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Articles

The Uruguay Round Agreement on Agriculture: A New World Order for Agricultural Trade?¹

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Agriculture has been successfully brought back into the General Agreement on Tariffs and Trade. In this review, which is intended to draw heavily on a set of unpublished conference papers, a brief history of the issues, the proposals and the outcomes for agriculture are presented. The possible implications for the agricultural sectors of the Australian and New Zealand economies are discussed. The formation of regional trading arrangements and their place in a multilateral trading environment is analysed. Agricultural trade and environmental issues are discussed within the context of the Sanitary and Phytosanitary Agreement. Finally, some items for the future agenda are presented.

1. Introduction

The Uruguay Round of multilateral trade negotiations has been completed and the new World Trade Organisation (WTO) has come into existence. The Agreement on Agriculture that is part of new General Agreement on Tariffs and Trade (GATT), which in turn is an agreement under the WTO, is set to be implemented in July this year. The outcome of this Round marks a significant break with the past because, at last, domestic and border policies for agricultural products have been brought back within the disciplines of the GATT and constraints have been placed on the freedom of governments to pursue issues of national and sectoral interest without proper regard to their detrimental international consequences. In the short and medium run, the price which has been paid for this set of enforceable rules has been the lack of substantial gains in agricultural trade liberalisation.

However, given the political economy of agriculture, it is most unlikely that binding liberalisation can ever occur in the absence of a set of enforceable rules.² It has not occurred in the non-agricultural sector as non-tariff barriers and "grey area measures", such as voluntary export restraints, have been substituted for

lower, negotiated tariff rates. Therefore, the Agreement on Agriculture in which the concept of bindings has been extended from import protection to domestic support and export assistance, represents a fundamental breakthrough. This advance, together with the improved dispute settlements procedure, the agreement on sanitary and phytosanitary regulations, and the institutional framework for monitoring provided by the Committee on Agriculture in the World Trade Organisation, will create the conditions conducive to more stable agricultural trade flows which are based on comparative advantage rather than on the size of national budgets.

The outcome of the Round, then, is the first step along the path which has been advocated for decades by agricultural economists. At last, governments appear to have accepted the proposition that policies which are inefficient in terms of both budgets and losses of consumer surplus, which create avoidable international tensions, and which do not even achieve the income support for farmers which are supposed to be

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¹ The main purpose in this review is to summarise and to place in context the papers which were presented at a GATT forum organised jointly by Arthur Andersen and the Victorian Branch of the Society: *The Uruguay Round – A New Era?*, which was held in Melbourne on 18 October 1994. The secondary purpose is to make reference to the four earlier articles which have been published in the *Review* on the topic of the Uruguay Round as it has related to agriculture, namely, those by MacLaren (1991), Petrey and Johnson, Chadee and Johnson and Hillman, and to link those with the papers given at the Forum.

² For a discussion of the political economy approach to agricultural trade policy in the context of trade negotiations and to agricultural policy with particular reference to the Common Agricultural Policy of the European Community, see MacLaren (1991).

the target, should either be radically altered or removed altogether. Nevertheless, the extent to which the advocacy of economists can be attributed with the breakthrough of the Uruguay Round, is not altogether clear³.

The structure of the review is as follows. A brief outline of the issues of the agricultural component of the Uruguay Round negotiations is presented in section 2 in order to provide a background against which to judge the outcome. The outcomes achieved in the Agreement on Agriculture are summarised in section 3. The possible effects of this outcome for Australia and New Zealand are outlined in section 4. The unfinished business which may form the review beginning in 1999, together with items which may be part of the new agenda are discussed in section 5. In the final section, some conclusions are presented.

2. The Issues

The early 1980s was a period of rising agricultural protectionism and international tensions. The GATT and the OECD Ministerial meetings of 1982 were arranged partly in response to this crisis. For agriculture, the former meeting was a failure, the latter a success. From the OECD meeting emerged the Ministerial Trade Mandate, the implementation of which required: firstly, estimation of the assistance to agriculture in the OECD countries on a commodity-by-commodity basis; and, secondly, assessment of the effects of reductions in that assistance. The measures of assistance chosen were those of producer and consumer subsidy equivalent, respectively PSE and CSE, devised a decade earlier by Josling for FAO and deriving from earlier work by Corden in Australia.⁴ This work by the OECD then provided the basis for the aggregate measure of support (AMS) which was to become essential, as part of the Agreement on Agriculture, in providing an easily understood device with which to monitor levels of domestic support and changes in them over an agreed time horizon⁵.

