

13. The Impact of Agricultural Policies of EU and NAFTA on World Trade

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1. Introduction

Over the last century, agricultural commodity output has steadily declined as a percentage of GDP in almost every country. In contrast, agricultural trade has increased and currently about 30 % of agricultural output is traded. However, the relative importance of agricultural trade to the global trading regime has declined from 30% of the value of merchandise trade in the 1950s to less than 10% in the 1990s. In spite of this, agriculture remains a contentious and vexing issue. In agriculture, for decades a complex system of interventions by nations has prevented gains from trade that has accrued to areas like manufacturing. The several GATT Rounds of negotiations did not bring about progress in the liberalization of agriculture.

Price supports and protectionist policies in the EU, US, Japan and elsewhere have induced farmers to overproduce and have caused the corresponding governments to offer excess agricultural quantities to world markets, thus lowering world agricultural prices. The most elaborate schemes have actually occurred in the EU because of the explicit and detailed guidelines known as the Common Agricultural Policy (CAP) (Batavia and Malliaris, 1996). These low prices have created an unfavorable environment for production of these commodities in Third World Countries, even though many of them may have a comparative advantage in food crops. Import restrictions imposed by industrialized countries against primary products restricted market access for Third World exports. The widespread use of non-tariff barriers and substantial tariff escalation significantly curtailed the dynamism of Less Developed Countries (LDCs) exports. They have also imposed severe losses on other countries heavily dependent on agricultural exports. These low prices have also created tensions between the industrial countries, who found their budgets for agricultural subsidies escalating. The sharp fall in world commodity prices in the early 1980s, coupled with major losses in market share, led the US to call for an eight round of GATT negotiations, called the Uruguay Round, 1986-93, which was finally completed in 1993. The Uruguay Round succeeded in agreements for modest reductions in domestic market supports and export subsidization

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in agriculture. This will mitigate distortions in world markets and increase export opportunities for more efficient producers to some extent.

This study explores the welfare costs of agricultural protection in the EU and US. A detailed analysis of the impact of these protectionist policies on world agricultural prices is provided. The welfare costs include those borne by the producers, consumers and taxpayers in these countries as well as the impact on the rest of the world. An analysis is also made of the benefits to EU, NAFTA and the rest of the world if these protectionist policies are removed.

2. Empirical Estimates of Costs of Agricultural Policies of Developed Countries

Using a dynamic, stochastic, multi-commodity simulation model of world food markets, Tyers and Anderson (1992) have provided quantitative estimates of the protectionist agricultural policies. They estimate that in 1985 US dollars non-farm households in Western Europe and Japan each had to pay between \$800 and \$1700 per year in the form of higher prices for farm products and higher taxes. The benefits of the protection policies to producers ranges from 25 percent of gross farm income in EU, to 33 percent in European Free Trade Association (EFTA), and 66 percent in Japan. The estimated net losses in 1980-82 amounted to \$9 billion per year for EU and Japan, and \$2.7 billion for EFTA countries. These losses have been increasing over time. They estimate losses to non-farm households in Japan and West Europe for the 1990s to be \$2000-\$3000 per year for each household in 1985 U.S. dollars

According to the OECD (1992), \$320 billion were transferred from consumers and fiscal budgets to the agricultural sectors in industrialized countries in 1991. Transfers in EU (\$141.8 billion) and Japan (\$63.2 billion) come from consumers via high domestic prices, and in US (\$80.8 billion) it is paid out of general revenue. Farmers and governments in general prefer to transfer income to farmers through the market place, via higher prices, rather than by direct welfare payments. This leads to border measures which insulate domestic prices from world markets, and includes import barriers and export subsidies. In the US beginning in 1965, and now in the EU under MacSharry reform, domestic income transfer policies have been redesigned to make them less trade distorting. Finland, Norway and Sweden have by far the highest per capita transfers (ranging from \$925-1173), whereas per capita transfers in Australia and New Zealand are the lowest (\$70 and \$19 respectively)(Valdes and Zeitz,1995).

