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Reviews

Agricultural Competitiveness After the Uruguay Round

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This paper examines the extent to which the Uruguay Round's implementation and other policy reforms are likely to alter the fortunes of Australasian and other farmers. It finds that, compared with other structural adjustment pressures, the Uruguay Round *per se* is likely to have a positive but relatively minor effect. Nonetheless, the net gains are likely to be very substantial relative to the efforts expended by the Cairns Group to ensure agricultural reform remained in the final agreement of the Round. Those gains will be larger the more the Cairns Group remains vigilant in ensuring (a) that the promised cuts in protection are actually implemented, (b) that the reforms are not accompanied by the imposition of compensating support policies and (c) that further cuts are delivered in the next round of negotiations to begin in 1999.

1. Introduction

For most of the past decade, farmers throughout the world have been eyeing the Uruguay Round of multilateral trade negotiations and wondering how their international competitiveness would be affected. With the completion of negotiations in April 1994, the subsequent ratification of the agreements in most national parliaments, and the replacement of the GATT Secretariat with the World Trade Organization in 1995, now is an appropriate time to ask: where do we go from here? In particular, will Australian and New Zealand farmers be substantially better off because of the Round, and how significant will the Round agreements be compared with other influences on agricultural competitiveness in different countries during the next few years as the Round is implemented? In addressing these questions, one needs to focus as much on changes in non-agricultural policies and markets as on agricultural influences *per se*.

The paper begins by summarizing the ways in which domestic policies are being influenced by the Uruguay Round agreements, and then examines other farm and non-farm policy reforms affecting the agricultural competitiveness of various countries/regions. The latter include regional integration initiatives, as well

as unilateral reforms both in former communist countries and in other developing economies. These forces for change are being superimposed on more-fundamental economic influences on agricultures competitiveness in each country. On the supply side, the most important of these are growth at home compared with abroad in farm relative to nonfarm (a) sector-specific factors of production and (b) total factor productivity. The main demand-side influences are the low income and price elasticities of demand (and hence slow growth in the demand) for farm products globally. The final section of the paper concludes that, compared with these other structural adjustment pressures, the implementation of the Uruguay Round agreements during the rest of this decade will have a positive but relatively minor impact on the welfare of Australasian farmers, and should be seen as but a beginning to the process of reducing the disarray in world food markets.

2. The Uruguay Round

2.1 The Agricultural Agreement¹

In the light of the long history of agricultural protection growth in industrial countries (Johnson; Tyers

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¹ The progress of the agricultural part of the Round has been well covered by a series of articles in this *Review*. See MacLaren (1995) for a survey of those and other earlier papers.

and Anderson 1992), even a standstill in agricultural protection would have to be described as progress. It would be an advance over what otherwise might have been the case not least because it would reduce the risk of newly industrializing countries following the more advanced ones down the agricultural protection growth path. But in fact more (although only a little more) than a standstill on farm policy was agreed to in the Uruguay Round. The GATT agreement on agriculture, to be implemented mostly between 1995 and 2000, has three main components: reductions in farm export subsidies, increases in import market access, and cuts in domestic producer subsidies. (For developing countries the implementation period is ten rather than six years and the extent of reform required is less.) While it is too early to estimate precisely the overall effects of the agreement -- because that depends on fine details and on the differing interpretations and re-instrumentations that will follow -- preliminary empirical estimates are beginning to appear and some broad comments are possible.

The fact that farm export subsidies are still to be tolerated continues to distinguish agricultural from industrial goods in the GATT, a distinction that stems from the 1950s when the United States insisted on a waiver for agriculture of the prohibition of export subsidies. Moreover, even by the turn of the century farm export subsidies need be only about one fifth lower than they were in the late 1980s to comply with the agreement. True, the budgetary expenditure on export subsidies is to be lowered by 36 per cent from the base period, but it is only the agreed cut in the *volume* of subsidized exports (21 per cent) that is likely to bite since international food prices are expected to be considerably higher in the implementation period than in the depressed 1986-88 base period.

