AN AUSTRALIAN PERSPECTIVE ON AGRICULTURAL TRADE AND THE URUGUAY ROUND

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Australia is a small open trading economy that depends substantially on exports from the agricultural and mining sectors to balance imports of manufactured products, capital equipment and services. This trading pattern reflects the relative resource endowments of the economy which is rich in natural resources relative to population and has a relatively high wage structure relative to its Asian neighbors. Although Australia has a substantial manufacturing sector, much of the sector is import competing and protected behind relatively high import barriers, although it should be noted that these barriers to trade are slowly being dismantled (Kerin and Cook).

Since there are substantial economic gains to be had from freer trade, Australia has slowly been moving to lower import protection and assistance structures to promote economic growth through further specialization in those activities in which it can be internationally competitive. The recent policy announcements of the Australian government are designed to reduce disparities in protection across the whole economy (Kerin and Cook).

The Australian government also had a pivotal role in the formation of the Cairns Group which has proposed substantial reform to agricultural trade in the current General Agreement on Tariffs and Trade (GATT) round (Cairns Group). The agricultural proposals are far reaching, involving the phasing out of all quantitative barriers to trade in agricultural products, the elimination of export subsidies, variable levies and minimum import prices, the binding of all tariffs at low or zero levels and the rewriting of the GATT rules to reflect this. Assistance to agriculture, at least among developed countries, would be limited to structural adjustment measures that do not impact negatively on trade; nondistorting measures to stimulate domestic consumption; noncommodity specific aid for research, extension, education and other government services; disaster relief; and humanitarium aid. Finally, direct income support decoupled from production and marketing would be allowed. In effect, the proposal

aims to shift assistance to agriculture away from market intervention instruments to more trade neutral measures of assistance. The Cairns proposals include an early relief package and a proposed ten-year maximum phase-in period.

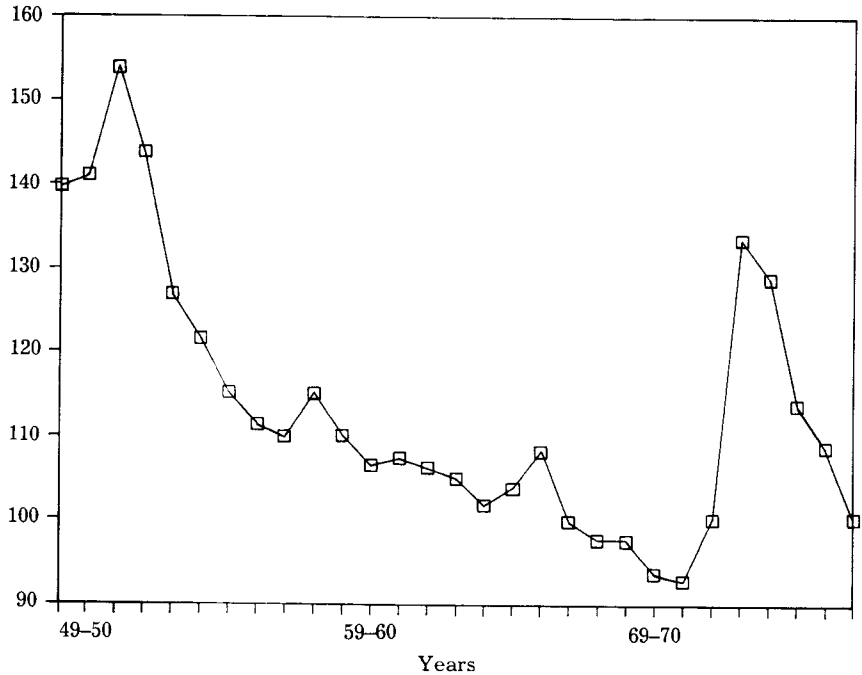
The Incentive to Reform Agricultural Policies

When D. Gale Johnson first wrote his book, *World Agriculture in Disarray,* in 1973 he surely wasn't expecting to find those world markets in even greater disarray fifteen years later. Had it not been for the production shortfall largely caused by the U.S. drought, world grain markets would still be awash with grain and the immediate outlook for producers would be poor. As it is, grain stocks are still substantial and if farmers respond to the higher world prices as they did to the higher prices of the 70s we can expect supply to outstrip demand growth within a few years. This would result in another financial crisis of the sort experienced in the early 1980s. Why is this?