Although several studies have attempted to measure quantitatively the levels of protection, there has been a lack of precision in the estimated measures of protection (Gardner,1991). Gardner shows how tricky it is to estimate the world price effects of U.S. farm programs. Gardner estimates that for all agricultural commodities taken together, the

U.S. intervention as of 1987 generated \$16.5 billion for producers (mainly economic rent to farm owners) at a cost of \$22.5 billion to consumers and taxpayers. The dead weight loss of \$6 billion is principally the opportunity cost of idled land and of handling surplus stock of commodities. It was estimated that as of 1982 agricultural protection was generating a worldwide deadweight loss of \$41 billion annually; this is the net potential gain from global liberalization.

Many studies have found that the main beneficiaries of liberalization --covering grains, livestock products, and sugar--would be liberalizers themselves (see Gardner (1991) for shortcomings of these estimates), and if liberalization is limited to the industrial economies, the LDCs as a group would experience net welfare loss. The LDCs would face higher prices and consumer welfare losses would tend to dominate producer welfare losses. Countries with poor agroclimatic endowments would lose from liberalization (for example, Chad), since these countries are net importers of agricultural products and also benefit from the current discriminatory arrangements (such as the Lome Convention). Other middle-income and upper middle income countries (such as Uruguay, Argentina) are net agricultural exporters and did not benefit from preferential market access; these countries are likely to benefit from liberalization.

Tyers and Anderson (1992) show that if industrial countries completely tariffed their trade policies in the process of partial liberalization, fluctuations in domestic food prices in EU and Japan would increase, in U.S. would be no greater, and in more open food economies of Canada and Australia would be less. Also, the extent of instability in international food prices would be reduced in half. Therefore the net effect of reform on the instability of food markets in EU and Japan would be quite modest. They also show that a complete liberalization of OECD agricultural protection would benefit LDCs as a group substantially (\$17 billion), and also each large individual developing country and most subgroups of small developing countries also gain; the only ones estimated to lose are a few medium sized countries that are heavily dependent on food imports (Bangladesh, Korea, and the North Africa/Middle East group). In 1990, the estimated benefit to producers in Western Europe and Japan of their food policies amounted to \$104 billion, but losses to producers elsewhere in the world due to these policies was \$45 billion. The estimated global net welfare loss due to these policies was about \$50 to \$57 billion per year, more than three times the estimated global loss in the early 1980s. The countries hurt most by such policies are the lightly subsidized agricultural exporting countries like New Zealand, Argentina, Australia, and Thailand. These countries and ten other agricultural exporting countries have banded together to form the Cairns group which lobbied hard for the lowering of protection of agricultural markets.

Developing country net foreign exchange in the year 2000 is estimated to be about \$39 billion greater in the absence of industrial country food policy and \$81 billion greater if developing country policy distortions also were removed (in 1985 U.S. dollars).

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If both developed and developing countries liberalized their policies and increase productivity growth by price incentives in developing countries, global welfare for the year 2000 would increase by \$127 billion per year.

3. Impact of Existing Agricultural Policies on World Prices

The world-market prices of many agricultural commodities tend to be volatile, while the protected domestic price is held relatively constant (e.g.. In U.S. sugar policy, quotas and import fees are adjusted so as to maintain domestic price at about 22 cents per pound, while the comparable world rate during 1985-1988 ranged from 4 to 12 cents per pound).

The secular decline in real prices for key agricultural commodities has persisted since the turn of the century, and especially for maize, rice and wheat since the early 1950s (Valdes and Zeitz, 1995). During 1900-1986, the decline has been 0.35% annually for food, 0.82% for nonfood agricultural products, 0.68% for cereals, and 0.54% for nonbeverage foods, and a 78% percent decline in real food prices during 1950-92, a 1.3% annual decrease. Among commodity specialists world prices of agricultural commodities are expected to continue to decline in real terms. Such forecasts, however, are subject to considerable uncertainty due to unknowns in four areas: Production levels in the former Soviet Union and Eastern Europe, China's potential and positions on trade, the extent of trade liberalization by developing countries, and the role of future gains from technology.

