

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

FROM COLD WAR TO COOPERATION IN NEGOTIATING TEMPERATE-ZONE AGRICULTURAL AND TRADE POLICIES*

"-----yet much remains
To conquer still, peace hath her victories,
No less renowned than war, new foes arise
Threatening to bind our souls with secular chains".

These famous lines of Milton's ode to Lord Cromwell written in 1652 have a chilling verisimilitude to those principles underlying the conditions that exist in developed countries and temperate-zone agricultural trade today. Those were times fraught with anxiety. Cromwell having had placed on his head "Worcester's laureate wreath" was immediately faced with a "settlement of the nation", one aspect of which, coincidentally, was the important Committee for Trade which had been founded in 1650. (Fraser, 1973).

Now, almost 350 years later, these also are times filled with anxiety: peace has broken out; walls have tumbled; the enemy is our friend; there is still famine amidst feast; and the so-called "farm problem" is still around, meaning that the costs of farm commodity subsidization continue to be too high. Issues are more complex. Instead of one Committee on Trade which faced the Lord Cromwell and which probably dealt with most international problems on a bilateral basis, our current leaders face dozens of institutions of which, for example, the GATT is only one. Oh to have only those problems of Our Chief of Men!

About two years ago I addressed the British Agricultural Economics Society on the subject "Confessions of a Double Agent in the EC-US Policy Argument." An alternative title was "Appreciating the Opposition in Agricultural Policy" (Hillman, 1992). The essential observation was that certain political and economic events and forces are driving Europe and the United States toward compromise and accommodation in their agricultural and

^{*} Professor Jimmye Hillman, University of Arizona, Tucson, Arizona

trade policies and that they should get on with the process. That adjuration now includes all the temperate-zone industrialized world.

After a lifetime of economic analysis, but not entirely devoid of negotiating farm policies, I can safely say that one of our professional shortcomings has been that we don't sufficiently understand and appreciate the situations and the positions of those in opposition to our policy recommendations. Agrarian issues and rural life are part of the historical-cultural milieu of every country, but they have been particularly important in the political economy of the West ever since Roman times. Physiocratic philosophy, farm fundamentalism and sympathy for the peasant and the "family farmer" still run deep in Europe and the United States. Countries like Japan use similar bases to excuse inertia on farm programs and restrictive trade policies. Rural life style, recreation space and independent entrepreurship have arisen as additional arguments to oppose change. Yet, most of these receive short shrift from current agricultural policy analysts.

Added to these are concerns over food ecurity and food safety as well as environmental health, which have arisen as major issues in recent years. Thus becomes possible a defense-mechanism construct of major proportions, which necessitates the most profound understanding and diplomatic patience. I begin by warning you that there is still a bit of the double agent (or split personality) in me regarding these matters. There is a deep yearning to see the family farm maintained, the bucolic life protected, to protect the farmer against big business and big government. However, it is but a short step from "my desire" to "my right", and to the "duty" that the government protect and sustain me! Micreover, this attitude borders on having a "disease", the disease of self-righteousness and often implies: "clean up your mess immediately but let me take my time in cleaning up mine." In fact,

there's a bit of this duality in all of us, particularly in academics, and a huge portion in most farm politicians.

In what follows I should like to continue the theme of the Aberdeen paper, but expand, update and try to be a bit more specific with some suggested directions and levels of activity toward resolving the major hurdles in the farm and agricultural trade policies of the developed countries. I chose an eclectic grouping of issues to illustrate a thesis of conciliation, cooperation and understanding, rather than confrontation and obstruction, toward agricultural trade policy resolution. After a brief description of the current subsidy situation and the Uruguay Round of GATT, I make equally brief observations on macroeconomics and the role of government. From there, I proceed to select three areas (this list could have been greatly expanded!) for modest commentary and policy suggestions: national agricultural policies, non-tariff barriers, and food security. Finally, I make some comments as to the role of the United States in helping improve agricultural policy and the multilateral trading system.

THE CURRENT SITUATION

A. Subsidy and Protection

We begin with what the Lord Cromwell didn't have in 1650 but which the world has plenty of today: large-scale industrialized farms with highly controlled production processes buttressed by governments that influence market processes through all sorts of intervention mechanisms, price support policies, border protection and export-import manipulative devices. These instruments of agricultural market intervention patterned after the United States experience with its Agricultural Adjustment Acts of the 1930s have grown

enormously since World War II. Many have been transformed from altruistic efforts to assist small producers in domestic agriculture and to raise internal low farm incomes to powerful instruments of protection from external producers and international commerce in agricultural goods and services.

It is instructive to study the latest OECD report on agricultural policies where 20 pages are devoted to a *Glossary of Agricultural Policy Terms* (OECD, 1993, 205-225). Even so, the text hastens to point out that the list isn't exhaustive! Enormous bureaucracies have been built up across the industrialized world to administer farm programs, to manage agricultural commerce, and to supervise the legislative and regulative constructs attendant to modern agricultural trade flows.

The apparent antilogy or inconsistency between a relatively declining agricultural sector, numbers of farms, etc., and a relatively increasing set of industries, institutions and bureaucracies associated with farming and agriculture is a broad subject beyond our need to fully analyze in this paper. Suffice it to show here that shares of agricultural products in world merchandise trade have been in secular decline at least since 1950, while the costs of protecting this declining share appear to be rising. Agriculture today stands at about 10% of world trade, compared to 80% for manufactures. Shares going to mining products make up the difference (Figure 1).

It is more important to point out that despite this declining relative share for agricultural trade and the concomitant declining absolute number of farmers everywhere, total transfers of benefits from taxpayers and consumers to agriculture have continued to rise generally over the past several decades. (See Table 1 for the years 1988–92.) Hence, we can logically conclude that agricultural protection and agricultural trade distortion have

risen relative to the manufacturing sector. Producer Subsidy Equivalents (PSEs) and Consumer Subsidy Equivalents (CSEs) as measures of support for agribusiness have their critics (Johnson 1991, 43–46; de Gorter and Harvey 1990, 1) but until better measures become available they can be used in fora such as this to make the point. In 1992 the OECD has calculated that net transfers from consumers and taxpayers associated with agricultural policies were US\$354 billion, of which US\$160 billion was for the European Community, \$91 billion for the United States, and US\$74 billion for Japan. Total transfers per full-time farmer equivalent in 1992 were US\$17,700 for Europe, US\$36,100 for the United States, and US\$24,000 in Japan.

What is the rationale for subsidizing and protecting a relatively declining agricultural sector and fewer farmers, disregarding the benefits which accrue to the distribution of comparative advantage in agriculture? Many studies of agricultural protection have been made in recent years without coming up with an accepted explanation of the differential levels of protection across the industrialized world. Gardner (1992) alludes to the lack of an explanation on the international scene by his analysis of the United States situation. Whereas the old "farm problem" disappeared, as defined by agricultural economists in the post-World War II decades, the variety and the magnitude of interventions did not. In fact, the programs of the mid-1980s were the costliest in history while 20% of United States farmland was held idle. Despite a modified version of the MacSharry Plan, for reforming the Common Agricultural Policy (CAP) of the European Community, costs remain high and many sticking points remain. The basic issues of high costs and the maldistribution of benefits—from a political vantage point—remain in most countries. Agricultural economists have a particular role in exposing protectionist and discriminatory policies not only between countries but within countries where farm welfare often gets special preference relative to non-farm welfare and employment issues.

In passing it should be noted that public choice theorists have their explanations of this apparent incongruity. Tullock and Hillman (1991) examined the power of interest groups in US agriculture. More recently Schonhardt-Bailey (1993) has proposed that the form of asset holding is an important determinant of different propensities to protect domestic agriculture, allowing for different incentives of groups to lobby for a change in trade policy. Specifically, she states: "Industrial and commercial interests, who typically have an incentive to lobby for free trade in agriculture, will achieve more in those countries where their equity capital is held directly by the voting public. This is because direct ownership of a stake in industry creates a larger incentive to lobby and vote for polices that benefit that industry. In contrast, where assets are held indirectly through institutions (banks, pension funds, and so on) those incentives will be far more muted. ----- The empirical results strongly support a link between institutional shareholding and higher levels of agricultural protection."

More on this subject later. I now turn to the state of GATT and the Uruguay Round.

B. GATT: The Uruguay Round

It has been seven long years, many economic analyses, and perhaps even a greater number of political meetings of every type since the Punte del Este opening of the Uruguay Round of GATT Negotiations in 1986. One should remember that this is the eighth round of GATT since World War II and that considerable effort and expense has already been devoted to agricultural trade policy issues. Hence, on the basis of valuation of human time and effort alone, more and better results could be expected.

When it comes to the GATT I am tempted to say "We all know about the GATT and all that", then proceed to something else! But, do we know, and could we do anything even if we did!? I think it can be safely said that the farm-trade dispute is diverting the industrialized countries from the main goals of agricultural policy—and main goals of world trade harmony and economic growth. It is keeping GATT from decisions on other kinds of commerce, including services and non-agricultural goods. It also tends to hamper economic growth in under-developed countries. The dumping of cheap corn, wheat and other commodities in poor countries has discouraged agricultural advancement. And that is a basic source of economic growth, as rich countries certainly should know from their own experience.

