 (Paarlberg, 1987, Chapter 2). But it was rejected as too radical by the EC and the CTA, and by the farm interest groups in the United States.

Approach (b) is really a modification of the substance of the relevant GATT articles to include more comprehensive coverage of relevant domestic policies. This approach has some familiar pitfalls. Seemingly reasonable, innocuous, irrelevant, or overlooked measures have a way of becoming important distortions in practice, especially since the trade environment changes in the long run. And the classification process might open up attractive opportunities for capture by the relevant interest groups as time goes on; this is essentially one way of describing what happened in the drafting of Article XI, for example. (Some phytosanitary measures belong in this

category. For example, South Korea prohibits imports of California oranges because of medfly infestation, even though the medfly is no longer found in California; see California World Trade Commission, 1986).

Recent estimates (U. S. Department of Agriculture, 1987) of PSE calculations, as proposed in (c), were presented in Table 2. Development of a uniform measurement system is obviously feasible. Its advantages include the fact that a freeze on PSEs does not imply immediate disbandment of the whole policy structure. Nevertheless, its implementation would immediately make incentive differentials more responsive to shifting comparative advantage and more easily comprehensible to the public at large. If PSEs are frozen and non-tariff barriers are also frozen or at least subjected to existing GATT restrictions, then a problem anticipated by Paarlberg--substitution of more objectionable measures currently restricted under GATT, maintaining a constant PSE--can be avoided.

A more important problem with PSEs is that, as presently calculated, they do not include the cost of required acreage reductions associated with farm programs in the United States. More generally, PSEs do not distinguish "coupled" incentives (such as price supports) which encourage increased production from "uncoupled" transfers (income transfers independent of production) that do not.

Compensation for loss of distortion-inducing transfers is likely to be desirable or necessary in a long-run multilateral reform program. But such reform would not be fully reflected in PSEs as currently calculated. Hence, in addition to PSEs (which are valuable because they make the full extent of support obvious), we propose another measure, PIE. It would include only those components of PSEs that have a net influence on output. Thus, direct

income transfers unrelated to current or future production (as proposed below) would be excluded. PIEs should be the measure of phased multilateral reductions in distortions.

It is true that freezing of PIEs would mean short-run recognition of a status quo that may appear inequitable to nonsubsidizing nations (Paarlberg, 1987). But the Australian and Canadian proposals in Table 5 indicate a willingness to accept this fact prior to phased reductions of distortions.

A variant of this approach could use weighted PIEs across all commodities for a particular country. The specified target would be set in terms of these weighted PIEs. This, of course, would allow greater discretion for each country since the country could, if it desired, continue to distort one particular commodity while more than proportionately reducing the degree of subsidization for some other commodity. This proposal is quite consistent with the spirit of the Australian and Canadian proposals to use price gaps as subsidy measures. The PIEs, though harder to measure, appear to be a sounder basis of comparison, especially if some countries resort to cost-oriented interventions such as input subsidies or acreage restrictions.

If all other approaches fail, or are nonstarters, there is always the piecemeal approach (d) to fall back on. As indicated above, obvious targets are all the provisions of Articles XI and XVI that were once insisted upon by the United States.

6. Multilateral Initiatives Outside of GATT

As suggested by the review of section 2, the current starting position of global distortions in agriculture throughout the developed world will require a long and arduous adjustment path. The adjustments will not be painless.

However, the losses imposed upon consumers and taxpayers by current agricultural policies in developed countries of OECD are very substantial and the excess burden is high, especially if the welfare of the Eastern Bloc is ignored. As a result, the economic returns to reform appear very attractive compared with those available from most other areas of governmental activity.

The adjustment process must cover not only trade measures most closely related to traditional GATT concerns but to the whole array of instruments of agricultural policy with a predominantly domestic focus. Guidelines for reform of agricultural policy are slowly taking shape. The 1987 Economic Report of the President argued for negotiations and agricultural policy cooperation above and beyond GATT. The Reagan Administration began a coordinated move to raise the issue of agricultural protectionism at the 1986 Economic Summit. The issue will be raised once again at the 1987 Italian Summit. The dual hopes of many are that guidelines will be set by political leaders rather than by trade negotiators and that the political leaders will be more likely to recognize the broad national interest in reform and more powerful and flexible in multinational negotiations. In the Summit context, it is possible that the equivalent of a G-7 could be created for agriculture.