The impetus for changes in agricultural policy initiated in Paris in 1982 was continued at Punta del Este in 1986. That impetus was reinforced by changed circumstances and altered attitudes (MacLaren 1994, p.2):

By the mid-1980s, circumstances had changed: the budgetary costs of agricultural income support programmes were no longer economically or politically tolerable; envi-

ronmental groups were becoming an effective counter force to traditional farm lobbies; and there was a general political disenchantment with agricultural policy instruments which were clearly not achieving their objectives. Governments appeared to be more willing to redefine their agricultural policies: domestically, it became accepted that income support should be decoupled and targeted; while internationally, there should be a recoupling of national and international prices. In Warley's view "[t]his confluence of internal preferences and external needs [wa]s unique in the 40 year history of the GATT" (Warley, p. 313).

The Punta del Este Declaration included the sentiment that the agricultural trade negotiations should attempt to find ways to liberalise agricultural policies through "... improving the competitive environment by increasing disciplines on the use of direct and indirect subsidies and other measures affecting directly or indirectly agricultural trade, including the phased reduction of their negative effects and dealing with their causes" (GATT). The negative effects of agricultural policies were by then well known and their causes long recognised. However, in previous negotiating Rounds in the GATT, domestic agricultural policies had been exempted from negotiation and this accounts largely for the lack of progress in liberalising agricultural trade.

Six sets of proposals were submitted to the Negotiating Group on Agriculture during 1987 and 1988. A common set of themes ran through these proposals, although there were also elements of difference, e.g. liberalisation or management of trade, and the need, or lack thereof, for an AMS. In general, in each proposal, agricultural protectionism was approached by classifying the main elements into market access, domestic support and export subsidies. In addition, the potential for countries to abuse their sanitary and phytosanitary regulations was also identified as an important area for negotiation.

³ For a discussion of this issue, see Meilke and de Gorter.

⁴ See the discussion by Cahill and Legg on the origins of this work and the annual publication by the OECD of the results of their computations from 1988 onwards in *Agricultural Policies, Markets and Trade*.

⁵ This particular form of an AMS in the context of trade negotiations was not without its critics. For an assessment of the arguments, see Cahill and Legg (pp.27-35).

The Cairns Group proposal lay somewhere between the bold, but unrealistic, liberalisation proposal from the United States (in which all trade-distorting measures would be removed and only de-coupled policies permitted) and the more cautious proposal from the European Community (see Rossmiller). The essence of the Cairns Group proposal was as follows (MacLaren 1994, p.3):

The Cairns Group proposal which was submitted to the GATT in October 1987 covered three time horizons. Phase I was to cover the period until the end of 1988 and was to involve, *inter alia*, a freeze on import barriers, subsidies which affect trade, and sanitary and phytosanitary regulations which were acting as non-tariff barriers. Phase II was to involve adjustment over a ten-year period to cover, *inter alia*, targets for reduced levels of overall support, and concentration on a reduction in the use of the most trade-distorting measures. It was accepted in the proposal that some forms of assistance, e.g. decoupled income support and aids for structural adjustment, could be exempted. Phase III covered more general aspects of the way in which GATT was applied to agriculture and the ways in which governments should be bound by the disciplines of the General Agreement. The proposal focussed on: the prohibition of "grey area" measures such as variable import levies; the prohibition of the special treatment of waivers sought on the basis of domestic policy instruments, e.g. the US waiver for its Section 22 legislation under Article XXV; the binding of all tariffs at zero or low rates; the banning of agricultural subsidies which affect agricultural trade; the harmonisation of sanitary and phytosanitary regulations; and the provision of exemptions for decoupled income support measures and infrastructural support. The proposal also gave support to the use of an aggregate measure of support (AMS) based on producer subsidy equivalents (PSE). For countries such as Australia and New Zealand these proposals could easily have been accommodated because the consequent changes in their own agricultural policies would have been relatively minor in comparison with those that would have been required in most other OECD countries.

The negotiations on agriculture were long and difficult and, at times, threatened to cause the Round to be aborted. However, it was recognised by most governments that by negotiating across a number of negotiating groups simultaneously, it was possible to make transparent the benefits which would be foregone in non-agricultural areas if negotiations on agriculture were allowed to cause the Round to fail. Therefore, the impediments to progress in agricultural liberalisation fell away. The most important of these impediments was the Common Agricultural Policy which was reformed in 1992 and which then allowed the United States and the European Community to reach an accommodation at Blair House in November 1992, thereby paving the way for the conclusion of the Round in December 1993.