Negotiations on GATT were finalized and a draft treaty signed in December, 1993. It had been said, "The Uruguay Round still staggers from crisis to crisis, kept alive only by the realization that failure would be bad for the prospects for economic recovery" (Josling, 1993). The Blair House Accords which were agreed upon in November, 1992 were resurrected, principally by France and it will be remembered, this Accord was a revision of the Dunkel Proposals of December 1991 and over which much political negotiating and infighting had already taken place.

Details of the final draft GATT agreement were not available to me for this paper.

The principal elements of the Dunkei Draft, as modified in the Blair House Accords were:

- Tariffication of non-tariff trade barriers
- reduction in tariffs by 36% in 6 years
- safeguards for importers (quantity trigger of 125%, and price trigger)

- safeguards for exporters (minimum access opportunities of 3-5% of consumption)
- reduction in expenditure on export subsidies of 36% in 6 years
- reduction in quantity of subsidised exports by 21% in 6 years
- reduction of overall support, as measured by an AMS, by 20% in 6
 years
- · exclusion of 'green box' measures from the AMS
- special terms for developing countries
- agreement on sanitary and phytosanitary measures

It should be noted that, while the Dunkel Proposal and Blair House Accords do not assure the world of free trade in agricultural products, they do represent an advance over the situation that existed before the Uruguay Round began (Josling) and that a better deal on agriculture might have to wait a while longer (Ingersent, Rayner and Hine, 1992) Surely the same might be said of the final agreement.

OBSERVATIONS ON FUNDAMENTALS

The agricultural sectors of temperate-zone countries have many problems in common and which should bind them as to solution. As is often the case, however, the issues that divide overshadow those which should unite, and particular problems arise only to be blown out of proportion by the rhetoric of the combatants. What should be strategies for long-term evolutionary betterment of farmers and rural population never surface, or are lost in the shuffle of tactical maneuvering over commodity trade issues in the short run.

Examples of this are the US-EC soybean argument, the US-Japan controversy over citrus, beef and rice, the Canadian-US (also Canadian-Australian) issue of pork imports, etc. Using our analogy on Cromwell, even the great Lord himself often got diverted by lesser issues such as schedule and content of meetings of the Rump Parliament, verbal arguments with his personal denigrators, even after he was named Lord Protector, and other items of lesser importance to national survival and well being.

Economic philosophies, trade disputes and trade tensions that cannot be mitigated by commercial diplomacy are continuing subjects for economists and political scientists. Most analyses have centered on the differences between the United States and European Community on farm trade issues (Moyer and Josling, 1990) because of the acuteness of disputes. But the time has come to think more generally, in a longer time frame, and certainly in broader geographical terms. Also, as already intimated, when an industry—agriculture in this case—is losing power relatively, it should seek accommodation and make alliances. Economic analysts of agricultural policy issues could lead the way by pointing out that not only is agriculture a small part of the whole, but that "economic truth" is but a part of the entire answer to improving the lot of mankind. With these thoughts in mind I want to choose an eclectic grouping of issues to illustrate my thesis of conciliation, cooperation and understanding, rather than confrontation and obstruction, toward agricultural trade policy resolution.

A. Macroeconomics

Most everyone would agree that it is difficult for agriculture to thrive in a world economy that is in the doldrums. If we look at the major example of the Great Depression, we see unemployment, slow economic growth, exchange rate instability, tack of direction in

central banking, and trade protectionism all abetting conditions of retarded production, low productivity and stifled world trade in agricultural commodities. On several occasions since World War II the world has slid into recession, the last of which is now upon us. Accompanying each of the recessions was a series of agricultural trade difficulties, led by forces beyond the power of the agricultural establishment in the industrialized countries to counteract. Long ago had the political forces in agriculture lost the power to greatly influence the macroeconomic agenda (Paarlberg, 1981, 1–13). Departments of treasury, foreign affairs, energy, environment and others are now calling the shots, depending on the country or the region.

Hence, we arrive at my first, and major suggestion. OECD countries, the Group of Seven organization and the annual IMF-IBRD discussions should focus on a major tune-up for the world economy. Inflated asset prices of the 1980s have required balance sheet adjustments by households, enterprises and financial institutions and, consequently, left a legacy of recession that settled over most parts of the industrialized world (International Monetary Fund, 1993). Large and continued budget shortfalls now result in fiscal imbalances which are not sustainable, the real problem being growing structural imbalances. The mechanics of recovery I shall leave to financial experts, but the political-economic remedy appears clear: a well-focused and persistent strategy for intermediate term recovery which would be the launching pad for longer-term sustainable economic growth. An average growth rate of less than 3 percent in industrialized countries would not be sufficient to fulfill this objective. Multilateral adjustment in structural policies, fiscal policies and monetary policies all have their place in that focus.

In this context, the importance of having completed the Uruguay Round of GATT to economic recovery and sustainable growth becomes more obvious as a target for leaders of industrialized countries. Weak growth and unemployment in recent years have resulted in a trend toward protectionism, managed trade and resistance to change. Agricultural forces in some countries have taken advantage of this trend and have allied themselves with protectionist elements. Resistance to competition and change are major impediments to growth thus producing a vicious circle—protective measures feeding on economic weakness and economic weakness being aggravated in turn by ensuing protection. While my emphasis is on agricultural trade distortion, I cannot overemphasize the necessity for world leaders to move boldly now that this round of GATT has been completed, and should further exercise their leadership in improving the entire trading system.

In this regard, the establishment of a Multilateral Trade Organization (MTO) was part of the Draft Final Act of the Uruguay Round. Including an MTO might partially rectify the error made (principally by the United States Congress) by not ratifying the Havana Charter (International Trade Organization) in the late 1940s. The MTO would administer GATT processes, the agreement on services, exceptions provided for balance of payment reasons, and trade-related phenomena. It would also undertake a number of obligations with respect to agricultural trade.

B. The Role of Government

Many problems arise between governments not because of large fundamental differences in their economic philosophies and their democratic institutions but because of the way governments are organized, the bureaucracies which are put in place to carry out policies, and the tactical weapons which particular administrations use to carry on

negotiations—in our case agricultural and trade policies. I have shown elsewhere, for example, that most European countries and the United States historically have taken different attitudes towards cartelization, trusts and government intervention (Hillman, 1992). Moreover, in the recent GATT negotiations the initial US position of zero option—eliminating all subsidies and trade restrictions in ten years—presented the false impression, or false hope, that the administration in power was, indeed, trying to "get the government off the farmer's back" or to "get the government out of [American] agriculture". The ensuing dialogue and negotiation took considerable time—two years or more—to get all parties into a realistic position of bargaining.

Fact is, no government has its hands clean when it comes to agricultural and trade policy intervention. Except for the massive intervention in agricultural production and trade authorized by the Agricultural Adjustment Act (AAA) of 1933 (Amended in 1935, and subsequently), the United States has always postured as the champion of open markets. Only recently, due principally to the success of Japan, has US economic and trade policy rhetoric wavered, with some strong support for more management of the economy through government actions in industry and trade. Ostensibly, such industrial intervention would be taken to offset the growing power of Japan and Europe.

With all the current debate and excitement about "privatization" and economic liberalization it should be remembered that much government intervention into markets and trade processes in the past came about because of the failure of markets and breakdown of commercial policies. The AAA and its successors in the United States which still have the federal government very much at the heart of farm and trade policy, is an example. All Europe, Australia, New Zealand and others had similar experiences with interventions from

the turn of the century up to World War II, if not directly in farm production and marketing decisions, certainly in commercial policies, exchange rate manipulation and monetary management, and structural controls. New Zealand is the only country which has, in recent years, fully liberalized and desubsidized its agriculture and related trade policy. I have doubts that in the foreseeable future governments of the industrialized countries will have free and open agricultural markets. Thus, the argument will continue as to what is the best approach to farm and trade policies, how to keep pressure on for freer markets, how to desubsidize and deregulate, and how to reduce costs of farm programs while improving the welfare of the farm population. And, of course, how to be fair to developing democracies.

In my opinion the role of governments will continue in trade and agricultural policy, particularly to destructure rigid production and distribution systems. To list but a few other areas, several of which will be discussed briefly below: desubsidization of the domestic, commercial, farm sector; environmental, health and food safety issues; food security; program costs and fairness to newly developing democracies; and the role of research and quasi-government organizations in agricultural policy.

No doubt, we are now at a different time in history with respect to farm production and marketing, structural issues, the influence of agribusiness, scientific possibilities, etc. The problems facing agriculture in the 1990s, while different from those prior to World War II are just as difficult and perhaps more unmanageable. Few policy answers can be lifted directly from historical experience, but, if we look carefully, economic and political analyses do tell us why certain past policies have produced unexpected results while other policies have created more problems than they have solved (Cochrane, 1993, p. 466). Thus, it is not enough to blame government for all our woes, nor is it wise to expect government to

cure all ills. My position is that governments are set up to assist their constituencies; and, further, because of the different situation we now face our collective governments have the responsibility to work together reasonably toward solving agricultural and trade-related issues. This will require competent civil servants, statesmanlike politicians and not a few competent economists.