In these negotiations, the coordinated measurement and adjustment of PIEs (decoupled PSEs as discussed above) could be vigorously pursued. Measurement of PIEs could be the responsibility of a system of independent national institutions advocated by Carmichael (1986) and summarized in the right-hand column of Table 5. The Australian Industries Assistance Commission indicates that such independent organizations are indeed feasible. Measurement procedures could be defined and enforced internationally. These institutions could also help make the full extent of subsidies to agriculture more transparent to the population at large.

One problem with agricultural reform, multilateral or national, is that the general population that pays the price for current distortions shows considerable support for transfers to farmers. Some observers attribute this observation to ignorance of the true facts regarding the distributional effects of subsidies usually favoring those with the greatest output. Support for this view comes from the pervasive desire to hide the true cost of subsidization by keeping much of it out of the public budget.

It is quite possible, however, that even with full information there would still exist in many countries a national policy consensus that farmers, especially poor farmers, not be penalized excessively due to asset value reductions caused by policy revisions.

Major reforms will entail substantial adjustment costs, particularly in highly protected industries such as grains in the EC as well as sugar, tobacco, and dairy in the United States. Agriculture is highly capitalized with human resources, equipment, and land. Many resources are devoted to agricultural production based on the existence of incentives in government policy. Removing protection will cause the value of these investments to drop. Reform proposals need to address policies to facilitate adjustment and to provide compensation to those seriously disadvantaged by the removal of domestic programs--not only farmers but perhaps off-farm input suppliers, including banks, processors, and marketers of output.

In addition, compensation may be necessary to neutralize resistance to change. Aside from equity considerations in considering compensation, compensation may be needed to achieve the efficiency that comes as a result of policy change. In essence, it may be needed to buy the concurrence of the losers to the policy change. This mitigates potential resistance to the

policy reform from those adversely affected. If reform of a policy will result in higher real income overall, then the winners will be able to compensate the losers and still be better off." If the policy is beneficial for society, then some means must be found to placate coalitions of obstructionists, and compensation must be considered as an attempt to prevent obstructionist policy tactics. Thus, compensation may be considered necessary to win reform. In Working Party I of the Economic Policy Committee of OECD, the United States vigorously argued that we must begin to seriously evaluate transitory arrangements of compensation which could, in fact, be very generous given the long-run savings that can be achieved by rationalizing agricultural policy.

In designing a compensation program, moral hazard and time consistency are very important. Two aspects of moral hazard relevant to compensation design can be distinguished. The first relates to the "buy off" argument for compensation. Losers could accept the compensation for the policy change and yet continue to resist the policy change. An example of this comes from international trade adjustment in the early 1960s when workers adversely affected by tariff changes were given adjustment assistance while simultaneously their unions lobbied against the tariff changes. If compensation is given just to those whose assent is necessary to change policy, then there is an incentive to protest the change even if one is only marginally affected.

In addition, entry costs of political economic markets must be increased so that, once the losing interest groups are compensated, they are less likely to be able to return and seek rents once again.

The second aspect of moral hazard relates to the determination and payment of compensation and the associated problems of "compensation seeking." Unless

carefully designed, the announcement of plans for compensation will result in the devotion of resources to compensated-related activities (i.e., market entry), solely for the purpose of collecting compensation. If, for example, it is announced at time t that those producing sugar at time $t+1$ will receive compensation in exchange for a loss of import protection, then the number of acres devoted to sugar production will surely increase. This response is not related to market-generated economic signals but to compensation seeking. Such behavior incurs a net social loss that works to offset the efficiency benefits achieved by reform.

Even if entry by outsiders is barred, those within the sector gaining compensation will have an incentive to enlarge assets used to determine compensation. False claims may be made to increase the amount of compensation granted. This could include an increase in the acreage attributed to production or the padding of the value of the capital stock committed to a certain crop.