3. The Outcome

The Agreement on Agriculture is shaped very much on the structure used in a report by de Zeeuw as Chairman of the Agriculture Negotiating Group until 1990, on the *Draft Final Act* produced by Arthur Dunkel in December 1991 and the *Final Act* of December 1993. Taken in conjunction with the Agreement on Sanitary and Phytosanitary Measures (the SPS Agreement) and the Dispute Settlements Procedure of the WTO, the final agreement is close to the major elements of the original Cairns Group proposal⁶. However, there are a number of important differences which will be discussed below. The main elements of the Agreement on Agriculture are the following (MacLaren 1994, p.4):

On **market access** it was agreed that there will be the tariffication of all barriers to imports and that the rates for the aggregate of commodities will then be reduced by 36 per cent over a six-year period beginning in 1995 based on their values for the period 1986-1988. There will also be a minimum reduction of 15 per cent per commodity over the same period. On **domestic support measures** there will a classification of policy instruments into 'amber policies' and 'green policies'. The former represent production- and trade-distorting policies: the latter are those which do not. All

⁶ For a discussion of sanitary and phytosanitary regulations in the GATT, see Petrey and Johnson (pp.438-440) and Hillman (pp.222-224).

amber policy instruments are to be part of the total AMS calculation. It has been agreed that this statistic will be reduced by 20 per cent over the six-year period from 1995 from the base period of 1986-1988. Importantly and unfortunately, the deficiency payments which are part of United States farm income support policies and the compensation payments which are now part of the reformed CAP are in the so-called "blue box" of partially decoupled instruments⁷. On **export subsidies**, it was proposed in the *Draft Final Act* that there would be a reduction of 36 per cent in subsidy outlays and a 24 per cent reduction in the subsidised export volume. At the Blair House meeting, the latter figure was reduced to 21 per cent. As with adjustments in the other measures, reductions would occur over the six-period from 1995 but from the base of 1986-1990. There is also a component of the proposal which is designed to prevent subsidised exports being shipped in the guise of food aid. In addition, there are special provisions for various categories of developing countries and there is a "rice clause" for Japan and Korea.

In addition to the Agreement on Agriculture there is an Agreement on Sanitary and Phytosanitary Measures, the principal aim being to improve the current operation of Article XX by basing standards on sound scientific evidence. The final element of the outcome of relevance to agricultural trade is the accepted change to the Dispute Settlements procedure. In effect the rules have been changed to ensure that the present effective veto of a contracting party over a Panel ruling is removed.

However, the above summary glosses over a number of additional and important practical aspects that limit, in many cases, the degree of trade liberalisation which will be achieved. These aspects will now be explored in more detail.

3.1 Market Access

The process of converting non-tariff barriers to tariffs has been described as "dirty tariffication" because the new, bound tariff rates often exceed the price wedge between domestic and world prices that prevailed during the period 1986-88. Hence, even after reductions of at least 15 per cent, protection may still exceed that observed in the base period (Ingco). In order to

encourage countries to accept the previously unacceptable, namely, import protection for agricultural products based only on tariffs, special safeguards were agreed. These safeguards can be implemented on the basis of either a price or a volume trigger but not both, with the trigger being defined on the 1986-88 base period price or quantity, respectively. Specific commitments have been given through the use of tariff-rate quotas that a minimum share of domestic consumption will be guaranteed for imports, namely, 3 per cent rising to 5 per cent.

Putting these three aspects together, the practical outcomes may be summarised as follows (Ryan, p.4):

The policy change required by the agreement is a shift from an NTB to a bound tariff that is "equivalent" to the original barrier. In practice this means a two-tier tariff schedule. The form would be as follows: for quantities up to the amount of import in the base period, or some "minimum access" if base imports were below some specified threshold (typically 3 per cent of base period domestic consumption), there would be a zero or low tariff. Imports would be expected to enter readily up to the base period quantity or minimum access guarantee. Above this quantity a higher tariff would be applied. This second tier tariff is calculated to be prohibitive at the anticipated domestic and import prices. Thus, initially imports would not exceed base period or minimum access amounts.

Ryan remarked that "[i]t was only to be expected that countries would interpret these provisions in ways which benefited their domestic interests" and went on to illustrate this statement using the example of the European Union (Ryan, pp.4-5):

... Tariffication of EU variable levies for cereals is an important case in a number of respects. ... The EU in determining its initial tariff equivalent took the internal price for Common Wheat as ECU 241/tonne, calculated from the Intervention Price, plus 10 per cent, plus seasonal increments. The external

⁷ The "blue box" was added to the original "amber box" and "green box" policies at the Blair House bilateral meeting in November 1992 which involved only the United States and the European Union.

price is taken as ECU 93/tonne, specified to be the fob Argentina price plus transport cost, minus a quality adjustment. The difference between these two prices gives an initial bound duty of ECU 148/tonne. The EU duly entered a tariff of 160 per cent in to the Schedule. (It reduces by 36 per cent to 102 per cent over the implementation period.) While technically in keeping with the guidelines the method used undoubtedly builds "fat" into the tariff. The EU market price is often below the intervention price for wheat. The external price is also probably a little low: the cif Rotterdam price used by the EU in calculating its variable levies was higher than this during the base period.