As unpalatable as it may be to many farmers, rapid productivity growth, including the spread of the "Green Revolution" technology in developing countries, has outstripped demand growth. Demand growth has been dampened by the slowdown in economic and population growth in many developing countries and the foreign exchange constraints they face because of the very high levels of overseas debt they are required to service. Output growth has been stimulated by the support policies of many industrialized countries, resulting in enormous "excess capacity" in many agricultural sectors of these countries (International Agricultural Trade Research Consortium 1988a, p. 2). Excess capacity reflects the fact that many agricultural sectors have too many resources employed in agricultural production relative to demand.

In the early 1980s, this excess capacity manifested itself in rising stock levels and a blowout in the budget costs of government support for agriculture, particularly in the European Community (EC) and the United States. By 1986 each was spending from budget sources alone about $US 25b on farm programs. On top of this there were substantial consumer taxes which transferred additional support to producers. It is estimated that total transfers to producers exceeded $US 50b in the EC in 1986 and over $US 35b in the United States in the same year (International Agricultural Trade Research Consortium 1988a, p. 3). Japanese transfers to a much smaller agricultural sector approached U.S. levels. Other industrialized countries and many developing countries also support their agricultural sectors but not to the same extent as the "big three." Industrial market economy support for agriculture is estimated to have exceeded $US 150b in 1986 (International Agricultural Trade Research Consortium 1988a, p. 3). Although this level is likely to decrease over the next few years mainly due to world market prices being higher, if existing policies are left in place the costs can be expected to rise

Figure 1. Real Price Index U.S. Agriculture
1949–1986



again in the future as world prices once again return to their longer-term trend which is downward in real terms (Figure 1).

Why Reform Agricultural Policies?

There are at least four compelling reasons why we need to reform agricultural policies:

1. *Agricultural support policies are costly,* both in terms of direct budget costs and in terms of costs imposed on consumers and other sectors of the economy. Assistance to one sector is a tax on another. The net result is a loss of real income to the economy.

2. *Agricultural support policies are often misguided economically.* While price and income support measures can provide some relief from the declining terms of trade facing agriculture, this relief can only be temporary or it becomes excessively expensive as the gap between domestic support prices and world prices widens. Farmers need to continually adjust the size and efficiency of their farm operation if they are to survive financially in this environment. The process of economic adjustment can be impeded by price and income support programs that isolate farmers from market trends. Inevitably such policies cause land prices to become inflated and this slows the adjustment process down. While high land prices might be good

for this generation of farmers it is not good for the next, as it raises the cost of entering farming.

3. *Agricultural support policies reduce trade and real income levels.* This effect is not easy to see since what we observe is a trade distorted outcome of all the existing policy interventions and not the trade and income levels we would observe in the absence of the policies. Trade barriers in the form of import quotas, high tariff levels or other forms of restrictive policies restrict the flow of trade in agricultural products and prevent resources being allocated to their highest value use.

4. *Agricultural support policies impose significant costs on other countries.* Agricultural surpluses created by government subsidies must be sold on world markets and this reduces the size of the markets available for other exporters and lowers the price they can receive for those exports. It is this effect that gets labeled as "unfair" trading practices and attracts much of the media's attention. It is clear from the above, however, that the "unfair" trading practices can be directly traced to the domestic farm policies.