To avoid these problems, the design should not allow real resources to be used to affect the size of compensation. The obvious way to achieve this is to make receipt of compensation independent of current or future actions. Compensation could be calculated as the product of some historical output base and some fraction of the difference between the PSE that would have been paid under the old program rules and the PIE calculated currently. It would be paid only to those in the market at the base period prior to the announcement of the reform.

In implementing this compensation, the government must make every effort to convince the population that this reform will never be repeated in the future. New entrants to agriculture must be clearly aware that there is no prospect of future compensation schemes; otherwise, the price of their land would be

higher, reflecting prospects of compensation. Rate of return would then be below expectations--a fact that could, in turn, increase the pressure for future compensation. There are severe theoretical and institutional problems with attempts by governments to commit themselves against repeating a current compensation programs. In practice, however, governments do make commitments that have some credibility. If they did not, the whole topic of this paper would be moot.

In a widespread agricultural reform, the major market participants are likely to have net gains. Therefore, they can finance their reforms with domestic tax revenues collected from the consumers who gain from reform and still leave consumers and producers better off--assuming the marginal welfare cost of taxation is not too high. But the net gains may be quite uneven and some poorer, less-developed countries dependent on grain exports would likely lose substantially as would the Eastern Bloc. The large gainers, including the Cairns group and the United States, might target aid contributions to reduce the harm done to poorer countries. Differences in gains between wealthy countries may be offset by, for example, concessions on barriers to industrial trade that tend to be high in the Cairns group.

7. Unilateral Reforms

In general, multilateral reforms offer higher net benefits than unilateral action. This does not mean that unilateral reforms are undesirable if no coordination can be achieved. On the world scene, one country, New Zealand, has committed itself to virtually complete liberalization of agriculture. Given its comparative advantage and its exposure to world markets, other alternatives have proved unacceptably costly.

Two policy choices already unilaterally adopted by the United States have opposite implications for trade reform prospects. As mentioned above, reduction of loan rates and the introduction of marketing loans have increased the price competitiveness of the United States in agricultural markets. This has greatly increased the incentives for other exporters to come to the negotiating table and is probably responsible for the developing consensus among the United States, Canada, Australia, and the other "nonsubsidizing" exporters. On the other hand, the very large acreage reductions adopted this year for domestic reasons suggest that the United States will still tend to raise world prices by greatly limiting acreage beyond legitimate conservation requirements if not by holding excessive stocks. This will not help to persuade export subsidizers to mend their ways.

Guidelines for further unilateral reform have been outlined in the Economic Report of the President (January, 1987). There are four major components of a coherent reform; they are: (a) complete decoupling, (b) targeting, (c) resource conservation, and (d) joint and multilateral implementation of decoupled and targeted subsidies. In the structure of this reform, it is explicitly recognized that those groups who lose could be compensated by nondistortionary transfers.

In the movement from current policy to longer term coherent policy within the United States, the Reagan Administration seeks revisions in the 1985 Food Security Act. To allow ample time for structural adjustment, to reduce budget exposure, to provide fairness, and to move more meaningfully in the direction of decoupling production from payments, the Reagan Administration has proposed five revisions in the 1985 legislation. Specifically, it is proposed that the 50-92 Provision be extended to a 0-92 Provision; that for purposes of the

payment limitations, the definition of a "person" be administratively and legislatively tightened; that total payments be limited to \$50,000 per person; that there be redirection of target prices from 1985 by 10 percent per year through 1990; and that more flexibility be permitted in the setting of loan rates for program crops. These proposed revisions pertain to wheat, feed grains, cotton, and rice.