A second distinguishing feature of the agricultural agreement is that it requires nontariff import barriers to be converted to tariffs.² Those tariffs are then to be reduced and bound. However, the extent of tariff reduction by the end of the century is even more modest than for export subsidies: the *unweighted* average tariff cut must be 36 per cent, but it could be less than one sixth as a *weighted* average, since each tariff item need be reduced by only 15 per cent of the claimed 1986-88 tariff equivalents. Tangermann gives the example of a country with four items subject to tariffs, three sensitive ones with 100 per cent duty rates and one with a 4 per cent duty. Reducing the three high rates to 85 per cent (a 15 per cent cut) and eliminating the 4 per cent rate (a 100 per cent cut)

would give an unweighted average cut of 36.25 per cent. This would meet the requirement for an unweighted average cut of 36 per cent and minimum cuts per item of 15 per cent, but would allow high protection on sensitive products to remain and may increase the dispersion of rates.³

Moreover, the claimed tariff equivalents for the base period 1986-88, and hence the initial tariff bindings, are in many cases far higher than the actual tariff equivalents of the time. The European Union, for example, has set them on average at about 60 per cent above the actual tariff equivalents of the CAP in recent years, while the United States has set theirs about 45 per cent above recent rates. This 'dirty' tariffification, shown in column 4 of Table 1, has two consequences. One is that actual tariffs may provide no less protection by the turn of the century than did the non-tariff import barriers of the early 1990s. Indeed in the case of the EU the final bindings for the year 2000 are almost two-thirds above the actual tariff equivalent for 1989-93, and for the United States they are more than three-quarters above (final column of Table 1). The other consequence of binding tariffs at such a high level is that it allows countries to set the actual tariff below that but to vary it so as to stabilize the domestic market in much the same way as the EU has done in the past with its system of variable import levies and export subsidies. This means there will be much less than the hoped-for reduction in fluctuations in international food markets that tariffification was expected to deliver.

It is true that some countries have agreed also to provide a minimum market access opportunity, such that the share of imports in domestic consumption for products subject to import restrictions rises to 5 per cent by the year 2000 under a tariff quota (less in the case of developing countries; 8 per cent in the case of rice in Japan in lieu of tariffification). But that access is subject to special safeguard provisions, so it only

² An important exception is that Japan managed to avoid tariffing its rice policy (Hayami and Godo 1996), the wisdom of which is highly questionable even from a domestic political viewpoint (Anderson 1996).

³ An increase in the dispersion of rates within the sector could itself be welfare-reducing even if the mean rate was unchanged. This is more likely the more resources (including agricultural land) can be switched from what become less-protected to more-protected sub-sectors (Lloyd).

Table 1: Uruguay Round Tariff Bindings and Actual Tariff Equivalents of Agricultural Protection, European Union and United States, 1986 to 2000

	Actual tariff equivalent (%), 1989-93	Tariff binding Final period 2000(%)	Proportional reduction by 2000(%)	'Dirty' tariffication ^a 1986-88	Binding 2000/ actual tariff equivalent, 1989-93
<i>European Union</i>					
Wheat	68	109	36	1.60	1.60
Coarse grains	89	121	36	1.42	1.36
Rice	103	231	36	2.36	2.24
Beef and veal	97	87	10	1.00	0.90
Other meat	27	34	36	1.32	1.26
Dairy products	147	205	29	1.63	1.39
Sugar	144	279	6	1.27	1.94
ALL AGRIC.					
unweighted av.	45	73		1.61	1.63
std. devn.	57	96		1.58	1.68
<i>United States</i>					
Wheat	20	4	36	0.30	0.20
Coarse grains	2	2	74	2.00	1.00
Rice	2	3	36	5.00	1.50
Beef and veal	2	26	15	10.33	13.00
Other meat	1	3	36	0.67	3.00
Dairy products	46	93	15	1.09	2.02
Sugar	67	91	15	1.50	1.36
ALL AGRIC.					
unweighted av.	13	23		1.44	1.77
std. devn.	22	35		1.20	1.59

^a Announced base tariff rate as a ratio of actual tariff equivalent in the base period.

Source: Ingco (1995)

offers potential rather than actual access (another form of contingent protection). Furthermore, it formally introduces scope for discriminating in the allocation between countries of these tariff quotas, and tends to legitimize a role for state trading agencies such as Indonesias BULOG.

There are thus elements of quantitative management of both export and import trade in farm products now under the GATT, including scope for discriminatory limitations on trade volumes, rather than just limitations on price distortions. This feature of the agricultural agreement is unfortunate, for it reduces the degree of flexibility of economies to adjust to chang-

ing market circumstances, and while it may reduce uncertainty for some traders it will do so at the expense of greater uncertainty for others.