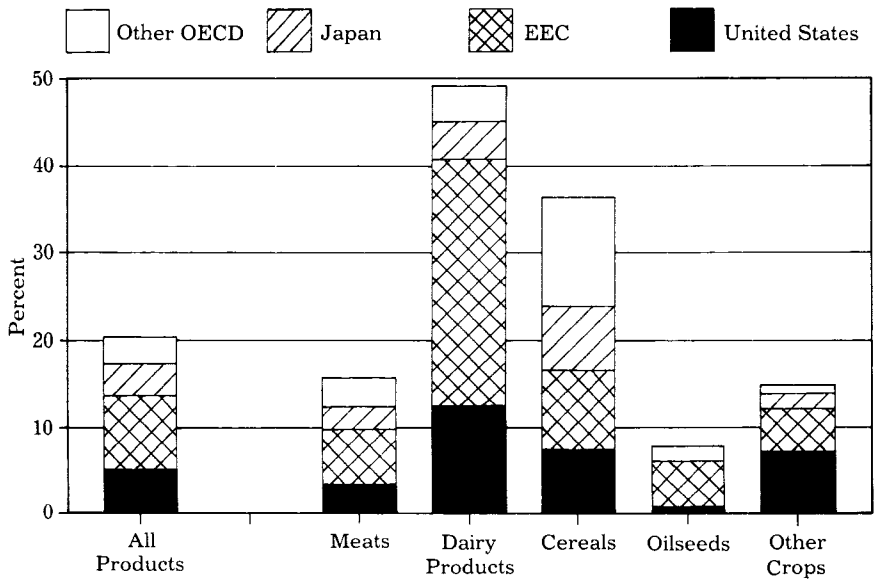
A number of economic studies have gone a considerable way toward quantifying some of these effects. The high costs of the EC Common Agricultural Policy are now well documented (Australian Bureau of Agricultural Economics) and the costs of other industrial country policies are coming in for greater scrutiny following the Organization for Economic Cooperation and Development (OECD) Trade Mandate study (Organization for Economic Cooperation and Development) and other analyses conducted since that time.

There are a number of measures that can be used to quantify the level of government support for agriculture. Aggregate measures known as producer subsidy equivalents (PSEs) and consumer subsidy equivalents (CSEs) are now being widely used. The PSE measures the gross producer subsidy provided by government support at current prices. It includes all the direct and indirect transfers provided by government programs into a single measure. Because government support provided to producers in many cases increases the domestic price of a product, this transfers income from consumers to producers and this is measured in the CSE. Both the PSE and CSE can be positive or negative depending on whether producers and consumers are taxed or subsidized.

The PSEs and CSEs provide a means of comparing assistance across countries. Based on 1986 data, Japan provides the highest level of producer support, followed by the countries of Western Europe, the Newly Industrialized Countries (NICs) of Asia, Canada, the EC and the United States (Figure 2). Other Western Europe, Japan and the NICs tax their consumers the most in percentage terms based on this data, which was compiled by the Economic Research Service of the U.S. Department of Agriculture (International Agri-

cultural Trade Research Consortium 1988a). Australia, New Zealand and the Lesser Developed Countries (LDCs) have low to negative producer support overall, although individual commodities can be high. Also, PSEs and CSEs can fluctuate considerably due to the impact of exchange rate adjustments between countries and changes in world price levels. Between 1984 and 1986 the levels of PSEs and CSEs generally increased.

Figure 2. World Price Increases from Liberalization Contribution by IME Countries in 1986



A number of attempts have been made to model the effects of agricultural trade liberalization on producers, consumers and taxpayers. These include studies by Tyers and Anderson (1986), the OECD, the International Institute for Applied Systems Analysis (IIASA), and Webb, Roningen and Dixit. Research is also underway to look at the economy-wide effects of liberalization using general equilibrium modeling (Centre for International Economics).

The Anderson-Tyers model has been used extensively to investigate the effect of trade liberalization on agricultural commodity markets (see Tyers and Anderson 1986 for the analysis of selected commodity markets for the World Bank and Tyers and Anderson 1987 for an analysis of OECD country effects). Policies of both the EC and Japan were found to have a substantial price decreasing effect on world prices for a range of commodities, although the magnitude of these effects varies between commodities. Similarly, these policies have substantial effects on inducing price instability into world markets.

The EC is a major contributor to instability in wheat, coarse grains and dairy products. Conversely, its policies act to stabilize world prices in nonruminant meats to some extent. Japan's policies induce major instability into ruminant meat markets and some instability into coarse grain and dairy markets. Other country policies were also found to have price decreasing and destabilizing effects on world markets.