The Administration also proposes interesting changes in the U. S. sugar program to deal with distortion generated by current policy. For this commodity program, the Administration has proposed reform that would lower the price-support loan rate for sugar by 12 cents a pound while providing transition payments to cane and beet sugar producers as compensation over a four--year adjustment period. These transition payments effectively transfer some of the burden of producers' support from consumers to taxpayers. Direct payments to producers start at 6 cents a pound, are scaled in accordance with production, and decline in subsequent years. These total payments represent only partial compensation and the costs of such transfers are expected to total slightly more than \$1 billion over the total adjustment period. This proposed reform is expected to reduce domestic production from 6.4 million tons in fiscal year 1987 to 4.3 million in fiscal year 1992. Correspondingly, it is expected that import quotas will be increased from 1.2 million tons in fiscal year 1987 to 4.2 million in fiscal year 1992. Prices faced by domestic sugar producers will fall as a result, and it is expected that world prices of sugar will increase dramatically.

The high cost of this program and the idea that very large direct payments would be made to some producers have generated some negative reactions. If the true subsidy equivalent of these programs were made more transparent

via, for example, the institutional structure proposed by Carmichael, this type of reaction might be less important.

8. Conclusions

The advocates of liberalized agricultural trade are close to a consensus on the broad objectives of reform and have a great interest in coordinating their strategies for negotiation. Within GATT, the best that one might hope for is agreement to:

- (a) Measure PIEs (or "decoupled PSEs") and to freeze them at current levels.
- (b) Freeze the more distortionary components of the PIEs at current levels or at least continue to subject them to the weak current GATT provisions for agriculture.
- (c) Over time, gradually reduce all PIEs in a coordinated fashion--with effective incentives for multilateral compliance.

If these objectives have any chance to succeed, they should be chosen by the advocates of liberalization as their joint GATT negotiating position. It constitutes, in effect, a complete reversal of agricultural exemptions and waiver obtained in past negotiations by the United States.

What concessions can be offered within GATT to opponents of reform? The United States must, at a minimum, offer to relinquish its GATT waiver. It could also offer as a bargaining chip something along the lines of a control on the liquidation of its current commodity stocks and perhaps a promise to retain some acreage controls to ease the transition over the next few years.

Other major nonsubsidizing exporters can join with the United States in offering concessions on restrictions of imports of nonagricultural goods and services.

The reform package outlined here will no doubt need strong support outside of GATT if it is to have any hope of success. The same set of proposals should be pursued in the OECD and at the Economic Summit in June. An important objective of non-GATT negotiation could be the establishment of an independent institutional structure for measuring PSEs, PIEs, and the distributional effects of transfer flows. This information will help make the true nature of current policies more obvious to the general public in all countries and also provide the means of coordinating and monitoring the multilateral reform process as market conditions change.

To satisfy fairness concerns and to mitigate producer opposition, a generous system of compensation should be offered to those (agricultural producers and others) with significant losses from the reforms. These should be based on PSEs and on production history before the announcement of policy reform. New entrants should be explicitly excluded from any compensation.

The program outlined above is, to say the least, not a sure winner. But the stakes are high, and the opportunities for reform are greater than they would be in more prosperous times. One advantage of the package is that, in the short run, there is no need for wholesale disruption of the current protective structure, nor for abandonment of those GATT provisions that provide some protection against further deterioration in the international trading environment.

Footnotes

¹ The ostensible rationale was that the inherent risk and uncertainty in the sector was very great relative to the riskiness of the industrial sector. Ironically, the exemption and subsequent developments have reduced the stability of agricultural markets.

² Whether the United States would also want to relinquish the right-to-foreign-policy-related embargoes (such as imposed in 1980) is a question that requires thought. Perhaps the last grain embargo against the Soviet Union was much less costly all round than other (perhaps military) actions that might have been substituted for the embargo.