SELECTED AREAS FOR COMPROMISE AND RECONCILIATION

A. Development of Rules on National Policies

Though the Uruguay Round has been finalized, much remains to be done to assure mutually acceptable agricultural and trade policies in the industrialized countries. One might state further that, given the unlikelihood of I) zero intervention in agricultural markets on the one hand and 2) a return to high price supports linked to yields and commodity output on the other, it behooves signatory countries to move beyond the current agreement package to another level of accommodation.

It would help here to again remind ourselves that the "Old Order" agricultural policy argument is no longer valid, i.e., a policy based principally on the assumptions of 1) chronic low income in agriculture for those farmers who are responsible for a high percentage of aggregate output, and 2) that the income problem in agriculture can be corrected through adjustments in farm output prices alone. The United States and the European Community have now taken significant actions to move away from old schemes of internal support and have agreed to actions on market access (through tariffication) and export subsidies which should be a solid base for future activities. The GATT-MTO forum is an excellent place for this to take place.

The centerpiece for future policy reform consists of actions taken by the United States and the European Community to break the direct link between price support levels and producer receipts; i.e., to decouple payments to farmers from individual farm output. Yield decoupling is a positive development for liberalized world trade and is a rational economic procedure for allocating resource use in agriculture. It has the advantage in GATT of fitting "green box", or production-neutral specifications. Fortunately, progress has been made in this process, first by the United States in the 1985 and 1990 farm bills, then by the Community in 1991 as a result of efforts by Commissioner MacSharry. Though the approaches are different, a reform process is underway which will be politically difficult to reverse.

The move toward decoupling in the United States accelerated with the 1990 Farm Bill. Although not the first such idea², it was the beginning of major legislative efforts to deal with program costs, distributional issues, and trade linkages all in one package. Specifically, in the "Triple Base" idea, target-price base acreage yields were continued "frozen", or historically fixed, and deficiency payments can be received only on 85 percent of base acreage. Producers may plant any eligible commodity, except fruits and vegetables, on up to 25 percent of the crop acreage base. Producers will not receive deficiency payments on 15 percent of the crop base. On the remaining 10 percent of the flexible acreage, producers will receive deficiency payments only if they plant the original program crop. Producers' base history is preserved regardless of the eligible crop planted on flexible acres if they comply with the provisions of the programs. These provisions give added pressure to move away from rigid programs of the past which linked output with price

support levels for specific commodities, and give added impetus to market orientation in international trade.

A brief but excellent demonstration of the decoupling effects of the 1985 and 1990 US farm legislation is outlined by Wescott (1993). Aggregate payment coverage ratios are calculated, and indicate a reduced government role in the farm sector through traditional commodity programs. These trends largely reflect fixed program payment yields and reduced payment acreage, factors that will continue to reduce the role of government commodity programs on agricultural supplies. Table 3 shows that projected farm-level payment coverage ratios for com, wheat, rice, and upland cotton in 1995 and 2000 will be lower than 1992 ratios. Additionally, should target prices remain fixed and market prices increase, deficiency payment rates will decline. A likely result is that program participation rates will also fall, lowering aggregate payment coverage ratios for each crop.

In sum, farmers will base more of their planting decisions on market signals as government payments continue to cover a declining portion of production at both the individual farm and national aggregate levels. Planting flexibility provisions will continue to provide farmers the opportunity to respond to market signals in their cropping choices on part of their land (Wescott, p. 7)

In the European Community the MacSharry proposal, followed by the Reforms of 1992, would subsidize farmers on a hectarage basis instead of paying them the same amount through the output price. Josling (1993) has demonstrated rather convincingly that such a switch in subsidy technique produces significant reform despite the fact that the 1992 Reform as passed by the Council of Ministers changed significantly the MacSharry proposal as regards commodity prices. He argues that the switch to hectarage subsidy in

effect, decouples payment from yield, and that 'The farmer allocating variable inputs would only increase yield if profitable at the new market price. The market price would become the marginal revenue as far as yield-increasing inputs are concerned. This partial decoupling, if indeed it is confirmed in practice, would constitute a major advance in the operation of the CAP. Recognition, through inclusion in the green box, would seem appropriate."

Another brief and excellent document from the Economic Research Service, USDA (Madell, 1993) corroborates Josling's analysis. Unlike previous reforms in the CAP's 30-year history, the 1992 package of reforms will alter EC production, consumption and trade of most major commodities, and will significantly change the policy tools used to support farmers. In particular the new supply control measures are designed to limit production and EC budget outlays.

Both the United States deficiency payment and related program provisions, and the EC Reform proposals are complicated by complex administrative procedures on set-aside and there is room for analysis and argument as to nature and process. There is little doubt, however, so long as there is linkage between acreage set-aside and payment in compensation for the set-aside, this is evidence that the price level generated by border protection is still too high. "Slippage" is inevitable in set-aside, (e.g., increased productivity and fertility on acreage that is set aside) and other attempts to soften the impact of decoupling.

Now that the Uruguay Round is behind us, I am optimistic that we have set in motion an irreversible process which, though unsatisfactory to many, will provide the basis for a long-range progressive reform in agricultural policies and trade in the industrialized

countries. For example, set-aside and other such practices as market impediments could be phased out over time. The GATT and an MTO are needed to see that the rules of the game, as agreed to, are followed. A warning must be given here, however, that negotiating domestic agricultural policy reform is highly improbably through international institutions such as GATT. The United States attempted to "finesse" its own reform in early Uruguay Round proposals but failed (R. Paarlberg). We must keep what is known in basketball jargon as the "full court press" over the long-run, aided by excellent information and analyses, political good will and a mutual understanding of our past, cultural as well as agricultural.

If "pure decoupling" were possible, farmers would lose their logical, historical "excuse," or "right," to payment. Politically they would have to justify any payment on another argument such as a welfare criterion. This has always been farmers' greatest fear in the United States. It was once argued that farmers didn't want to be paid for *not growing* commodities, i.e., set-aside. I never believed that then, but I am not as pessimistic as I once was, and as some (Ingersent, et al., 17) now appear to be, about the lowering of political and social obstacles to a further extension of direct income support to compensate farmers for the loss of price support. My personal experience in the United States is that taxpayers (assuming away consumers' issues) are concerned as much or more, with who gets payments—a distributional question—as they are with what payments are for—a question about which they are likely to be more susceptible to governmental corrective action.

To be sure, payments for decoupling, outlays for export enhancement, and other expenditures for subsidizing production of agricultural commodities which don't find

reasonable commercial markets—all—should be increasingly researched along the lines of the OECD work. This is a process in which we can all be involved. My own observation is that the rural environment and related social and physical infrastructure is in greater disrepair—and in need of help—than is the commercial farm plant in most countries. Moreover, we have excellent research results on agriculture farm and business efficiency. Hence, what now needs emphasizing are questions involving equity, I repeat, not just who gets the money, but also for what!

B. Sanitary and Phytosanitary, Environmental, Health, Safety and Nontariff Barriers

To the extent that agricultural questions were negotiable, the commercial issues such as market access and export subsidies dominated GATT discussions in the past. A major development in the Uruguay Round was the negotiation of domestic farm support programs to make them more compatible with stable world markets. There arose, also, yet another area for negotiation which I shall designate generally as *nontariff barriers* (NTBs) the discussion of which will be limited to sanitary, phytosanitary, environmental, health and safety standards for the sake of brevity.

A general listing of the major categories of nontariff barriers and related policies are shown in Table 4. Much of the so-called NTB protection was subsumed under the topic of tariffication in the Uruguay Round, and in the Dunkel text. The important issues of quotas, variable levies and more easily quantifiable barriers (Sections I, II and parts of III in Table 4) fall under this category of protection and are dealt with in other areas of the negotiations. However, a wide range of not-so-easily-quantifiable actions by governments at every level of their operation result in agricultural protection the effects of which are not so easily measurable (Sections IV, V and parts of III in Table 4). With the decline of tariffs as the first

line of protection, followed by tariffication of quantifiable barriers, attention will increasingly turn to these regulatory and administrative devices which might be used as protective devices in the flow of agricultural commodities.

In addition to my early work on the subject (Hillman, 1978), the literature has increased dramatically in recent years. Shane and von Witzke (1993) have edited papers from a meeting of the International Agricultural Trade Research Consortium (IATRC) the theme of which was the relationship between the environment, public goods, government policies and international trade. Finger and Laird (1987) report that in 1984 developed countries applied nontariff barriers of 44 percent of agricultural products from other developed countries and to 33 percent of imports from developed countries. Bredahl and Forsythe (1988), Petrey and Johnson (1992) and others have called attention to phytosanitary and zoosanitary regulations as important sources of technical barriers to trade. Cramer (1991) pinpoints the animal growth hormone question as a problem for international food safety standards. Haley (1993) in a study on nitrate demonstrates an increasing overlap in environmental and agricultural policies. And Runge (1992) has provided us with a benchmark paper on the environmental effects of trade and agricultural policies.

One of the components of the Uruguay round of GATT negotiations was to achieve greater harmonization of these technical standards. Under Article XX(b) of the GATT, countries are allowed to have their own technical standards in order to 'protect human, animal or plant life or health.' They are also covered by the Agreement on Technical Barriers to Trade which was negotiated during the Tokyo Round (like most of that Round with emphasis primarily on industrial standards rather than agricultural) to supplement

Article XX(b). In fact, three international scientific organizations are designated under the proposed GATT agreement to help provide technical expertise in S&P disputes (Castaneda and others, 1991).