World trade in agricultural commodities is estimated to increase substantially, at least in meats and rice, with the removal of assistance policies. In other commodities the net increase in trade is not very great for a number of reasons. Firstly, increased exports from traditional exporters are offset by a decrease in exports from Europe. Secondly, substitution occurs in production and consumption in response to the changing price relativities. For example, the high domestic prices of ruminant meat and dairy products in East Asia have encouraged the imports of feedgrains, rather than meat and dairy products directly.

With a move to free trade, imports of grain decline and meats increase. In contrast, the relatively high prices for coarse grains in Europe have reduced import demand, relative to the free trade scenario. These various shifts in trade patterns tend to offset themselves with respect to trade volumes, although the underlying effects on producer and consumer welfare are substantial. The results also indicate that policies that isolate a country's agriculture from world markets lead to increased instability of world markets as the adjustment pressures associated with changes in supply or demand are forced onto others.

The Static World Policy Simulation (SWOPSIM) model is a modeling framework developed to allow the effects of domestic agricultural policies on world trade to be evaluated (Roningen). It has been applied to analyzing the effects of trade liberalization in developed countries (Roningen, Sullivan and Wainio) and in the Pacific Basin (Webb, Roningen and Dixit). More recent results of liberalization of agricultural policies in the SWOPSIM framework for developed and developing countries were recently reported at the International Agricultural Trade Research Consortium (IATRC) meeting, "Bringing Agriculture into the GATT" (International Agricultural Trade Research Consortium 1988a, b, and c).

Some important conclusions from this analysis are:

- Elimination of all existing agricultural policies of the industrial market economies would increase world agricultural prices by an average of 20 percent.

- Removal of government assistance policies in the EC and the United States makes the greatest contribution to improving world prices. Removal of EC policies would raise world prices by an average of 8 percent, with the largest increases in the dairy, sugar, rumi-

nant meat and wheat markets. Removal of U.S. policies would raise world prices by 5 percent, with the greatest increases in dairy, sugar, coarse grains, cotton and wheat.

- The policies of Japan and other Western European countries do not have a large effect on world prices, with the exception of rice in Japan. Japanese rice policies have more effect on world rice prices than all other country policies combined.

- The national income of the industrial market economies is improved considerably by the removal of agricultural assistance, although the benefits and costs of removing policies is unevenly spread among different groups. Taxpayers costs are lowered dramatically, while producer and consumer groups gain or lose depending on the specific policy mix in each country. Consumers in the EC and Japan gain over $US 20b while consumers lose $US 13b in the United States because of higher food prices.

- Producer income in the highly assisted industries is lowered by the removal of assistance policies and this, in the absence of any alternative action, is likely to cause resistance to policy reform in those countries. These income losses are the greatest for rice producers in Japan, beef producers in the EC and grain producers in the United States. The losses are the greatest if reforms are implemented on a unilateral, rather than a multilateral, basis. This provides the incentive for the industrialized countries to participate in a negotiated reduction in assistance, rather than going it alone.

- For developing countries the picture is mixed. The developing exporters would gain through higher world prices and the market opportunities created by the withdrawal of some of the highly assisted industrial market economies from export markets in which they currently compete. However, many of the developing countries currently support or tax their own agricultural sectors and it is not clear whether they would gain or lose from participating in liberalization themselves. Food importing countries will face higher food importing costs, although the higher prices should stimulate their own agricultural sectors. This is an area requiring further analysis.

- Trade liberalization would probably lead to more stable world prices for agricultural commodities because supply and demand would be more responsive to changes in prices caused by weather and other unplanned events. The quantitative impact of this effect is more uncertain, however, because countries may still choose to isolate their producers and consumers from the full variability of agricultural prices through stabilization arrangements.

The Policy Challenge

From a global perspective the evidence is strong that the reform of agricultural policies to remove or substantially reduce the trade dis-

torting effects of agricultural policies is a highly desirable goal. The question is why, if reform is such a good idea, that we don't see it happening? The answer to this question is a complex one involving both economic and political dimensions. At the heart of the issue, however, is the conflict between domestic agricultural policy objectives and the international policy objective of promoting free trade among countries. Essentially the two are in conflict and disputes of this sort have not been successfully resolved by the GATT process to date. There are some hopeful signs that this round of the GATT will be different.