The third main component of the agreement is that the aggregate level of domestic support for farmers is to be reduced to four fifths of its 1986-88 level by the turn of the century. That too will require only modest reform in most industrial countries because, as the final column of Table 1 implies, much of the decline in that measure of support has already occurred. Moreover, there are many forms of support that need not be included in the calculation of the aggregate measure of support (AMS), the most important being

direct payments under production-limiting programs of the sort adopted by the US and EU. The use of such instruments (including environmental provisions) is likely to now spread to other countries and commodities as farm income support via trade measures becomes less of an option.

In short, the agricultural reforms agreed to in the Round involve only very modest liberalization over the next six years in industrial countries, with plenty of room (a) for disputes over compliance to the year 2000 and (b) for further reductions in the new millennium (see column 2 of Table 1). They will accelerate agriculture's relative decline and loss of farm jobs in heavily-protected industrial countries, but only slightly. And they will boost gradually the competitiveness of farmers in countries where the international price rises are transmitted to the domestic market for farm products, although again the improvements will be only slight over the remainder of this decade. But at least agriculture is now in the mainstream of the GATT (which allowed the other agreements in the Uruguay Round to be concluded), and it has been agreed to reopen agricultural negotiations in 1999 to continue the process of farm reform. Moreover, the important need to tariffify nontariff import barriers and to quantify the AMS in the interests of transparency, and to include domestic producer subsidies in the reform package, has been acknowledged and explicitly incorporated into this agreement. The new rules and obligations eventually will constrain further farm protection growth in both industrial and developing countries, thereby promising greater certainty and stability to international food markets in the future and so encouraging countries with a natural comparative advantage in farm products to exploit the new market opportunities, not least through seeking reductions in their own country's direct and indirect policy discrimination against agriculture.

2.2 The Economic Gains from Uruguay Round Liberalization

The Uruguay Round was not only about agriculture of course. Manufacturing tariffs (already quite low) are to be reduced further, 'voluntary' export restraints are to be phased out, the Multifibre Arrangement is to be abolished and protection to textiles and clothing lowered, a (small) beginning is to be made to liberalize trade in services, there will be greater discipline on abuse of intellectual property rights, and much-improved dispute settlement procedures are being put in place in the new World Trade Organization. All of

these changes will boost global economic welfare substantially.

Earlier GATT Secretariat estimates put the economic benefit of the Round as a whole at between US\$200 and \$500 billion per year (Nordstrom, McDonald and Francois). More-recent studies provide lower estimates of global welfare gains though, primarily because of the more-modest agricultural reforms that are now expected thanks to 'dirty' tariffication and to the fact that agricultural protection has decreased since the Round began (the effects of which were not captured in earlier studies).⁴

These empirical studies grossly underestimate the total benefits from the Uruguay Round, however. This is because they under-represent or ignore a number of important effects of the agreements that are difficult to quantify *ex ante*. One is in strengthening the multilateral trading system (including the bringing of services, TRIPs and TRIMs under GATT discipline) and thereby in boosting investor confidence, employment and productivity growth. Another is the encouragement that greater openness abroad gives to accelerating the unilateral reform programs of individual countries beyond their Uruguay Round commitments. These studies also assume the alternative scenario is the status quo, whereas it may well have been more protectionism, higher barriers around regional blocs, and sporadic trade wars with few if any winners.

Bearing those points in mind, much can still be learnt from these latest quantitative modelling exercises. Hertel *et al.* (1995) estimate a global welfare gain from agricultural and manufacturing trade liberalization of US\$260 billion per year by 2005 (in 1992 prices), or 0.4 per cent of expected global GDP. Much of that estimated benefit of the Round will accrue to developing countries, especially the more open ones. The estimated gain to East Asia's developing economies is a 4.7 per cent boost, primarily because of large gains from (a) textile and clothing import liberalization by industrial countries and (b) their own reforms.