- The Codex Alimentarius Commission is responsible for issues such as food additives, pesticide residues, contaminants, animal drugs, packaging, and food standards. Representatives of government regulatory agencies, the international scientific community, and industry from 138 countries serve on the Commission. The Commission was formed in 1963 as a subsidiary of the Food and Agriculture Organization of the United Nations and the World Health Organization.
- The International Office of Epizootics is responsible for animal health issues. This international veterinary organization, formed in 1924, has members from about 130 countries and maintains a global animal disease reporting network.
- The International Plant Protection Convention is responsible for issues involving plant pests and plant health. The Convention, formed in the 1950s, has members from about 90 countries and, like Codex, is a subsidiary of the Food and Agriculture Organization of the United Nations.

Until recent experience proved otherwise, it was believed by most, including myself, that scientific consensus could provide guidance toward indicating which regulations are based truly on environmental, health, or safety grounds and which are motivated by protectionism that is not sanctioned under the GATT. However, recent policy decisions and other administrative rulings are not encouraging with respect to nations coming to terms with harmonization of food safety standards solely on the basis of scientific consensus.

In July 1991 the Codex Alimentarius Commission voted not to establish maximum residue levels for four growth-promoting hormones that are widely used in livestock production. What makes the action significant is that the Commission's own scientific advisory committee, as well as its Committee on Residues of Veterinary Drugs in Foods,

has determined that the four hormones are safe under specified conditions of use and had established recommendations for maximum residue limits (Cramer, p. 12).

The hormone and like cases illustrate the difficulty of the role of science in harmonizing standards and regulatory procedures as instruments in reducing agricultural protection. Exacerbating this difficulty is that as laboratory instrumentation of food and other materials become more sophisticated, technicians can detect smaller and smaller amounts of residue or harmful substances, and product approval is held up for longer periods. All of which raises fears among consumers, whether justified or not, and the suspect-list of retail food or farm commodities grows longer. A good example of this is the "zero tolerance" guidelines which were issued recently (1993) by the USDA in response to residues found in some US packing plants.

One can agree with Josling (1993, CREDIT) that increased technical instrumentation followed by heightened consumer concerns leaves governments with an uncomfortable dilemma when it comes to food standards. Pressure from consumer groups, reinforced by environmental lobbyists, tends to lead toward more regulation and the banning of substances which often have minimal health risks. Such tighter regulation, however goes against the trend towards less government intervention in business and consumer affairs. Inevitably exporters will see such regulation as a form of protectionism. The EC-US beef trade conflict of recent years is a good example of this dilemma.

Adding to the complication of harmonization of standards are the differences that exist between nations as to taxes and subsidies on domestic food producers and on suppliers of agricultural inputs. In the United States this involves state taxes and subsidies as well. In my state of Arizona, subsidies on irrigation water were withdrawn by the federal

government only to be replaced recently by state and local subsidies. These actions are instrumental in the encouragement or discouragement of input or food product use, thus adding to trade discrimination.

The uncertainty which arises from such situations is a "paradise" for regulators of commerce and for an administrative bureaucracy. For a diagram on the potential for bureaucratic complication through the administrative process in trade legislation see Figure 2. In my experience, there is little doubt that administrators use the flexibility of the law to discriminate against foreign competition. But it is difficult to ascertain the scope and authority of those decisions where the consequences are protectionist. There is no uniformity among countries as to the ways in which administrative directives are issued. Elected or appointed officials often have the power to formulate rules which make interpretation of legislation easier. These rules will carry the same authority as statutes. In many cases new administrations routinely issue their own revisions or supplements to the regulations. This in itself creates problems in the administrative procedure, if only because of difficulties commodity traders and others have in obtaining a copy of the latest regulation.

In the case of quantitative restrictions, such as quotas, licensing and exchange controls, the discretionary component of administration is generally small, so discriminatory or arbitrary practices are readily identifiable. In other regulatory activities abuses are more difficult to discover. To quote an unnamed official: "Honestly, it depends on the price of ____ as to how rigorously I apply this particular regulation." The point is that the administration of the regulations, rather than the regulations themselves, will determine the extent of protection that results.

However high-minded and able the administrators who conduct day-to-day policy may be, there is a danger that because they are not subject to direct public criticism and public accountability, they fall prey to the influence of domestic special interest groups. It is not that executive agencies are more susceptible than legislatures, but that this susceptibility is not limited to the elected representatives of special interests; in the realm of bureaucratic politics it escapes the publicity and constitutional checks that control it in legislative politics. As a result, in the major OECD governments agricultural interests have become entrenched. The introduction of marketing schemes, export policies and regulatory activities can often be directly attributed to pressure from organized groups of producers.

There are numerous examples of the concentration of policymaking power among administrators increasing the effectiveness of organized pressure from directly affected groups, or their lobbyists. Probably the most effective lobbying group of all is the National Central Union of Agricultural Cooperatives (ZENCHU), which is a branch of the Japanese National Farmers Cooperative.

The setting of scientific standards and strengthening of settlement procedures for disputes over technical principles will come easier than administrative objectivity and agreement among bureaucratic decision-makers. Thus, when science and bureaucracy cannot cope political decision, based largely on economic criteria, will be necessary. The GATT negotiating procedure could make an important contribution to harmonization of environmental, health and food safety if it could improve on dispute settlement procedures. But experience shows that scientific criteria alone are not enough even for GATT to set its own standards.

This dilemma is analogous somewhat to the dilemma facing economists and politicians in a situation of "pure decoupling" where past action (production) is quite irrelevant. Moral philosophy, philanthropy and ethics must all be involved. The outcome will certainly depend on political persuasion, because no one country has enough economic power to, alone, set standards and make them stick. Thus, I again invoke the assistance of economists — particularly political economists—, other scientists, competent civil servants and statesmanlike politicians, to recognize the seriousness of these issues; to conduct the necessary research for better enlightenment, and to move toward an international accommodation.

C. Food Security

Now that the Uruguay Round has been completed, much remains to be done to assure mutually acceptable agricultural and trade policies in the industrialized countries. The two most destabilizing factors in international agricultural markets are variable growing conditions, which relates to volatile production, and the macroeconomic conditions of world economy, already discussed. While macroeconomic forces of prosperity and depression are more difficult to control, industrialized countries could moderate the destabilizing effects of variable crop production by agreeing to operate a grain reserve program with the capacity to 1) stabilize—not raise—world grain prices, and 2) to assure food security in the developing world. Stocks as a percentage of total wheat and coarse grains consumption cannot long remain below 20 per cent as they did in 1972–76 without grave consequences in the industrialized and the developing countries, and without causing grave distortions in agricultural trade (Table 1).

I am aware that suggesting a food reserve program is tantamount to waving a red flag before many. Yet such a reserve might be a small price to pay on orders to allay the fears of some countries about embargoes, access to commercial stocks and internal production disasters on the one hand; and those of other countries, namely the poor-income countries, who think they will be priced out of the market, or cut off from traditional food and supplies in economic emergencies. The 1993 floods in the United States and the disastrous 1993 rice harvest in Japan are reminders of the destablizing influence of Nature. Moreover, one is aware that the food security specter has been used to cover up protective agricultural policies and as an excuse for inefficient, distortive national trade policies. On the other hand, with an increasingly integrated world economy and with a seeming commitment on the part of the United Nations to monitor economic as well as political welfare, food security and access to food supplies demand constant attention.

Food reserve policy should be distinguished from national self-sufficiency movements, which never gained respectability in international economic circles. International reserves never emerged as a serious subject while the United States was the residual world supplier of grain, which grew out of its price supports program and its willingness to finance the costs of carrying stocks. There was little incentive for other countries to get involved. The logic for reserves changed in the 1970s with the violent fluctuations in world markets, the refusal of the United States to continue as residual supplier, the embargoes and export restrictions on grain, and the fears of a decrease in suppliers in world markets.

A variety of studies were made during that turbulent period, one by the FAO (Food and Agriculture Organization, 1975) many of which were based on excellent data and

analyses. The logic for a reserves program can be substantiated so long as such program is profit neutral. Laying aside the question of their profitability, certain advantages can accrue from a reserves program which might justify their costs. For example: price stability, political considerations such as consumer assurance; and humanitarian considerations. which should be as separated from other factors as clearly as possible for purposes of economic analysis.

Major thrusts of past analyses center on stocks for commercial contingencies and reserves for emergencies, which call for different operational techniques, but all demonstrate that larger total stocks are required if each country holds its own reserves as compared to internationally held resources. Studies also demonstrate that costs of a grain reserve program are highly correlated with attempts to stabilize price volatility, i.e., increased stability involves disproportionally increased costs. Moreover, shifts in international grain consumption is a highly relevant question in any approach involving international action.

There is a vital relationship between outcomes in trade negotiations and any consideration of a food reserves program and food aid regimes. The same industrialized countries which negotiate positions in GATT should be capable of negotiating a rational policy on food security questions. Past failures such as the old concept of an International Wheat Agreement should not be a barrier to further attempts to put this important question on the table, say, in a MTO agenda. The two major questions of who pays and who controls the key to the reserves can be addressed along with other knotty questions of policy.