Agriculture in the GATT

The General Agreement on Tariffs and Trade (GATT) originated in 1947 as a relatively minor element of a more ambitious plan to promote peace and economic progress through the establishment of an International Trade Organization (ITO) (U.S. Congress). The ITO was to regulate trade relations and promote trade liberalization among countries in a similar way that the World Bank promotes economic development and the International Monetary Fund deals with international monetary problems. The ratification of the ITO's charter was, however, vetoed by the U.S. Congress and only the General Agreement survived (U.S. Congress).

The General Agreement is a detailed legal document that defines the operating rules under which signatories to the Agreement are expected to abide. Unfortunately, while the principles embodied in the Agreement are quite clear, the articles that attempt to make the Agreement operational are not. This provides GATT signatories ample scope to implement policies that are contradictory to the spirit, if not the letter, of the Agreement. GATT enforcement procedures are weak, relying on persuasion rather than penalty. Thus, many countries have become frustrated with the proliferation of nontariff barriers which have come to replace tariffs as the most significant barriers to trade in the last few decades. Ninety-six countries are currently contracting parties to the GATT, with another twenty-eight de facto members and one provisional member (National Center for Food and Agricultural Policy).

In spite of the general ineffectiveness of GATT disciplinary procedures, previous multinational rounds have made some progress toward trade liberalization, particularly in manufactured products. Unfortunately, agriculture, until the current Uruguay Round, has explicitly been excluded from these liberalization efforts. The reasons for this lie in special concessions made to the United States in 1955 to allow it to maintain quantitative restrictions on farm imports into the United States. These restrictions were considered necessary by the U.S. Congress to sustain domestic farm support prices legislated in Section 22 of the Agricultural Adjustment Act of 1933. Thus,

U.S. domestic farm policies have always taken precedent over trade liberalization efforts in the GATT.

Ironically, other countries have sought to exploit the loophole provided by the United States in the case of agriculture. In particular, the EC and Japan (among others) have chosen to pursue policies of "self-sufficiency" in food products, employing a whole range of trade distorting measures to do so. The measures used by these countries, including quantitative import restrictions and explicit export subsidies, have been very disruptive to trade, imposed substantial costs on consumers and other exporters, yet were legitimized under the GATT Agreement. To bring agriculture into the GATT framework and to achieve significant trade reform will require a change of attitude by the participating countries and a rewriting of the GATT rules to remove all special treatment for agriculture (Hathaway).

The key issue becomes one of defining an acceptable set of agricultural policies that are not trade distorting yet provide policy flexibility to achieve domestic policy objectives for agriculture. How this is to be achieved is yet to be fully worked out, but it will involve a shift in policy emphasis away from direct price and income support to more trade neutral measures of assistance.

Governments intervene to achieve a variety of objectives. In the industrial market economies a key objective is to support farm incomes and a wide range of intervention measures are used. These range from direct trade intervention at the border such as quotas, variable import levies and export subsidies, through to indirect income support via deficiency payments and two price schemes. Production subsidies are common and various programs are deployed to achieve price and income stabilization. Almost all of these programs are internationally destabilizing and trade distorting. They all would be subject to GATT disciplines and rules if a more liberalized trading environment were to prevail.

One proposal to reduce the trade distorting effects of farm income support is to "decouple" income support from farm production decisions. Such payments would not affect production or consumption decisions at the margin and hence would not be trade distorting. There are various ways income support could be decoupled including the use of negative income taxes, adjustment assistance or direct welfare payments. A relatively new proposal is to use a Production Entitlement Guarantee (PEG) to provide direct income transfers to farmers (International Agricultural Trade Research Consortium 1988b). A PEG is prespecified limit on the quantity of production for which a producer would be entitled to receive a guaranteed price. Each farmer would be able to produce as much output as he likes but only the PEG quantity would receive the higher price. All other production would be at world market prices. Consumer prices under the PEG would also be at world market prices which would require the dismantling of all border and internal support measures apart

from the PEG (International Agricultural Trade Research Consortium 1988 b, p. 4). The cost of the PEG payments would be made direct from budget sources. While this would promote domestic policy transparency it may not be very attractive to a government trying to reduce government expenditures. On the other hand, direct transfers of this sort could be made more efficiently and would insure that payments were targeted to the appropriate producer groups.