References

- Anderson, Kym and Yujiro Hayami. Political Economy of Agricultural Protection: The Experience of East Asia. Sydney, Australia: George Allen and , 1986.
- Bureau of Agricultural Economics, Agricultural Policies in the European Community, Canberra, Australia, Australian Government Publishing Service, Policy Mnograph No. 2, 1985.
- California State World Trade Commission. California Agriculture: Barriers to Trade, Volume 1. The Pacific Rim, Sacramento, California, 1986.
- Carmichael, W. P. "National Interest and International Trade Negotiations," The World Economy, December, 1986, pp.341-357.
- Dam, Kenneth W. The GATT: Law and Economic Organization, Chicago: University of Chicago Press, 1970.
- Economic Report of the President, Washington, D.C.: U. S. Government Printing Office, January, 1987.
- Frankel, Jeffrey A. "The Impact of U. S. Economic Policies on a Commodity-Exporting Debtor: The Case of Thailand," IBER Working Paper 8729, University of California, Berkeley, February 3, 1987.
- GATT Secretariat, International Trade, 1982-83, Geneva, 1983.
- Harris, Simon, Alan Swinbank, and Guy Wilkinson, The Food and Farm Policies of the European Community, New York: John Wiley and Sons, Inc., 1983.
- Hillman, Jimmye S. Nontariff Agricultural Trade Barriers, Lincoln, Nebraska: University of Nebraska Press, 1978.
- Johnson, D. Gale. "Domestic Agricultural Policy in an International Environment: Effects of Other Countries' Policies on the United States," American Journal of Agricultural Economics, Vol. 66, No. 9 (December, 1986) pp. 735-44.

Johnson, D. Gale. "Domestic Agricultural Policies and World Grain Markets,"
mimeo, undated.

Miller, Geoff. The Political Economy of International Agricultural Policy
Reform, Canberra, Australia: Department of Primary Industry, Australian
Government Publishing Service, 1986.

Paarlberg, Robert L. Fixing Farm Trade: Policy Options for the United States,
Draft, February, 1987.

Petit, Michel. Determinants of Agricultural Policies in the United States
and in the European Community. Research Report 51, Washington, D.C.:
International Food Policy Research Institute, 1985

Petit, Michel, Michele de Benedictis, Denis Britton, Martijn de Groot, Wilhelm
Henrichsmeyer, and Francesco Lechi. "Agricultural Policy Formation in the
European Community: The Birth of Milk Quotas and CAP Reform," draft
manuscript, December, 1986.

Rausser, Gordon C. "Political Economic Markets: PERTs and PESTS in Food and
Agriculture," American Journal of Agricultural Economics. Vol. 64, No. 5
(December, 1982) pp. 821-833.

Tyers, Rodney, and Kym Anderson. "Distortions in World Food Markets: A
Quantitative Assessment." Background paper for the World Bank, World
Development Report, 1986.

United Nations, Food and Agriculture Organization. Agricultural Protection:
Domestic Policy and International Trade. FAO Conf. Doc. C73/LIM/9, 1973.

United Nations, Food and Agriculture Organization. Agricultural Protection and
Stabilization Policies: A Framework of Measurement in the Context of
Agricultural Adjustment. FAO Conf. Doc. C75/LIM/2, 1975.

- U. S. Department of Agriculture, Economic Research Service. "Embargoes, Surplus, Disposals, and U. S. Agriculture." Staff Report No. AGE 5860910, November, 1986a.
- U. S. Department of Agriculture, Economic Research Service. Rice: Situation and Outlook Report, Washington, D.C.: United States Government Printing Office, September, 1986b.
- U. S. Department of Agriculture, Economic Research Service, Government Intervention in Agriculture, January, 1987.
- Vogt, Donna V. and Jasper Womack. The Common Agricultural Policy of the European Community and Implications for U. S. Agricultural Trade. Study prepared for the Republican Members of the Joint Economic Committee, 99th Congress of the United States. Washington, D.C.: U. S. Government Printing Office, S.PRT 99-191, 1986.
- White, Eric W. "Europe in the GATT," address given at Europe House, London, May, 1960, p. 5.
- World Bank, World Development Report, 1986. New York: Oxford University Press, 1986.
- Wright, B.D., K. G. Stamoulis, Y. Nishiyama, D. Pick, C. Carter, and A. McCalla. "Trade Barriers and Macroeconomic Factors Affecting Exports of California Specialty Crops," draft (March 19, 1987) prepared for the Agricultural Issues Center Symposium on Marketing California Specialty Crops: Worldwide Competition and Constraints, June 1-2, 1987, Sacramento, California.
- Zietz, Joachim and Alberto Valdes. "The Costs of Protectionism to Developing Countries," Washington, D.C.: World Bank Staff Working Paper No. 769, 1986.