THE UNITED STATES POSITION

United States commercial and agricultural trade policies have moved from 19th century protectionism, reinforced by an isolation-protectionistic position in the 1920s, to one that is more liberalized in the 1990s. Its position is not yet Ideal,"nor its role what it should be, commensurate with its military strength and potential political leadership. Yet, it can be safely said that its role in the GATT beginning with the Reciprocal Trade Act (RTA) of 1934 has been a bulwark against domestic United States isolationism and backward-looking trade policy. Moreover, beginning with the 1985 Farm Bill and its heterogeneous successor of 1990, the United States is slowly feeling its way forward toward a position many feel it should occupy in the world. Much remains to be done.

Section 22 of the 1933 Agricultural Adjustment Act (AAA) was the fulcrum of the United States attitude toward agricultural trade for a long time. The crux of this Act is that it legalized agricultural import quotas subject to certain constraints. That is still the case. Section 22 mandated the President of the United States to restrict the importation of commodities by the imposition of fees or quotas if such importation would render ineffective, or materially interfere with, the policies of the Department of Agriculture in relation to agricultural commodities. The scope and permissible action of the original legislation was expanded by the Trade Agreements Extension Act of 1951, under which no trade agreement or other international agreement can be applied in a manner inconsistent with requirements found in Section 22. The Trade Expansion Act of 1962 and the Trade Act of 1974 also make that exception. In 1986, the United States, as part of its negotiating position in the Uruguay Round of multilateral trade negotiations, expressed a willingness to

negotiate the repeal of Section 22, but certain domestic farm interests have continued to vigorously resist this change.

An additional disposition toward protection and trade distortion was contained in Section 32 of the 1933 AAA. Section 32 was aimed at the disposal of surpluses, domestically and abroad. Further, there was constant agitation in some agricultural quarters to legislate a marketing scheme with a discriminatory two-price system for farm products, domestic and foreign. Thus began a period of about 40 years (1933-73) of predominantly inward-looking, protectionistic agricultural policies, which became increasingly at odds with the United States position in the post-World-War II ambience and with its position in the post-war trade negotiations (Hillman, 1981).

Rather than exercise a bold and liberal posture from its overwhelming economic status in the early 1950s, the United States permitted the protectionistic views of farmers and farm organizations to prevail in the negotiation of waivers and exceptions to GATT Article XI on the general elimination of quantitative restrictions. Adding to this and other protective devices was the Agricultural Trade Development and Assistance Act of 1954 (Public Law 480), the principal aspect of which was an expanded surplus disposal program, some of it through export subsidies. Again a strong overall economic and political position of the United States was undermined and dissipated by rather narrow, vested interests. It should be remembered that high price supports linked to production controls and a position as the world's residual supplier of grains and cotton made the programs marginally operable for a quarter century after World War II.

The tumultuous conditions of the 1970s changed all that, the programs became even more costly in the 1980s, consumers and taxpayers became more unhappy, and

politicians felt compelled to act to reverse what they perceived to be a perpetual welfare system for rich farmers and agribusiness. Politicians felt compelled, but the principal action they could come up with was the target-price-deficiency-payment program alteration and the incipient decoupling activity of the 1985 Farm Bill, reinforced and abetted by the multifaceted 1990 Bill. These were still not sufficient to satisfy some interests both at home and abroad, but it was enough to pressure the EC to action and to give hope for more trade liberalization and environmental and food safety action in future legislation.

There is time in this forum to touch only the most significant actions the United States can do to lead out in the world struggle for a liberalized trade policy, and corrective actions on trade-distorting domestic agricultural policy. Again, I am in the unenviable position of having first-drafted this paper before United States congressional action on NAFTA, and the December 15, 1993 deadline for action on GATT.

First, I am in total accord with the Australian position (CER excepted?) with respect to regional economic groupings (Embassy of Australia). The recent emphasis given discriminatory regional economic groupings has created undesirable cross-currents in international trade policy. These expanded groupings, of a preferential and discriminatory character, are being developed in Europe and in North and South America, and there are signs of a similar trend emerging in Asia Countries pursuing these arrangements appear to miscalculate the reaction from others affected.

Europeans seem to be more acquiescent with the idea of regional trading blocs and cartels, but not the United States. Regional trading blocs, for whatever reason, are the current analytical fad among political economists, even agricultural economists who have had several special professional meetings on the North American bloc of Canada-Mexico

and the United States (NAFTA) and on other blocs.⁵ The general idea of blocs, or cartels, have been around, however, since the end of *laissez faire* capitalism before World War I. Cne of the best descriptions of the rise and evolution of attempts to restrict competition by mutual agreement, trading blocs included, is given by my old professor, the late John B. Condliffe (1950). I'm not sure he would have been very enthusiastic about the economics (as compared to the politics) of NAFTA.

The United States, therefore, should commit itself first and foremost to a determined effort to the supremacy of the multilateral trading system. The effectiveness of GATT depends ultimately on the multilateral trade system being the overriding objective of US trade policy. Moreover, as I have already said, now that the Uruguay Round has been completed the United States should lead in establishing and supporting a Multilateral Trade Organization.

Second, the United States must continue to address its own domestic farm commodity programs with the end objective being that the agricultural economy will operate in a way that serves not only the interest of farmers, but also the broader interest of society including adequate food supplies, food safety, quality water and other environmental amenities. By doing so it can be a model to the European Community, Japan, and others.

Future US policies will be under pressure to lower commodity subsidization. Data show that between 85 to 90 percent of deficiency payment go to about 8 to 10 percent of the producers. The sugar program is even more illustrative of a concentration of benefits.

In my opinion the best way to effect change in programs is inexorable political pressure, over a reasonable time period. This means that consumers and taxpayers must

be educated along the lines of John Pryde's proposals in New Zealand over the past few years. Lowering subsidies and redistributing income, however, will not be accomplished as they were in New Zealand beginning in 1984, i.e., "cold turkey." There is still an effective farm lobby in the United States. Nevertheless, according to one farm state congressman, John Bolhner, Congress will have less money to spend on agriculture, and government farm programs will be significantly reduced by the year 2000. He noted that agriculture will lose political clout as the number of legislators representing agricultural districts declines (Knight-Ridder).

Budget pressures, however, will exert inexorable pressure for change. The best politico-economic judgment is that subsidies will be reduced not through a reduction of target prices but through an erosion in acreage and yields. Modification of the flex provisions in new legislation will probably link guaranteed price to fewer and fewer acres. Program yields are already frozen, thus as yields rise, less and less of the farmer's production is covered by a guaranteed price. In 1993 less than three-fourths of farm participants' production is covered by government programs.

As already pointed out, a great concern in the United States is not just about the size of the total subsidy figure for the agricultural sector but, in addition, its distribution and for what the payment is made. Of the 2.1 million farms as defined by the Census, only 600,000 produce most of the country's farm output. What happens to the other I.5 million? For the most part they don't depend on farm income for a living, don't identify themselves with farmers, and, more importantly, don't figure in the success of commodity programs. Fact is, the small subsidy which this group receives from farm programs, when added to off-

farm income place most farm families in a favorable average household income category for the United States.

As to dairy subsidies and specialty crop programs such as sugar, tobacco, and wool and mohair, each will have to be played in its own context within new farm legislation. It is interesting to note, however, that Congress has already removed wool and mohair subsidies within two years. (No more after December 31, 1995.) The honey subsidy will not be funded in 1994, but it is unclear what happens later. Sugar quotas are another matter. Since their introduction in 1981, United States quota restrictions on sugar have cut back imports by 70 percent. Sugar has been further complicated by the NAFTA agreement. The political muscle of United States sugar cane and sugar beet producers was again demonstrated by getting Mexico to agree to demands which would preserve limits on foreign imports that keep the price of United States sugar high. Perhaps one day United States sugar policy, like Japan's rice policy, will be forced to face the realities of a new order of international trade priorities.

A third major issue for United States agricultural and trade policy involves adjustment costs and whether losers should be compensated when commodity policies change. The interface to this question is: should the "savings" from commodity programs be used for rural development, environmental, health and food safety programs? Of course the answer to these questions has international dimensions, but the next United States agricultural legislation is bound to address them directly which, in turn, should prove interesting to observing nations

Many analyses have already pointed to the economic relationship between achieving efficient agricultural production-allocative efficiency, of commutative justice—and

satisfying other goals related to the environment, health, food safety (Shane and von Witzke). I would add rural development, which raises normative questions, or distributive justice issues. In any event, many nonstandard issues will be more heatedly addressed in future US legislation, and questions related to public goods and externalities will continue to disturb analyses based on neo-classical assumptions of competition. Eventually, of course, these disturbances find their way into the international arena, the GATT and other legal institutions.

Prior to 1985 environmental and related groups were not a part of the negotiating strategy on agricultural policy in the United States. Since then they have become more analytical, some would say more 'fealistic' in their demands, and have even formed some coalitions with farm groups to achieve limited objectives. But there is still much dissatisfaction with the current status of farm legislation with respect to the environment and other such concerns. There is more and more talk of attempting to measure those costs which are placed on farmers by society's laws, and internalizing the costs in order to ascertain their magnitude. An important but difficult job for economists will be to find reliable measures of the social costs of producing a certain level of farm output. A similar methodological dilemma has plagued me over the years in attempts to measure the costs of regulatory nontariff barriers in international commerce.