Other policy interventions such as environmental policies and government support for research and development would be allowed under the revised GATT rules, provided they were not considered deliberately trade distorting.

Negotiating the Uruguay Round

The latest round of the GATT was launched in Punta del Este, Uruguay, in September 1986. For agriculture the Uruguay Round is different to previous rounds in that for the first time it was recognized that domestic policies are the fundamental cause of the agricultural trade problems and that to solve these problems there is a need to implement a phased reduction in trade distorting subsidies, improve market access and minimize the adverse effects of sanitary and phytosanitary regulations on trade. Various countries have also called for a rewriting of the GATT rules and disciplines and improved dispute settlement procedures to improve the effectiveness of the GATT in the area of agricultural trade. This is an ambitious agenda given the history of previous rounds.

The United States, European Community, Japan, Canada, the Cairns Group and the Nordic Countries have all tabled proposals providing their views on the issues. The U.S. proposal is the most far reaching, involving the complete elimination of all trade distorting subsidies over a ten-year period. It is silent on any short-term action. The EC on the other hand wishes to see short-term action to stabilize markets but says nothing about the long term. Most agree to the use of an aggregate measure such as the PSE to monitor the progress of the GATT participants toward freer trade.

The Cairns Group of food exporting countries, which comprise Argentina, Australia, Brazil, Canada, Chile, Columbia, Fiji, Hungary, Indonesia, Malaysia, New Zealand, the Philippines, Thailand and Uruguay, have put forward a comprehensive approach to the negotiations, encompassing both short- and long-term objectives for the negotiations. The proposal includes the notion of "early action" to achieve some immediate improvements in the agricultural trading environment. The principal elements of that proposal are outlined in Table 1. The Cairns Group is looking to the mid-term review for a commitment by the major parties to the broad framework outlined in its proposals and an agreement to seriously begin the process of winding back trade distorting policy intervention in agriculture. This

Table 1. The Cairn's Group Proposal

Short-term

- Immediate freeze on support and subsidies that distort trade and an agreement not to introduce new measures
- Agree to reduce the aggregate monetary level of output based support by 10 percent in each of 1989 and 1990
- Exempt developing countries from contributing to the first steps to long-term reform

Long-term

- Prohibit all measures not explicitly provided for in the GATT
- Eliminate all provisions for exceptional treatment of agriculture
- Bind all agricultural tariffs at low or zero levels
- Change GATT rules to prohibit the use of all subsidies and other support measures having an effect on trade
- Harmonize sanitary and phytosanitary measures based on multilateral standards and implement effective dispute settlement procedures

would be in the form of a specific commitment to reduce aggregate monetary support to agriculture by 10 percent in 1989 and 1990. The negotiating framework outlined at the recent IATRC meeting has much in common with the proposals of the Cairns Group (International Agricultural Trade Research Consortium 1988c).

Recent analysis by the Australian Bureau of Agricultural and Resource Economics (ABARE) on the effects of policy adjustments that would be needed in the EC, United States and Japan to achieve a 10 percent reduction in aggregate assistance from their 1986 levels indicate that the policy changes would not be large and the effects on world prices and aggregate trade would be moderately small (Australian Bureau of Agricultural and Resource Economics). Therefore, getting agreement to such a step might not be too difficult.

There are some encouraging signs that this round of the GATT will be more productive than previous ones. There appears to be a strong political commitment to reducing assistance in the form of the Ministerial Declaration released at the launching of the Round; the OECD May 1987 Communique; and its subsequent endorsement by the Heads of State at the Venice Summit in June of the same year. Although the proposals of the major participants are different in some major aspects, there is enough common ground to make a serious commitment to reform at the mid-term review in December. The negotiating framework provided by the Cairns Group and the IATRC group has sufficient flexibility to accommodate different approaches to policy reform. The main stumbling block may be a fundamental difference of philosophy between the EC and the United States on the role of markets versus the role of government in the regulation of agricultural trade. Some compromise in the short term by both sides is needed if the political momentum of the negotiations is not to be lost and real progress on the longer-term objective of undistorted trade in agricultural products is to be realized.