Three important implications of these results are worth stressing. One of the consequences of expanded

⁴ See, for example, Brown, Deardorff and Stern, Francois, McDonald and Nordstrom, Goldin and Mennsbrugge, Harrison, Rutherford and Tarr, and Hertel *et al.*

manufacturing export opportunities is that agricultural production growth in most East Asian economies is slowed -- despite farm trade liberalization in developed countries -- as more resources are attracted to textiles and clothing. This can be seen from Table 2, which shows the projected percentage changes in

output between 1992 and 2005 for each sector with and without the Round, as estimated by Hertel *et al.*

A second important point to note from Table 2 is the absence of negative numbers in column 1 for the rest of the world. That is, even in the countries reducing

Table 2: Projected Percentage Change in Sectoral Output Between 1992 and 2005 Without (Upper Entry) and With (Lower Entry) Uruguay Round Liberalization (per cent)							
(a) East Asian developing countries							
	S. Korea	Taiwan	China	Indonesia	Malaysia	Philippines	Thailand
Primary agriculture	65 43	76 79	121 125	71 66	102 69	60 19	95 77
Processed food	92 109	94 114	194 180	111 110	156 441	73 118	149 140
Other primary	134 128	143 142	246 238	79 73	119 98	79 67	104 91
Textiles	91 221	178 181	250 262	126 227	169 217	74 136	171 205
Clothing	67 146	74 89	225 327	114 639	196 262	88 285	168 338
Other light manufacturing	147 167	170 168	285 278	157 142	215 166	71 53	218 208
Transport, machinery and equipment	117 98	89 83	237 220	146 130	132 92	33 30	152 168
Other heavy manufacturing	141 143	188 182	315 301	177 163	154 262	78 64	194 195
(b) Industrial and other countries							
	North America	European Union	Japan	Latin America	South Asia	Sub-Saharan Africa	Rest of world
Primary agriculture	23 27	12 5	30 13	44 44	63 67	76 75	14 15
Processed food	21 21	8 5	28 21	48 47	94 108	81 78	24 19
Other primary	42 43	24 24	60 62	76 78	115 103	43 46	18 18
Textiles	30 7	11 3	23 25	53 46	116 138	75 58	24 9
Clothing	22 -41	-12 -60	8 1	53 42	114 241	111 30	17 -11
Other light manufacturing	31 30	15 15	38 40	51 51	130 129	59 63	31 34
Transport, machinery and equipment	60 62	46 48	30 29	23 22	126 86	13 16	27 31
Other heavy manufacturing	42 41	19 19	42 43	50 50	131 102	51 52	28 29
Source: Hertel <i>et al.</i> (1995, Table 14).							

their agricultural protection most (the EU, Japan and South Korea), their agricultural sectors are projected to be larger in 2005 than in 1992 -- the reforms simply slow the expansion of their farm output.

The third point, though, is that the expansion of agriculture outside Western Europe and Northeast Asia is only slightly faster than it would have been without the Uruguay Round, because the benefits from reducing agricultural protection are so widespread and the liberalizations still to come in the remainder of this decade are very modest.

Francois *et al.*, also estimate the annual gain from the Round to be up to \$250 billion in 1992 prices, but their model is calibrated to 1992 rather than 2005 so that gain represents up to 1.1 per cent of global GDP. That estimate assumes increasing returns to scale and imperfect competition for the industrial sector; when constant returns to scale are assumed the gain is estimated to be only 0.55 per cent. The latter is close to the 0.42 per cent gain estimated by Hertel *et al.*'s constant returns to scale model -- the difference underscoring the point that market structure assumptions are critical in such modelling work. Of that global welfare gain of \$250 billion, only one-thirtieth is attributable to agriculture post-1992, compared with one-third for other primary product reform, half for textiles and clothing, and the rest for other manufactures. For Australasia, however, half the estimated gain (of 0.5 per cent of GDP) is due to agriculture.⁵ Again East Asian developing economies are projected to gain proportionately the most (a GDP boost of 3.8 per cent per year). These big gains for East Asia are based on the assumption that MFA quotas are phased out and tariffs on textiles and clothing are lowered as agreed. Since much of that reform is to be left until the end of the 10-year implementation period, however, there is good reason to doubt that all of that textile/clothing liberalization commitment will be honoured.

3. Effects of Other Policy Reforms

In addition to the Uruguay Round, there have been numerous regional integration initiatives and unilateral reforms in former centrally planned and developing countries which are having an effect on agricultural competitiveness of different countries. In this section, attention is focussed on several of these.