If new US farm legislation requires domestic farmers to internalize environmental costs and other countries don't follow suit, this would create a problem in comparative advantage. We have already addressed that as one of GATT's major issues is the harmonization of food safety, environmental and other nontariff regulations. In this regard there has emerged amongst some agricultural commodity groups⁷ in the United States a

strategy to offset the apparent cost of production advantages held by certain developing countries; namely, that of incorporating equivalent social and environmental costs in the production costs of foreign producers when making cost comparison for trade and policy analyses. For example, health, unemployment—tirement, environmental and other costs which are imposed on domestic producers should be offset with equivalent import taxes or fees to create a level playing field. The argument is that this procedure creates incentives for developed countries not to reduce social programs, while at the same time it creates incentives in developing countries to improve social conditions such as health. This offsetting social tax has been labeled Measurement of Aggregate Government Imposed Costs (MAGIC). In certain commodity circles, especially among Europeans, I find this type of strategy attracting increasing attention. It is not a new argument to economists, of course, but agricultural producer groups are ever on the lookout for new ways to protect their position.

In a fourth observation related to United States trade and agricultural policy I choose to be quite candid and critical. As already implied, the United States squandered a good opportunity immediately after World War II to take strong leadership in reducing agricultural protection. By not supporting the establishment of an ITO and, instead, by continuing protectionist policies inherent in its domestic price support legislation—effectuated by Section 22—the United States drifted inward until it was forced to deal with the realities of a hew situation after the mid-1970s. Gone were the days of acting as the world's residual supplier and the indirect dumping of excess supplies on the international scene through Public Law 480, or Food for Peace, programs. The latter was distortive enough to

agricultural markets in some developed countries but it was disastrous to many underdeveloped country growth programs.

Price supports, having been often set too high for domestic producers, generated surplus products and distorted resource use. Such was the case in the 1977 farm program after which came the attempts at correction in the early 1980s and the ill-fated Payment-irr-Kind (PIK) program. Program costs soared, which may account for the United States insistence on the Zero-Option for starters in the Uruguay Round of GATT. Having learned its lesson well on agriculture, the United States gave considerable ground on farm trade in the 1992 Blair House Accord only to have the entire package stymied by an opening of the legal text to amendments on issues ranging from intellectual property rights to textiles. Thus ensued an impasse over which tariffs to cut, and by how much.

Throughout the Post-World War II explosion of economic growth and trade, and despite enormous progress in lowering trade barriers, agricultural protection remained high. Often frustrated at making further progress in a multilateral forum such as the GATT, the United States has chosen to get tough in a bilateral context, e.g., with Japan over citrus and beef, and with Europe over soybeans. In doing so it sometimes has used its own laws, rather than international rules and procedures. This is a rejection of the principles of multilateral free trade, not a means toward it. Even bloc negotiations such as NAFTA are subject to such strong-arm tactics. Bilateral do-it-yourself trade tactics are not compatible with GATT. A recognition on the part of the United States of a basic complementarity in world agricultural production and trade is a must for the 21st century.

A cardinal sin of the United States is its penchant for acting alone, enacting its own trade laws and using them to break its way into the markets of others. In agricultural

legislation this tendency goes all the way back to Section 32 of the 1933 AAA. A recent version of this type action is the 1988 Omnibus Trade and Competitiveness Act, which broadened an earlier version of section 301 legislation (of the Trade Act of 1974) and which allows the United States, in effect, to designate specific countries as unfair traders, and to threaten them with higher tariffs unless they change their trading practices.

There is little dispute that the United States or any other country has recourse to enforce trading rights acquired under GATT and such trade treaties. For example, the recent famous oilseeds dispute with the European Community rests on trading rights established in the Kennedy Round. The United States is using unacceptable trade practices, however, when it threatens, unilaterally, to close its markets—disregarding its GATT commitments—in response to the trading practice of another country. Threats, unilateral pressures backed up by domestic lobbies should not replace the GATT and multilateral commitments. As a final commentary on this topic, the weak country is always in danger of being bullied by the strong in the world of trade, hence multilateral agreement is their best protector. Moreover, the process by which agreement is reached is vitally important for everyone.

CONCLUSIONS

Solving international commercial policy problems was never easy. It was not for the great Lord Cromwell 350 years ago, even in a bilateral context; and it has not become any easier despite the positive lessons the world has gained from such events as the 1846 abolition of the English Corn Laws, and Reciprocal Trade Act-GATT successes of the 20th Century. Nor have agricultural trade policy problems, a phenomenon of particular complexity in recent decades, been of simple solution, even though production agriculture is of diffsinishing relative consequence in modern

industrialized countries. Finding economically positive and politically acceptable outcomes will be no easier now that the threat of large-scale war has diminished and a possible Pax Americana is at hand.

This is a realistic, not a gloomy assessment. My reasoning is not difficult to follow. Twentieth century market intervention in agriculture starting innocently, but boldly, enough with such programs as the United States AAA, eventually became inoperable because the assumptions and conditions on which the programs were built no longer existed and were no longer valid. Thus, in 1993 after several rounds of GATT and an eighth round - one of seven years duration that has concentrated on agricultural policy issues - the industrialized countries are faced with a great necessity for political action.

Recognizing that the problems are great, complex and of almost unmanageable proportions, I have made modest suggestions toward progress. First of all, it is not likely that precipitous action, such as was taken by New Zealand in 1984, will be taken in the large countries or blocs. Naturally, we hope that the world will not revert to the isolationist-protectionist and nationalist-backward-looking legislation that plagued all countries in the 1930s, and of which there was a plenty in the opposition to NAFTA in the United States. Instead, it is suggested that, having recognized the magnitude and seriousness of the problem, the large industrial economies should continue to press heavily for the revision of farm program after farm program until a better accommodation of liberalized trade is reached. A start has been made in the United States 1985 and 1990 farm bills and with the MacSharry Reform in the European Community, but much more remains to be done.

Governments have responsibilities to "undo" as well as to "do". Hence, the moves toward gradually decoupling of farmers' support payments from agricultural output and price levels should be a first order of business by governments everywhere. Moreover, in fiscal reform and deficit reduction actions on the part of the large industrial

Moreover, in fiscal reform and deficit reduction actions on the part of the large industrial states of the West and Japan emphasis should be placed on reforming agricultural policies, not only to reduce cost but also to eliminate discrimination.

As a collary, nontariff barriers should be a major order of business. More accurate analyses should be made by economists and potential legislative action by politicians should be taken relative to nontraditional subjects such as the environment and food safety. It is rather obvious from recent experience and decisions that technical scientists will not provide an easy solution for NTB questions. Should the money now spent on farm programs be directed to such causes as solving NTB questions and for rural development? How can this be accomplished? What are the problems as to magnitude of costs and distribution of benefits? Is an acceptable world food reserve a reasonable objective for the industrial countries to work toward?

Despite all its past mistakes and lost opportunities with respect to trade policy and agricultural protection, the United States is moving slowly but surely toward trade liberalization in its agricultural sector. This may not be fast enough for some but desubsidization, like going off narcotics, has great pains of withdrawal. The political price for withdrawing subsidies is high in some cases. The United States and the European Community through the GATT have begun a process of agricultural reform which should be pushed as rapidly as the political processes will withstand. Movement should be forward with such techniques as decoupling and NTB reduction. The GATT and a Multilateral Trade Organization would provide a forum for organizing negotiation and trade liberalization.

Remember my ingredients for progress: competent analyses from economists and technical scientists, even handed objectivity from administrative bureaucrats, and tough but understanding negotiation and execution on the part of elected politicians. Economists could greatly increase their effectiveness as "persuaders" if they were to include more economic history, political thought and communication techniques in their bag of tools. Or, John Pryde, is this too great a miracle to expect?!

REFERENCES

- Bredahl, Maury and Kenneth Forsythe, "Harmonising Phytosanitary and Sanitary Regulations Through GATT Negotiations." *Agricultural Economics Report* Department of Agricultural Economics, University of Missouri-Columbia.
- Cochrane, Willard W. The Development of American Agriculture: A Historical Analysis, University of Minnesota Press, 1993.
- Castaneda, Jaime, Dale Hathaway, Carol Kramer, Ed Rossmiller, Fred Sanderson, and Ann Tutwiler. Should Agriculture Go With the GATT? National Center for Food and Agricultural Policy, Resources for the Future, and International Policy Council on Agriculture and Trade, April 8, 1991.
- Condliffe, John B. *The Commerce of Nations*. W.W. Norton and Co., New York, 1950, pp. 454–66.
- de Gorter, Harry and David R. Harvey. "Agricultural Policies and the GATT: Reconciling Protection, Support and Distortion." International Agricultural Trade Research Consortium, Working Paper, 1990. 90–6.
- Embassy of Australia, "Australia and the United States of America: Issues for the Clinton Administration." Washington, DC, undated.
- Finger, J.M. and S. Laird. "Protection in Developed and Developing Countries: An Overview," *Journal of World Trade Law* 21(6):17, 1992.
- Food and Agriculture Organization, "Food Reserve Policies for World Food Security: A Consultant Study on Alternative Approaches." ESC:CSP/75/2, Rome, January 1975, 41 pp.
- Fraser, Antonia, *Cromwell, Our Chief of Men.* Granada Publishing Limited, 1973, p. 391.
- Haley, Stephen L. "Environmental and Agricultural Policy Linkages in the European Community: The Nitrate Problem and Cap Reform." IATRC Working Paper #93-3, IATRC /ERS/USDA, Washington, D.C., April 1993.
- Hillman, Jimmye S. *Nontariff Agricultural Trade Barriers*, University of Nebraska Press, Lincoln and London, 1978.
- Hillman, Jimmye S. (1992) Journal of Agricultural Economics, Vol. 43, No. 3. September 1992, pp. 327–341.