Given the right conditions, countries of Eastern Europe (e.g. Poland) and the former Soviet Union (e.g. Ukraine) could become net exporters in several agricultural products in less than a decade. The longer run supply response, however, is more uncertain, depending on whether severe institutional and political impediments to agricultural production and productivity are removed in the years to come.

Before the dissolution of the former Soviet Union, incentive distortions in agriculture favored livestock producers but failed to meet demand on the consumption side. The demand for cereals also rose because grain was used for direct consumption as well as for feed. In the short run, the collapse of aggregate output and therefore purchasing power will reduce the demand for livestock products and livestock feed. This could cause a substantial reduction in net food imports (Tyers, 1994). The centrally planned economies did a poor job in creating and adopting new technology. Yields in meat were 30-45% below those in Western Europe and 20-50% below yields in milk. The efficiency of livestock feeding was also poor and resulted in overspending on feedgrains ranging from 75 to 125%. Productivity could be increased by 10-50% for grains, 50% for beef, 80% for pigmeat, and 100% for milk. They could even be higher

since prereform supplies of inputs were irregular and unpredictable and spoilage rates in storage, transport and processing were extremely high. Results also suggest that productivity in Eastern Europe could increase by as much as 50% for grains and beef and 25% for milk production. The EU is gradually reducing its barriers against the EE-3 countries (Former Czechoslovakia, Poland, and Hungary) exports. The effects of reforms in the EE-3 countries are likely to be small. In the former Soviet Union, livestock were highly subsidized compared with grains, so liberalization should increase grain production and reduce livestock production. On the consumption side, grain demand for feed and food will be reduced relative to demand for livestock products. Since grain demand will fall and producer price will rise, a surplus in grain seems inevitable. This result is striking given that the region has been a net importer of grains for half a century. On average, by the year 2000, the postsocialist countries are expected to be self-sufficient in food, with net export earnings of 50-80% of those predicted for the US. The tendency of GATT agreement to make international prices higher will probably be offset by a reduction in discrimination against agricultural sectors in LDCs.

Estimates for China, whose rising income levels are inducing a shift from grain products to livestock products with higher income elasticities, suggest that it could become a major importer, with imports of 33-46 million tons. With a world market that trades only 110 million tons, this could push prices upwards. Also China is estimated to become a large rice exporter, of possibly 20-30 million tons by the year 2000. With world trade in rice at 13 million tons, this could result in very low international prices. However, vast difference in the projections abound. For example, Chinese cereal imports for the year 2000 was projected to range from one million tons (FAO estimate) to 43 million tons (by the World Bank). Tyers and Anderson (1992) consider cereal imports in excess of 100 million tons quite possible. If China were to stop importing grain for political reasons, the world market price of wheat could drop by 25%. In reality, the world price of sugar dropped in 1989 in the aftermath of China's crackdown on the prodemocracy movement, when sugar imports were curtailed sharply and domestic rationing was introduced.

Trade policy reforms in LDCs (currently pursued by many Latin American countries) affect production and are likely to affect food prices. In the past, most LDCs taxed agriculture, directly through export taxes and the operation of marketing boards, and indirectly through the protection of the industry and an overvalued exchange rate. For a set of 18 countries (Schiff and Valdes, 1992) for their agricultural pricing policies, the estimates averaged more than 30%. Indirect taxation, in particular through industrial protection and exchange rate overvaluation is the dominant factor, with an effect on price nearly three times that of direct interventions in agriculture through taxation of exportables or protection of importables. Removal of these high levels of direct and indirect taxation facing agriculture in many developing countries is likely to have a

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significant effect on production, consumption, and on trade flows. The impact of increased production liberalization by LDCs could effectively neutralize the upward price movement in most major temperate zone products that is expected from liberalization by industrialized countries. Similar points are made for sugar and rice and tropical beverages (Brandao and Martin, 1993). However, developing countries (e.g., Korea, Taiwan, China, Indonesia, Philippines) in the midst of industrialization may opt for protectionist policies towards agriculture that are similar to those of industrialized countries . Such protection may result in much lower world market prices.