The Australian government is strongly in favor of trade liberalization in the current round of GATT negotiations. As a small trading

economy it has much to gain from freer access to international markets. The Australian economy remains dependent on the export of primary products despite considerable diversification of the economy in the post World War II period. Some manufacturing industries (particularly textiles, clothing, footwear and motor vehicles) and a number of agricultural industries (dairy, eggs, some fruits, sugar and rice) benefit from relatively high support levels arising from import restrictions of various types (Johnston 1988a and 1988b).

The recently announced policy reforms (Kerin and Cook) are designed to lower these import barriers through a phased reduction in support levels. In a sense the Australian government has decided to go it alone on trade liberalization through a phased approach to reducing industry protection across the board. By allowing time for these changes to be implemented and providing adjustment assistance to affected industries the adjustment costs of changing support are minimized.

Conclusions

The agricultural crisis of the 1980s was exacerbated by the agricultural assistance policies of the industrial market economies which prevented declining real agricultural prices from being reflected in producer production decisions and prevented the lower real prices from being reflected in consumers' consumption decisions. This led to a persistent imbalance in supply of grains, relative to demand. Policies relating to other commodities such as dairy, sugar and livestock also distorted trade patterns.

The long-term trend in real agricultural prices is downwards, albeit with considerable year-to-year fluctuations. In such an environment it is not possible to isolate producers from market forces indefinitely, otherwise the budget and consumer costs of such policies will become prohibitive. There is a need to switch the policy emphasis away from price and income support to policies that encourage adjustment and improvement in economic efficiency of farm structure.

In addition to imposing economic costs at home, agricultural assistance policies impose economic costs abroad, as the agricultural surpluses created by price and income support are transferred to the international marketplace. To date the GATT has been ineffective in imposing discipline on domestic policies, the cause of the market imbalances observed in the 1980s. There is now sufficient empirical evidence to support the proposition that the economic costs imposed by inappropriate agricultural policies are large and worth addressing in the GATT.

The GATT has not proven to be a very effective means of promoting freer trade in agricultural products, in contrast to considerable success in reducing barriers to trade in manufactured products. The reasons for this largely relate to the unwillingness of the industrial

market economies to subject their domestic agricultural policies to international scrutiny. The waiver provided to the United States in 1955 has been exploited by others and as a consequence world trade in agricultural products has become highly distorted, imposing considerable costs on low cost developed country exporters and reducing market access to developing countries many of which are highly dependent on their agricultural sectors for employment and trade. Global welfare has been significantly reduced as a consequence.

The policy challenge is to find a set of alternative agricultural policies that do not significantly distort trade yet enable the legitimate pursuit of domestic political objectives. A range of policies associated with the provision of public goods such as research and development, disease control, and environmental policies are not seriously under challenge. What is at stake are price and income supports that isolate producers and consumers from international prices and as a consequence result in exportable surplus being sold on the international market at below cost. Alternative ways of providing short-run support to farmers, such as through income stabilization schemes which provide safety nets during severe market downturns, are also likely to be permissible under revised GATT rules.

The political support for policy reform evident at the launching of the Uruguay Round and at the OECD meetings now needs to be translated into a program of action. The mid-term review, to be held in Toronto in December, provides such an opportunity. First, agreement is needed on the key elements of the negotiating framework including the overall objectives and timetable. Second, commitment to a package of early reforms is needed to show the seriousness of the intent to reform trade distorting agricultural policies. Fortunately, the background research undertaken by the Cairns Group and the IATRC provides a strong basis for such decisions.

The Australian government strongly supports trade liberalization in the current GATT round. The agricultural support policies of the United States, the EC and Japan are seen as particularly damaging to trade and should be priority targets for reform. The recent policy initiatives of the Australian government are designed to place it in a competitive position in world markets whether these reforms occur or not.

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