- Hudec, Robert E. Developing Countries in the GATT Legal System, Trade Policy Research Centre Thames Essays, London, 1987, 259 pp.
- Ingersent, K.A., A.J. Rayner and R.C. Hine. "Agriculture in the Uruguay Round: An Assessment." Paper No. 4.
- International Monetary Fund, World Economics Outlook, Washington, D.C. October, 1993,
- The International Development Centre Working Paper Series, Queen Elizabeth House, University of Oxford, December 1, 1992.
- Johnson, D. Gale. World Agriculture in Disarray. 2nd ed. London: Macmillan, 1991.
- Josling, Timothy. "Agricultural trade issues in transatlantic trade relations". A paper presented at the Conference on 'Transatlantic Trade After the Uruguay Round," organized by the Centre for Research in Economic Development and International Trade (CREDIT), University of Nottingham, England, Monday, April 26, 1993.
- Josling, Timothy. 'The Reformed Cap and the Industrialized World'. A paper presented at the Meetings of European Agricultural Economics Association, Stresa, Italy, September 8, 1993.
- Knight-Ridder Tribune News Service, Washington, D.C., December 7, 1993.
- Kramer, Carol S. "Implications of the hormone controversy for international food safety standards," *Resources for the Future*, Fall 1991, No. 105, pp 12–14.
- Maddell, Mary L. "CAP Reform A New Era for EC Agriculture," AER Report No. 674, ERS, USDA, June 1993.
- Moyer, H. Wayne and Timothy E. Josling. *Agricultural Policy Reform: Politics and Process in the EC and USA*, lowa State, 1990, 235 pp.
- OECD, Agricultural Policies, Markets and Trade: Monitoring and Outlook, 1993. Paris, 1993, 362 pp.
- Paarlberg, Don. Farm and Food Policy: Issues of the 1980s, University of Nebraska Press, 1981, 338 pp.
- Paarlberg. Robert, "Why Agriculture Blocked the Uruguay Round: Evolving Strategies of a Two Level Game," Harvard Centre for International Affairs, April 1. 1991, 31 pp.

- Petrey, L.A. and R.W.M. Johnson, "Agriculture in the Uruguay Round: Sanitary and Phytosanilary Measures," *Review of Marketing and Agricultural Economics*, Vol 61, No. 3, December 1993.
- Reinsel, Robert D. "Decoupling, It's Not a New Idea." Choices, Third Quarter, 1989, pp16–19.
- Runge, C.Ford. "Environmental Effects of Trade in the Agricultural Sector: A Case Study." Prepared for the OECD Environmental Directorate, Paris; published as Working Paper 92-1, Center for International Food and Agricultural Policy, University of Minnesota, July, 1992.
- Salter, Liora. Mandated Science: Science and Scientists in the Making of Standards. Dordrecht, Kluwer, 1988.
- Schonhardt-Bailey, Cheryl. "For cheaper bread, buy stock in IBM: Causes of agricultural protection in developed and developing countries." Presentation at the European Public Choice Society Annual Meeting, Northern Ireland, April 14–17, 1993.
- Shane, Mathew D. and Harald von Witzke. "The Environment, Government Policies, and International Trade: A Proceedings, ATAD, ERS, USDA, 1993, 271 pp.
- Tullock, Gordon and Jimmye Hillman,. "Public Choice and Agriculture: An American Example," in *Issues in Contemporary Economics*, McMillan, Vol. 3, 1991, pp 98–118.
- Wescott, Paul C. "Market-Oriented Agriculture: The Declining Role of Government Commodity Programs in Agricultural Production Decisions." AER Report No. 671, ERS, USDA, June 1993.

ENDNOTES

- *Professor Jimmye Hillman, University of Arizona, Tucson, Arizona
- For example, though I shan't treat the subject here, the impact of industrial countries' farm policies on the developing world can't continue to be ignored. (Hudec, 1987).
- 2. The first major test for decoupling from fixed high prices, while still supporting the income of commercial producers, was made in the late 1940s by U.S.D.A. Secretary Charles F. Brannan. Known as the Brannan Plan, his proposal was to allow prices to be set by the market. The differences between support levels and market prices were to be made up through direct compensatory payments. Brannan also proposed a limit on the amount of the crop from each producer that would be eligible for payments. Although not decoupled, in the sense that payments were to be tied to production, the plan relied on the market to establish prices. (Reinsel)
- 3. In fact, when science is given a mandate to produce public policy recommendations, it actually changes the character of the science by exposing the personnel to a set of legal and economic pressures. this is met by an almost schizophrenic attitude towards economic issues among the participants in standard setting organizations. On one hand, almost every participant attested to the necessity of making decisions that were economically sound. On the other hand, these same participants sometimes denied that economic considerations were taken into account in the development of standards (Satter, P. 168).
- 4. The very great flexibility and uncertainty surrounding technical barriers has meant that the economics profession has not come to grips with them in an analytical fashion. The only conclusions in the literature are that 'low-level' technical tracks are favored by politically unimportant groups, whereas politically powerful groups use 'high-level' political tracks to argue protectionist causes (Finger). The technical (or rules) track is also favored by politicians because it spares than having to make a decision (and hence lose some votes). The (public choice based) literature on the political economy of protection, has almost totally disregarded the role of bureaucrats yet they remain the principal decision-makers for technical questions.
 - I have been only modestly successful in persuading my agricultural economist colleagues to attack the nontariff technical barriers issue. My assessment is that they see the subject matter area as 1) too expensive to research, because large amounts of primary data must be discovered, tabulated, etc., and 2) the research process itself is not easily quantifiable, cannot be easily "modeled" and thus produces few graduate theses in universities. Fortunately, Lincoln University has established a Chair on International Trade Policy, with a special emphasis on nontariff trade barriers. This gives me great satisfaction!
- 5. For example: International Agricultural Trade Research Consortium (IATRC), 'North American Free Trade Agreement,' subject title of a section of its Annual Meeting, New Orleans, Louisiana, 12–14 December 1991. Also, David M. Gould, 'Free Trade Agreements and the Credibility Trade Reforms' in *Economic Review*, Federal Reserve Bank of Dallas, First Quarter 1992, pp 17–27. On agriculture see "Agriculture in a North American Free Trade Agreement; Analysis of Liberalizing Trade Between the United States and Mexico," FAER N0246, ERS USDA September 1992.
- I am grateful to John Lee, former Administrator ERS, USDA for mutual conversations on these ideas.
- 7. The reference used here is that from the Hawaiian Sugar Planters Association.

Table 1. Total transfers associated with agricultural policies (in billion US dollars)

	Trans	sters fr	om tax	payers	,	Trans	sfers fr	om co	isume	\$		Bu	dget re	venues			To	tai trar	sfers	
Country		(1)					(2)						(3)			(1)	+ (2) -	- (3)	
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
Australia	0.6	0.7	1.2	12	1.1	0,3	0.4	0.5	0,6	0.4	0.0	0.0	0.0	0,0	0.0	1.0	1.1	1.7	1.8	1,6
Austria	1.0	8,0	1,1	1.2	1.3	2.5	2.0	29	3.0	3.0	0.1	0,1	0.1	0.1	0,1	3.5	2.8	3,9	4.1	4.2
Canada	53	5.4	5.3	6.7	5 4	3.4	3,4	4.0	4.1	3.7	0.0	0.0	0.0	0,0	0.0	8.7	8.8	9,3	10.8	9.1
EC-12 ¹	45.7	40.7	49 9	58.7	67 0	76 3	63 9	84 0	88.3	89.7	1.0	0.9	0.9	0.7	8,0	121.0	103.7	133,0	146.4	155.9
Finland	1.9	1.8	2.4	2.4	1.9	32	32	38	3.5	2.8	0,1	00	0.0	0.1	0,1	5,0	5.0	6,1	5,8	4.5
Japan	196	18.0	158	17.4	18 0	66 4	59.8	54.9	62.9	68.8	15.2	12.1	10.2	14.7	12.8	70,7	65.6	60,6	65,6	74.0
New Zealand	0.1	0.0	00	υO	0.0	0 1	01	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.2	0.1	0.1	0.1	0.1
Norway	13	1.8	2.1	2 1	22	1.7	1.6	2.1	2.0	21	0.1	0,1	0.1	0.1	0,1	3,5	33	4.1	4,0	4.1
Sweden	06	0 5	05	1 1	06	27	26	29	2.8	29	0.1	0.1	0.1	0.2	0.3	3.1	3.0	3.3	3.8	3.2
Switzerland	1.8	1.8	22	2 4	26	47	36	44	44	3 9	0.8	0.6	0.6	0.6	0.7	56	48	5.9	6.2	5.8
United States	44.2	47.8	44 2	54.6	63.4	22.9	23.0	26.7	27.4	28.6	0,9	0.7	8.0	0.9	0.9	66.2	70.1	70.1	81.1	91,1
TOTAL	122.7	119.5	124.7	147 8	163 6	184.2	163.5	186 2	199.0	205.9	18.5	14.7	12.8	17.3	15.8	288.4	268.2	298,1	329.5	353.7

1 Including ex-GDR in 1990, 1991, and 1992 Source: Agricultural Policies, Markets and Trade; Monitoring and Outlook 1993, Table II.15.