3.1 Western European Integration and CAP Reform

It was much easier politically for the European Union (EU-12) to agree at the end of the Uruguay Round to limit farm exports in the second half of the 1990s because of the expected absorption on 1 January 1995 of at least three former EFTA countries into the EU. The reason is that the joining EFTA members would be required to lower their domestic food prices from their current very high levels to CAP levels, which is likely to switch them from being net food exporting group to being net importers of food. A recent empirical study suggests that by the year 2000 if all EFTA countries were to have joined the EU then, as a group, they would have switched from being net food exporters to become net food importers. Specifically, their net food imports would absorb about one-seventh of the volume (representing about one-quarter of the value at CAP prices) of EU-12 farm exports by 2000 (Anderson and Tyers 1995). That is, most of the adjustment that would be required of Western Europe by the Uruguay Round agreement are being undertaken anyway as the EC-12 implements the MacSharry proposals and EFTA countries reduce their domestic food prices to those in the reformed EU as part of joining the EU. In fact only three of the five main EFTA countries chose to join in 1995 (Norway and Switzerland remaining in EFTA). Even so, that EU enlargement in the latter half of the 1990s to include three EFTA countries means the latter would, on behalf of all Western European countries, bear much of the brunt of the farm adjustment necessary to satisfy the Uruguay Round agreement.⁶

It is conceivable that the common CAP prices in an enlarged EU of 15 or more members would be higher than those suggested by the Uruguay Round agreement -- and without contravening that accord, given the large reduction in protection required in any case of the EFTA countries joining the EU. The EU ministers might choose to set CAP price levels higher for a combination of several reasons. First, a considerable proportion of the EU-12's export surplus would

⁵ These estimates for Australia are close to those estimated by the Industry Commission (1994, p. 239).

⁶ Presumably the US, the Cairns Group and others will raise this matter under Article XXIV of the GATT when the World Trade Organisation considers the notification by the EU of the expansion of EU membership.

be sold to the former EFTA countries at internal CAP prices instead of being sold on the open market at the ruling international prices. This would reduce substantially the budgetary cost of the export subsidies necessary to dispose of the CAP-induced surpluses, and so would reduce opposition to the CAP in EU-12 countries. Second, the agricultural ministers of the former EFTA countries would be bringing to the EU's annual price-setting committee a more protectionist inclination on average than the EU-12 ministers. Third, since the high-income EFTA countries joining the EU would be required to make significant net contributions to the EU's budget, the current budgetary constraint on CAP spending would be eased even further. And fourth, the cheap-rider problem in restraining CAP expenditure would worsen because of the additional number of EU member countries.⁷ Together, those changes will tend to cause the average level of agricultural protection in the enlarged EU to settle above what it otherwise would have been in an EU of just 12 member countries. That is, if the EU is treated as a single GATT contracting party, restrictions on the quantity and value of subsidized farm exports from Western Europe are insufficient to guarantee that at least EU-12 domestic farm prices and protection levels will not rise (even though for Western Europe as a whole they are required to fall).

3.2 The NAFTA, APEC and AFTA

The integration of Mexico into the Canada-US free trade area is of much less significance to the rest of the world in a direct sense, in that the Mexican economy is so small relative to its northern neighbours. But it is worrying in an indirect sense, because it represents a decline in the US's commitment to the multilateral trading system which in turn is directing other countries attention away from the GATT/WTO. Already Chile is expecting to follow Mexico into NAFTA next year, which will increase the incentive for other developing countries to join so as to reduce the risk of being locked out of North American markets. As more 'spokes' are added to the US 'hub', the complexity of the agreement could well escalate exponentially, in which case the likelihood of economic gains even to members, let alone to outsiders, will rapidly diminish (Anderson and Snape 1994; Krueger 1996).

APEC might be seen at first glance as a way to avoid this growth in complexity of FTAs within the Pacific basin. After all, the Heads of Government meeting in Bogor last November concluded with a pledge to move to free trade among APEC member economies

by 2010. Such an extreme outcome is highly unlikely, however. The most that can be expected is for that forum (a) to facilitate trade and investment among APEC member countries, for example through the sharing of information on developments in each others markets and policies, and (b) to provide reform-oriented governments with a little bit more of an argument in domestic policy debates as to why they cannot succumb to pressures to slow or reverse their unilateral reform programs.

The latter is also enhanced in Southeast Asia by the decision to create AFTA, a free trade area among the ASEAN economies, during the next decade. The most recent evidence of that effect in action is Indonesia's comprehensive deregulation package announced on 23 May 1995, which involves much more liberalization by 2003 than was committed to under either the Uruguay Round or AFTA.