By late 1990s new genetically engineered rice varieties are expected to reach farmers. Large productivity gains are forecast for vegetables, cocoa, coffee, and palmoil (Mitchell and Ingco, 1993). World Agricultural markets would also be affected considerably if agricultural raw materials are used as inputs in industrial production processes, such as fuel or chemicals.

4. LDCs Agricultural Sector

For developing countries, agriculture is a primary economic activity. The LDCs were essentially exporters of primary products. There was a belief, popularized by Raul Prebisch and Hans Singer, that there was a continuing secular decline in the price of primary products vis-à-vis those of manufactured goods. Therefore, LDCs trade policies should favor resource transfer from the export sector to import-substituting activities. Import substitution would not only foster economic development (via industrialization and its positive externalities), it would also tend to reverse the terms of trade decline for LDCs. The perennial foreign-exchange problems of LDCs was blamed mainly on the fact that developed countries were denying adequate market access to products of interest to LDCs- particularly agricultural goods. Eventually, this led to the adoption of GSP, the Generalized System of Preference, which entailed the concession by developed countries of temporary and non-reciprocal tariff preferences to imports from LDCs. The impact of GSP on agriculture was limited, and just prior to the Uruguay Round, agricultural products accounted for less than 20% of the imports accorded preferential treatment. Also, the Lome Convention was signed in 1975, and this provided preferential access to exports from more than 60 African-Caribbean-Pacific (ACP) countries to the EU market.

Developing countries' economic policies have in general produced a bias against agriculture (Bautista and Valdes, 1993, and Schiff and Valdes, 1992). Two broad set of policies have produced this bias: sectoral and trade policies and economy-wide macroeconomics policies. Most LDCs have adopted policies of import substitution and protection against imports competing with domestic production. These have had

substantial indirect effects on agricultural production because it reduced incentives for nonprotected traded goods (usually agricultural exports) relative to those for protected and nontraded goods. LDCs have government procurement policies (especially agricultural marketing boards), export taxation resulting in negative protection rates, and export quotas that suppress production prices of agricultural commodities, further distorting the prices of agricultural goods relative to other goods. At the same time, they subsidize inputs such as fertilizer, irrigation, power, and new seed varieties. The main beneficiaries of these subsidies tend to be the larger and affluent farmers. The input subsidies cause distortions in the choice of crops and farming techniques, compounding the adverse effects of output taxes (Krueger et al, 1988).

In addition to distortion caused by trade and sector policies, developing countries have pursued monetary and fiscal policies coupled with an overvalued exchange rate through exchange-controls and import-licensing mechanisms, further increasing the bias against agriculture. The overvaluation of the exchange rate lowers the returns to traded goods, especially agricultural exports and makes agricultural imports cheaper relative to domestic substitutes. Also, the expansionary monetary and fiscal policies increases the level of effective protection to domestic industry relative to agriculture.

5. Impact of Liberalization on World Markets

If world prices increase significantly as a result of liberalization by developed countries, and if these are fully transmitted internally, it would cause large transfers from domestic consumers to producers in the importing developing countries. If the price changes are not transmitted to the domestic market, then the governments will face rising consumption subsidy costs and implicit taxation of production, (Fletcher, 1992; Tyers, 1994). Many LDCs have insulated their domestic markets from price changes through nontariff barriers or state trading. Thus domestic liberalization for these countries may generate significant adjustment costs on urban consumers and provoke the reaction of powerful vested interests. Therefore, support for global agricultural trade liberalization is quite uneven among Third World countries.