Table 2. Current and projected farm-level payment coverage ratios

Year	Com	Wheat	Rice	Upland Colton		
		Pei	rcent			
1992 1995	73.0 70.3	76.7 74.7	72.4 71.3	72.9 68.8		
2000 ¹	66.3	71.4	69.5	62.9		

¹ Projected ratios assume the same ARPs as in 1992. Source: Westcott, p.7.

Table 3. Total Wheat and Coarse Grains: Supply and Demand Millions of Metric Tons/Hectares

	Area Harvested	Yield	Production	World Trade	Total Consumption	Ending Stocks	Stocks As % of Cons
WHEAT AND	COARSE GRAII	NS					
1965/66	529.0	1.38	731,8	103.0	767.3	141.1	18.4
1966/67	529.2	1.53	809.5	96.0	779.7	170.9	21.9
1967/68	538.3	1 53	825.4	89 9	804 3	192.0	23.9
1968/69	541 6	1.58	857.7	82.0	830.6	219 1	26.4
1969/70	540.4	1.60	862.1	89.0	879 8	201 5	22.9
1970/71	530.3	1.63	865 8	101.0	903.0	164.3	18 2
1971/72	537.2	1.79	961.6	101.3	936.8	189.0	20.2
1972/73	528.4	1.76	931.7	129 0	964.5	156.2	16.2
1973/74	551,9	1.86	1025.5	134 0	1018.2	163.4	16.1
1974/75	552.8	1.77	977 9	129.3	969.5	171.8	17.7
1975/76	564.7	1.76	993.7	141.9	984.0	181.5	18.4
1976/77	575.1	1.92	1106.4	147.2	1045.7	242.3	23.2
1977/78	570.7	1.87	1068.9	161.7	1076.6	234.6	21.8
1978/79	569.7	2.08	1183.2	165.4	1144.2	273.6	23.9
1979/80	569.6	2,03	1153.9	185.5	1164.9	262.6	22.5
1980/81	577.6	2.01	1159.4	202.0	1183.1	240.3	20.3
1981/82	587.5	2.05	1203.8	198.7	1179.3	264.8	22.4
1982/83	575.5	2.17	1248.0	188.7	1199.6	313.3	26.1
1983/84	562.0	2.07	1161.9	196.9	1217.6	257.6	21.2
1984/85	566.0	2.32	1314.8	206 2	1261.6	310.9	24 6
1985/86	569.7	2.33	1327.2	167.4	1258.2	379.9	30.2
1986/87	564.0	2.39	1346 5	173.5	1312.0	414.3	31.6
1987/88	542.9	2.36	1280.1	200.3	1332.1	365.0	27.4
1988(89	540.6	2,25	1216.0	198.2	1309.8	271.3	20.7
1989/50	546.6	2.42	1324.0	205.9	1346.3	249.0	18.5
1990/91	545.7	2.58	1409.0	189.6	1372.4	285.6	20.8
1991/92	540.2	2.49	1345.4	202.3	1369.0	261.9	19.1
1992/93	540.2	2,62	1417.7	197 3	1383.9	295.7	21.4
1993/94	533.9	2.55	1359 4	184.9	1392.5	262.6	18.9

Notes: Wheat and coarse grains trade data are on July/June years through 1975/76 From 1976/77 to the present, coarse grains is on a Oct/Sept trade year.
Stocks as a percent of consumption represents the ratio of marketing year ending stocks to total consumption.

Table 4. Major categories of non tariff barriers and related policies Quantitative restrictions and similar specific limitations - Restrictions on quantity and/or value of imports of specific 1. Import quotas commodities for a given time period; administered globally, selectively or bilaterally. - Same as above but with reference to exports. 2. Export limitations - Some system of licensing is required to administer the foregoing 3. Licensing restrictions. Licensing may also be discretionary and liberal, including use for statistical purposes. - Restrictions imposed by importing country but administered by 4. Voluntary export restraints exporting country; administered multilaterally and bilaterally; requires system of licensing; essentially similar to an orderly marketing arrangement. - Restrictions on receipts and/or payments of foreign exchange 5. Exchange and other designed to control international trade and/or capital movements; will financial controls generally require some system of licensing; may involve multiple exchange rates for different kinds of transactions. - May be selective in respect of commodities and countries of 6. Prohibitions origin/destination; includes embargoes; may carry legal sanctions. - Requires that an industry use a certain proportion of domestically 7. Domestic content and produced components and/or materials in producing final products. mixing requirements - Preferential trading arrangements that may be selective by 8. Discriminatory bilateral commodity and country; includes preferential sourcing arrangements. agreements - Arrangements involving barter, counterpurchases of goods, and 9. Countertrade payments in kind. II. Nontariff charges and related policies affecting imports

1.	Variable levies	 Based on a target domestic price of imports, a levy is imposed so that the price of imports reaches the target price whatever the cost of imports.
2.	Advance deposit requirement	 Some proportion of the value of imports must be deposited in advance of the payment, with no allowance for any interest accrued on the deposit.
3.	Antidumping duties	- Imposition of a special import duty when the price of imports is

alleged to lie below some measure of foreign costs of production; minimum prices may be established to "trigger" antidumping investigations and actions.

- Imposition of a special import duty to counteract an alleged foreign 4. Countervailing duties Government subsidy to exports; normally required that domestic injury be shown.

- When indirect (e.g. sales or value added) taxes are levied on the 5. Border tax adjustments destination principle, imports will be subject to such taxes but exports will be exempt; the effects on trade will be neutral except in cases in which the adjustments more than compensate for the taxes imposed or exempted, or when the size of the tax differs across commodities.

III. Government participation in trade and restrictive practices and more general Government policies

- 1. Subsidies and other aids
- Direct and indirect subsidies to exports and import-competing industries, including tax benefits and credit concessions.
- Government procurement policies
- Preferences given to domestic over foreign firms in bidding on public-procurement contracts, including explicit cost differentials and informal procedures favoring procurement from domestic firms.
- State trading, Government monopolies and exclusive franchises
- Government actions which may result in trade distortions, including Government-sanctions, discriminatory international transport agreements.
- Government industrial policy and regional development measures
- Government actions designed to aid particular firms, industry sectors, and regions to adjust to changes in market conditions.
- Government financed research and development and other technology policies
- Govern actions designed to correct market distortions and aid private fin is. Judes technological spillovers from Government programs, such as defense and public health.
- 6. Natices systems of taxation and social insurance
- Personal and corporate income taxation, unemployment insurance, social security and related policies which may have an impact on trade.
- 7. Macroeconomic policies
- Monetary/fiscal, balance-of-payments, and exchange-rate actions which have an impact on national output, foreign trade and capital movements.
- 8. Competition policies
- Antitrust and related policies designed to foster restrict competition and which may have an impact on foreign trade and investment.
- 9. Foreign investment policies
- Screening and monitoring of inward and/or outward foreign direct investment, including performance requirements affecting production and trade.
- 10. Foreign corruption policies
- Policies designed to prohibit or restrict bribes and related practices in connection with foreign trade and investment.
- 11. Immigration policies
- General or selective policies designed to limit or encourage international movement of labor and which have an impact on foreign trade and investment.

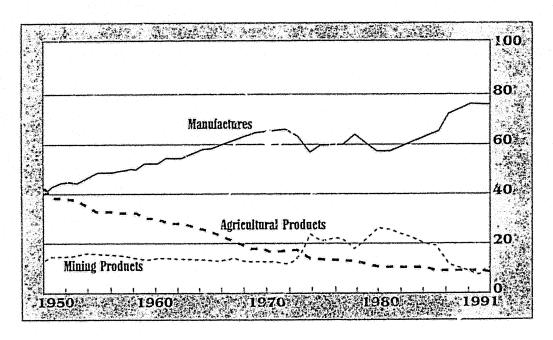
IV. Customs procedures and administrative practices

- 1. Custon, valuation procedures
- Use of specially constructed measures of price rather than the invoice or transactions price for the purpose of levying tariffs.
- 2. Customs classification procedures
- Use of national methods of customs classification rather than an internationally harmonized method for the purpose of levying tariffs.
- 3. Customs clearance procedures
- Documentation, inspection and related practices which may impede trade.

V. Technical barriers to trade

- Health and sanitary regulations and quality standards
- Actions designed for domestic objectives but which may discriminate against imports.
- 2. Safety and industrial standards and regulations
- See above,
- Packaging and labeling regulations including trademarks
- See above.
- 4. Advertising and media regulations
- See above.

Figure 1. Shares of Main Product Groups in World Merchandise Trade, 1950-91
(Based on value data)



Source: GATT. International Trade, 1991-92, Statistics, Chart III.1.

Figure 2. Influencing Trade Legislation: The Administrative Process