3.3 Central and Eastern Europe's Transformation

As occurred in North America, so also in Europe are poorer countries wanting to join the rich countries. Many of the former communist countries of Central and Eastern Europe are among those lining up for EU membership. While their full membership is unlikely before the turn of the century, the most advanced of them (the Central European countries of the Czech Republic, Hungary, Poland and Slovakia) have already begun a form of associate membership involving some preferential access to EU markets. Since the usable industrial capital stock per worker in those countries is low relative to the stock of agricultural land and other farm capital per worker, their comparative advantages during the next decade or so are likely to be in primary products and standard-technology manufactures until new stocks of industrial capital accumulate (Hamilton and Winters; Anderson 1992). So it is in these product areas that access to EU markets is most sought after. While to date the EU has been resisting, at the behest of its domestic interest groups, there are serious concerns about immigration from, and/or political upheavals in, the transforming economies should those economies not begin to prosper soon.

⁷ The larger the number of EU members, the more incentive each EU member country has to seek price increases for the products for which its excess supply is relatively large, and to cooperate less in policing farm supply constraints such as land set-asides in its own country.

Completely free access for Central and Eastern European farmers to EU food markets seems unlikely in the foreseeable future, if only because of its impact on the CAP budget. According to a recent simulation exercise, if just the four Central European countries were given unrestricted access to EU markets by the turn of the century at CAP prices, this could cause the budgetary cost of the CAP in the year 2000 to be enlarged by as much as one-third -- roughly offsetting the above-mentioned beneficial effect on the CAP budget of EFTA countries joining the EU (Anderson and Tyers 1995). A more likely development is that Central European farmers will be given restricted but gradually more preferential access to West European markets over time (from the current very low base), perhaps just enough to make them prefer to support rather than oppose the EU's agricultural protection policy in international fora such as the GATT -- as has been the case for the African, Caribbean and Pacific island signatories to the Lome Convention.

Even if Central and Eastern European producers were completely denied access to EU food markets, that would not prevent developments in those transforming socialist economies from raising CAP expenditures in the medium term. This is because of their likely expansion in net exports of farm products which, along with similar expansions by the reforming developing countries of Latin America and elsewhere (see below), would add to the downward trend in real international food prices. The magnitude of this effect on the EU's budget would be smaller than if Central European farmers were given access to EU markets, but it does mean that, whether the Central and East Europeans are given access to EU food markets or not, those economies will be imposing increasing budgetary pressure on the EU to reduce its domestic farm prices. That suggests the domestic political cost to EU member governments of CAP reform would be offset somewhat by the fact that such reform would lower the incentive for farmers in the transforming economies of Central and Eastern Europe to seek preferential access to Western Europe's food markets and/or for people in those countries to migrate westward.

In the longer term if economic growth accelerates and industrial capital stocks build up for this country group, their comparative advantage will change from primary products to manufactures. That would raise the likelihood of their net imports of food increasing, and more so the less domestic food prices are allowed

to rise above international prices and toward CAP levels.

As for Russia and the former Soviet republics of Central Asia, their long-term comparative advantage in agriculture might be considered great because of their low population density. The reason Russia is nonetheless a significant net importer of food and feed is partly because of the current inefficiency of its farm sector. However, net imports of farm products by Russia and Central Asia could increase or decrease: it depends importantly on the rate of future productivity in their mining sectors. Compared with the rest of the world, these economies are very well endowed with minerals and energy raw materials per worker (as is Ukraine); but the exploitation of their mineral resource richness (particularly via direct foreign investment) is heavily dependent on establishing clear property rights in the mining sector. Since the reforms began in the early 1990s the latter is something that has been as slow in coming as the privatization of farm land. During the next decade this group of economies could remain a net importer of farm products on the one hand, or on the other could become a major net exporter of them. Which state eventuates depends heavily on the extent to which the lack of clarity in property rights and the price and trade distortions adversely affecting each of these two primary sectors are removed, and the relative speed with which their producers respond to the changes in incentives (Anderson 1992; Roberts, Kottege and Tie; Tyers 1994).

3.4 Asia's Transforming Socialist Economies

China, and other Asian communist countries even more so, are far less endowed with industrial capital per worker than Central or Eastern Europe or the CIS. Since China, and Vietnam some years later, began their reforms by raising agricultural prices and giving farm households greater management freedom and responsibility, it is not surprising that net exports of farm products rose initially for these transforming economies. But both are very poorly endowed with agricultural land per capita, so unless they follow the agricultural protectionist path of their Northeast Asian neighbours they can be expected to strengthen their export specialization in industrial products into the next century and become net agricultural importers. That will happen much later for Vietnam (and later still for less densely populated Laos and Cambodia) than for more-affluent China, and more so for feed-stuffs than for food staples and livestock products

(which are more likely to enjoy price supports because of concerns about food security (see Anderson 1990, Garnaut and Ma 1992).⁸ The decline of agricultures competitiveness in China would be even more likely should China choose to privatize its coal and oil producing state-owned enterprises and/or allow private competition in the provision of those raw materials and/or reduce restrictions on their trade. In the latter events, the domestic prices of coal and oil could rise to the much-higher levels observed in international markets, attracting mobile factors out of farming (and other tradables sectors).