Paarlberg (1992) argues that even with liberalization there are limited consequences for developing countries. The developed countries subsidize the producers and tax consumers. Removal of barriers and subsidies reduces supplies and raises world prices. The rise in world prices negatively impacts developing country consumers while benefiting their producers, but the net effect is likely to be small even though negative. But reality is that LDCs also distort their agricultural food sectors, in the opposite direction. They tax producers and subsidize consumers by fixing domestic prices well below world prices. Therefore, if there is liberalization in both the developed

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and developing countries, there are broader implications. The world prices may not rise as much because LDCs liberalization reduces import demand and thus puts downward pressure on prices. The removal of distortions in LDCs can thus result in substantial welfare benefits for themselves. Also, the rural poor may be better off with higher food prices if agricultural producer prices are also higher.

Many studies used partial equilibrium studies to support the view that LDCs as a group, being net importers of temperate food, would lose as the price of their food imports went up due to liberalization. Subsequent general equilibrium models provided evidence to argue that not only net exporters but most LDCs would benefit from liberalization of trade in temperate food products (K. Anderson, 1992). The arguments for this result include the following: when the price of food goes up as a result of liberalization, the country switches to a sufficient extent from being a net importer to a net exporter of food. The price rise also induces more high-payoff agricultural research, and increasing farm productivity growth and welfare gains from this more than offsets the loss from worsening terms of trade. An LDC may have policies that lower the domestic price of food relative to other products; this has caused it to be a net importer of food despite its comparative advantage in agriculture. With a large price rise in food as a result of liberalization, resources may shift from the inefficient protected sector. A distorted economy which is a net food importer can have welfare gains from reducing its distortions that more than offset the welfare loss from deteriorating terms of trade.

6. The Uruguay Round and World Trade in Agriculture

The Uruguay Round was completed in 1993 and succeeded in agreements for some reductions in domestic market supports and export subsidization in agriculture. This will mitigate distortions in world markets and increase export opportunities for more efficient producers. Briefly, the agreement calls for nontariff barriers to be converted to bound equivalent tariffs, then reduced by an average of 36% over 6 years (and a minimum of 15%). Minimum access of at least 3% of domestic consumption is required and this will grow to 5% over 6 years. For internal support the cross-commodity average subsidy level was limited to 80% of the 1986-88 levels. The value of export subsidies must be cut by 36% and the quantity of exports subsidized must be cut by 21%.

Goldin and Mensbrugghe (1993) estimated the Uruguay Round's liberalization to have a positive impact on GDP at \$57 billion for EU, \$16 billion for Japan, \$12 billion for U.S., \$9 billion for EFTA, and about \$2 billion for Canada, Australia, and New Zealand (1985 prices). The 1992 CAP reform provides for a phased shift away from subsidization of production to direct payment to farmers, and significant reductions in guaranteed prices for cereals and beef. This should result in significant reduction in the

output of cereals in the 1990s. The commitment to reduce trade-distorting domestic supports is expected to have limited consequences for the U.S., because supports for a number of commodities have already been reduced in recent years. The commitment to reduce export subsidies will reduce exports of subsidized commodities by over \$500 million a year. But U.S. agricultural exports (especially grains and animal products) are expected to increase by \$1.6 billion to \$4.7 billion in 2000. Japan will provide minimum access to the domestic rice market equivalent to 4% of domestic consumption in 1995 and rising to 8% by 2000. The provisions on domestic supports and export subsidies are not expected to have any effect on Japanese Agricultural Policies. Because of the high level of bound tariff, the direct impact of the Uruguay round agreement on access to agricultural market in developing countries is expected to remain limited in the short run.

A number of food-exporting developing and transition economies will gain from higher prices and lower subsidies in industrial countries. These include members of the Cairns Group (Australia, Argentina, Brazil, Canada, Chile, Fiji, Hungary, Indonesia, Malaysia, New Zealand, Philippines, Thailand and Uruguay), sugar producers (e.g., Cuba, Brazil, Dominican Republic, Thailand), and East European Countries (e.g., Poland and Bulgaria). Also a large number of countries with potentially large agricultural sectors (e.g., China, Kenya, Mexico, South Africa) may benefit from a more liberalized environment if they succeed in implementing the needed structural adjustments in developing their domestic production capacities.

Brandao and Martin (1993) show that prices will increase by about 4-10% over the medium term as a result of reduced protection under the agreement for commodities like wheat, rice, meat, dairy products, and sugar. They also show that African and Mediterranean countries (including the Maghreb), which are net commercial importers of food, are likely to have adverse welfare effects as a result of higher prices. However, the terms of trade losses resulting from higher food import prices are likely to be offset in most cases by gains in other areas as a result of wider access to industrial countries markets (e.g., textiles and clothing). The Uruguay Round agreement has provided for increased food aid to affected developing poor countries during the reform program.

Valdes and Zeitz (1995) argue that the experience of countries such as Chile has shown that the dynamic gains and induced income growth associated with trade liberalization as part of economy wide reform can be substantial, exceeding the gains calculated by typical trade liberalization models. Also, this process is likely to result in a much more diversified structure of production and trade, including nontraditional exports. Trade liberalization (Tyers and Anderson, 1992) will also induce more price stability in the world markets. This stability and an end to the unpredictable competition between the budgets of EU and the US reduces the risk of investing in developing country agriculture, resulting in an output response and adding to the dynamic gains to be expected from trade liberalization.

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Tropical products account for two-thirds of the developing countries' exports, and studies show that world price changes associated with liberalization are likely to be small. Given that the Uruguay Round accord will be phased in over 6 years for the developed countries and over 10 for the developing countries, the changes per year may be hardly perceptible, except for perhaps livestock and sugar. This would be all the more true if developing countries manage, at the same time, in lowering their direct and indirect taxation of agricultural production.

Overall the world prices are unlikely to increase dramatically as a result of the implementation of the GATT accord. Significant price increases are likely only on a few products.

7. Summary and Conclusions

This paper analyses the developments of agricultural policies in the developed and developing countries, and the role and impact of agricultural policies (of EU and NAFTA) on world markets.

In agriculture, for decades a complex system of interventions by nations has prevented gains from trade that has accrued to areas like manufacturing. The several GATT Rounds of negotiations did not bring about progress in the liberalization of agriculture. The EU, in its continued efforts to develop a successful customs union coordinated agricultural subsidies among its members which resulted in excess supplies. The U.S. in the 1980s also introduced an explicit system of export subsidies to regain its share of the market. These subsidies involved high government outlays and have driven down world prices, creating an unfavorable environment for the production of these commodities in LDCs. These subsidies also imposed heavy losses on other countries heavily dependant on agricultural exports. Protectionism is also spreading to middle-income economies that are rapidly growing (e.g., Korea and Taiwan). Developing countries have tended to set agricultural prices below international levels, especially when compared at shadow rather than at official exchange rates, and to indirectly discourage agriculture via manufacturing protection. All countries have tended to stabilize their domestic food markets by adjusting each year their international trade in food, thereby causing international food prices to fluctuate far more than they otherwise would.

The CAP has been costly to the EU, particularly to the consumers and taxpayers, and involves large transfers to EU farmers. Evidence also shows that CAP has caused more trade diversion than creation. This differentiated effect for agriculture results from the impact of domestic distortions in addition to trade distortions. This suggests that regional arrangements which do not remove domestic distortions are likely

to be trade diverting (McCalla, 1992). Also, once CAP was in place it became hard to change because of vested interests and capitalization of community preference benefits into land values and quota rents. Temporary efforts to stabilize domestic prices are likely to lead to outright protection.

The NAFTA agreement in the area of agriculture is limited in nature and includes a set of trilateral provisions of a largely exhortive nature on the need to use less trade distorting domestic policies and to abstain from export subsidies. NAFTA concentrates on the issues of market access for internal trade, avoiding conflicts with domestic policies. Tariff and non-tariff barriers are to be phased out over the next decade, leading to relatively free internal market for many agricultural products. Grennes and Krissoff (1993) anticipate that NAFTA will not be significantly trade diverting.