3.5 Reforms in Other Developing Countries

The dramatic success of East Asia's newly industrialized economies since the 1950s contrasts markedly with the generally lacklustre performances in Latin America, Africa and South Asia through to the 1980s. It was therefore inevitable that eventually countries in the latter group would see the need to shed their relatively inward-looking trade and industrial policies and anti-agricultural policies. The debt crisis of the 1980s, plus the prospect of a fairer trade deal to emerge from the Uruguay Round in agriculture and textiles, contributed to the decisions by many of these countries to reform sooner rather than later. The temptation to seek membership of NAFTA is providing a further reason to pursue liberal policies, at least in Latin America. How those changes will affect their own and other countries' agricultural competitiveness, and whether it will offset or amplify the effects of the Uruguay Round agreement, is an empirical question that cannot be answered *ex ante* with much certainty without using a global simulation model. Nevertheless, several qualitative points are worth making.

First, in so far as those reforms reduce the extent of agricultural taxation (as they have in not only China and Vietnam but also Argentina and Thailand, to mention just two large agricultural exporters), they will tend to encourage net exports from those countries which will offset the agricultural price-raising effect in international markets of the Uruguay Round. The reforming countries will become even more competitive in agricultural markets. A striking example is Chile: agriculture's share of Chile's merchandise exports rose from 7 per cent in 1970 and 10 per cent in 1977 to nearly 40 per cent in 1992.

Second, in so far as those unilateral reforms also apply to light manufactures, as they have in countries with

policies that favoured only heavy or capital-intensive industries (including China and Central Europe), so exports of such items also will expand, and more so as the Multifibre Arrangement is phased out thanks to the Uruguay Round. The share of textiles and clothing in Thailand's exports trebled between the early 1970s and late 1980s to one-seventh, for example, and manufactures in total now account for two-thirds of the merchandise exports of that until-recently agrarian economy. Likewise, half of Indonesia's exports now come from manufactures, up from only 2 per cent in 1980.

And third, in so far as the opening up also extends to direct foreign investment, it could lead to mining booms in several countries that would reduce the competitiveness of those countries' farmers (as happened because of petroleum in Indonesia and seems likely to happen in Vietnam), while at the same time strengthening the competitiveness of farmers in countries where agriculture continues to dominate primary product exports.

3.6 Possible Threats to the Multilateral Trading System

In addition to the risks of countries backpeddling in the implementation of their Uruguay Round commitments, of them resorting to antidumping and other grey area measures to offset their agreed tariff reductions, and of the rulings of the WTOs dispute settlement mechanism being ignored, there are a number of other possible threats to the GATT rules-based multilateral trading system that could have a negative impact on open economies. One has already been mentioned in connection with the NAFTA, namely the directing of attention by the US and some of its neighbours away from multilateral and towards regional trade issues. The less 'clean' is the NAFTA and its extensions in practice, and the more Central and Eastern Europe looks to sign preferential trade agreements with the EU, the greater the likelihood of trade diversion and of excluded countries being made worse off, and of other trading blocs following suit -- the cumulative effect of which could be to undermine the effectiveness of the WTO.

⁸ This is not meant to endorse the projections by Lester Brown of massive Chinese imports of grain by mid-21st century, however. Those claims by the WorldWatch Institute's Director, repeated in the Institute's annual report (Ryan and Flavin), are likely to be out by several orders of magnitude.

A second threat is the entwining of trade policy with environmental issues. At one level the greening of world politics is simply giving industries an excuse to demand barriers to competing imports from countries with lower environmental standards, on the grounds that foreigners are underpricing their use of the natural environment -- an argument that can be shown to have little legitimacy in the absence of international environmental spillovers (and assuming government policies reflect the shadow prices society places on environmental resources). At another level, particularly where degradation of the global commons is involved, trade policy is being called on to provide sticks or carrots to encourage participation in multilateral environmental agreements. That argument is less easily dismissed in cases where there is no cheaper means available to ensure compliance (GATT 1992). Since demands for environmental protection are income elastic and as more is learnt about global environmental problems, so the demands on developing economies and resource-abundant countries such as Australia to raise their standards towards the ever-rising ones of higher-income countries, under threat of trade actions, are likely to grow. Whether agriculture in Australasia would be affected positively or negatively by such changes is an empirical question that is difficult to answer with confidence without a global economic/environmental model (Anderson and Strutt 1995).

And a third threat to the global trading system and especially to developing countries trade is coming via the demands from the US, France and other high-wage countries for the WTO to discuss whether market access should be conditional on a higher level of labour standards in developing countries. Since there are virtually no international externalities involved in this case, it has even less justification for being on the WTO's agenda than the trade/environment issue. Nonetheless, the politics of the issue in industrial countries is such that it may well be placed there (Anderson 1995). Aggregate economic welfare in (especially poorer) developing countries is likely to be reduced by the imposition of such conditions on market access, but again whether that would affect the agricultural sector of poor countries positively or negatively is a moot point. If labour standards were raised much more in urban than rural areas, for example, then urban jobs growth would slow and rural jobs growth would accelerate -- but the latter may be concentrated in rural industrial activities and result in workers reducing their time spent in agricultural pursuits.

4. Conclusions

Clearly, there is and will continue to be a great deal of change taking place in the world economy this decade as a consequence of major international economic policy reforms, over and above the normal pressures for structural change that accompany each nation's economic growth. Most of those policy changes ultimately will boost economic growth globally and especially in the countries taking an active part in them. The Uruguay Round reforms will help farmers in economies with an agricultural comparative advantage and below-average rates of agricultural protection. For example, half the benefit to Australia and New Zealand from the reforms expected after 1992 is estimated to be due directly to the agricultural reforms, according to Francois *et al.* But note that that is only part of the benefit to our farmers. Much of the other half of the benefit of the Round to Australasia is due to their own and other OECD countries' reductions in industrial trade barriers. Those reductions allow East Asia's densely populated developing countries to better exploit their comparative advantage in manufactures, which incidentally accelerates their agricultural sector's relative decline and in turn *indirectly* benefits Australasian farmers as East Asia's farm imports grow.

The regionalism in Western Europe and North America will probably boost regional economic growth but may not help many outsiders. For example, the expansion of the European Union to include three former EFTA countries may result in smaller cuts in agricultural protection in Western Europe than was being hoped for from the Uruguay Round: the new members' cuts in agricultural support will probably be partly offset by smaller cuts in support for farmers in the EU-12. The unilateral reforms of the former centrally planned economies could lead initially to increased agricultural competitiveness there, as happened in China and Vietnam, but the eventual outcome will depend very heavily on the extent and relative speed of reduction of resistance to privatization, of the lack of clarity in property rights and obligations, and of the price and trade distortions adversely affecting not just agriculture but also mining (and other sectors). The unilateral trade liberalizations in Latin America are likely to more or less offset the small international price-raising effects of agricultural policy reform following the Uruguay Round agreement. And the strengthening of the multilateral trading system, on which the small open economies depend heavily, is likely to be sorely tested

during the rest of this decade -- by not only regionalism but also environmentalism and the possible use of trade policy to raise labour standards (and human rights more generally) in developing countries.

Notwithstanding these developments, the best option for Australasia and other open economies continues to be to make the most of their trading opportunities by progressively removing remaining impediments to the optimal use of their own resources, and by supporting similar reforms in other countries through forums such as the WTO and APEC. Australasian farmers can be thankful that the Uruguay Round agreement has brought an end to unchecked growth of agricultural protection, but they need to be aware that the Round's positive impact on farmers in non-subsidized countries during the rest of this decade will at best be a minor offset to the traditional pressures for the agricultural sector to decline in relative importance -- and only then if the Cairns Group is vigilant in ensuring the promised cuts in protection are implemented. Monitoring and evaluating the policy re-instrumentation that is bound to take place will be important too, in preparation for the next round of agricultural negotiations to begin in 1999. If Table 1 is any indication, it is possible we will look back then and see that the Uruguay Round barely began the process of reducing the disarray in world agricultural markets. But at least it **did** make a beginning, and the benefit-cost ratio from the Cairns Group's efforts to bring that about will be seen to have been enormous.

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