The Uruguay Round was completed in 1993 was a modest success in the area of agriculture. The agreements called for reductions in domestic market supports and export subsidization. This should reduce the distortions in world markets and increase export opportunities for more efficient producers. Three points are relevant in assessing the Uruguay accord. The Uruguay Round accord is meant to curtail the protectionist policies of the newly industrializing countries that could have significantly depressed world prices in the future. Secondly, the accord's true significance is not in terms of its effect on price changes in world market, but in laying the foundation for future liberalization. The tariffication will make market access more secure and facilitate future negotiations on trade liberalization. Finally, the Uruguay Round offers significant gains to LDCs in areas outside of agriculture, such as minerals, textiles and apparel.

References

- Anderson, Kym.1992, Analytical Issues in the Uruguay Round Negotiations on Agriculture, *European Economic Review*, 36, pp519-526.
- Batavia B, and Malliaris A. G., 1996, The Common Agricultural Policy of the EU and Developing Countries, in C.G. Paraskevopoulos et al, Chapter 16, pp193-205.
- Bautista, R. M. and A. Valdes, (editors), 1993, *The Bias Against Agriculture: Trade and Macroeconomic Policies in Developing Countries*, International Food Policy Research Institute, ICS Press, San Francisco.
- Brandao, Antonio Salazar P. and Will Martin, 1993, *Implications of Agricultural Trade Liberalization for the Developing Countries*, World Bank, Washington.
- Fletcher, L.B., 1992, editor, *World Food in the 1990s: Production, Trade and Aid*, Westview Press, Boulder.
- Gardner, Bruce. 1991, *Agricultural Protection in Industrial countries*, in Greenaway et al, chapter 5, pp99-118.

- Goldin, Knudsen and Van der Mensbrugge, 1993, Trade Liberalization: Global Economic Implications, Paris-Washington, OECD-World Bank.
- Greenaway,D., R.C. Hine, A.P. O'Brien, and R.J.Thornton, 1991, editors, Global Protectionism, St. Martin's Press, N.Y.,
- Grennes,Thomas and Barry Krissoff, 1993, Agricultural Trade in a North American Free Trade Agreement, World Economy, Vol. 16, Issue 4, July, 483-502.
- Krueger, A. O., M. Schiff, and A. Valdes, 1988, Agricultural Incentives in Developing Countries:Measuring the Effect of Sectoral and Economywide Policies, The World Bank Economic Review, Vol. 2 No. 3, pp. 255-271.
- McCalla,Alex F., 1992, GATT, Preferential/Regional Trading Blocs and Agricultural Trade, Review of International Economics 1(1),pp73-89.
- Mitchell, Donald O. and Merlinda D. Ingco, 1993, The World Food Outlook, Washington, D.C.,World Bank.
- OECD, Agricultural Policies, Markets and Trade:Monitoring and Outlook. 1992, Paris.
- Paarlberg, Robert., Agricultural Policy and Trade Reforms in Developed Countries: Projected Consequences for Developing Countries, in Fletcher, 1992, Chapter 4.
- Paraskevopoulos, C.G., R. Grinspun, and T. Georgakopoulos (editors), 1996, Economic Integration and Public Policy in the European Union, Edward Elgar, Cheltenham,UK and Brookfield, US.
- Schiff, M. and A. Valdes, 1992, The Plundering of Agriculture in Developing Countries, World Bank, Washington,D.C.
- Tyers, R and K. Anderson, 1992, Disarray in World Food Markets: A Quantitative Assessment, Cambridge University Press, U.K.
- Tyers,Rod., Economic Reform in Europe and the Former Soviet Union: Implications for International Food Markets, 1994, Research report 99, International Food Policy Research Institute, Washington, D.C.
- Valdes, Alberto and Joachim Zeitz, 1995, Distortions in World Food Markets in the Wake of GATT: Evidence and Policy implications, World Development, 23(6), pp913-926.