Further evidence of the extent of "dirty tariffication" with the following examples taken from Josling and Tangermann, (Ryan, p.7):

The new EU tariff on butter will be set at an equivalent of 314 per cent, beef at 237 per cent and wheat as already noted at 160 per cent. In Canada, the new butter tariff will be 351 per cent, wheat will be 90 per cent, and beef will be 31 per cent. For the United States the new butter tariff will be approximately 138 per cent, and the beef tariff will be 31 per cent. In all cases, these tariff equivalents exceed, to varying degrees, the ratio of average internal price to external price for the commodities in question. In most cases, in fact, it is difficult to find potential import prices low enough and internal prices high enough to make these tariffs plausible as databased tariff equivalents to the existing NTB.

The 36 per cent reduction in the average tariff is an unweighted average. Therefore, there remains substantial scope for governments to cut high tariff rates on politically sensitive products by the minimum allowable, i.e. 15 per cent, and to cut by 100 per cent tariff rates on lightly protected products, while still achieving the necessary 36 per cent overall.

3.2 Domestic Support

Reductions in domestic support are measured on an aggregate basis, thereby allowing politically sensitive sectors to experience no reductions in support. Arrangements for binding domestic support will mean

that there is no effective capping of that support (Ryan, pp.9-10).

Sumner (1994) asserts that using a cross commodity average AMS and not including selected policies in the calculations ensures that internal support will not be disciplined in a meaningful way by the Uruguay Round. The aggregation across commodities was enough to assure that no policy in the US or the EU would be affected by the required 20 per cent reduction. The addition, that selected "production limiting" policies be excluded, was a concession to the EU and particularly to Commissioner MacSharry, who had promised that his CAP reform payments would not be subject to reduction commitments. So, even though no reduction would have been required anyway (under the Blair House Compromise) these direct payments are not even a part of the calculations of the AMS.

3.3 Export Assistance

Many observers have commented that the most binding element of the Agreement on Agriculture is that relating to the use of export subsidies. Not only are export subsidies bound by volume and value but no new subsidies can be introduced, i.e. products which were not subject to export subsidies in the 1988-90 base period are ineligible to receive subsidies after 1 July 1995. These bindings will have considerable impacts for both the EU and the US (Ryan, pp.7-8):

The reduction in the quantity of subsidized exports implied by the Round is likely to have the most important impact on international trade flows and prices for major commodities of any of the agriculture commitments. The EU for example will reduce export subsidies from its current levels of 34 per cent for wheat and flour, 38 per cent for beef and 29 per cent for cheese. The quantity involved for wheat and flour will be a reduction from 20 million tonnes to 13.4 million tonnes which in budgetary terms is from an outlay of ECU 2200 million to 1141 million. ... The EU is likely to reduce substantially its net exports in the next few years and this will allow world prices to rise while exports from other countries expand.

For the US reductions from current levels of export subsidies will involve cuts of 32 per cent for wheat and flour, 88 per cent for rice and 41 per cent for skim milk powder. The base period levels for US wheat is 21.4 million tonnes and \$US846 million. ... By the year 2000 EEP will be limited to 14.5 million tonnes and \$US 364 million. Average EEP bonuses will fall from around \$US 40 to \$US 25 per tonne, although any particular country may receive a larger bonus because it is the aggregate which is binding.

Policies which conform to the new rules are to be exempted from challenge under the WTO dispute settlements procedures (the "Peace clause") until the year 2003, except that countervailing duties can be applied in the event of proven injury from domestic policies including "blue box" policies. And finally, progress on agricultural policy liberalisation will be monitored by the new WTO Committee on Agriculture, a bonus for small countries such as Australia and New Zealand.

4. Outcomes for Australia and New Zealand

The outcomes for Australian and New Zealand agriculture have been estimated using a variety of models. These have included the SWOPSIM multi-regional, multi-commodity, partial equilibrium model and GTAP computable general equilibrium model⁸.

The principal effects of the implementation of the Final Act for Australian and New Zealand agriculture will be on their export markets because they are small-country exporters of agricultural products and because assistance to their respective agricultural sectors is low relative to the rates in other OECD countries. Nevertheless, for Australia there are implications for certain domestic sectors, e.g. dairy.

The effects on export markets will be felt in the form of: higher international prices, ranging, for example, from 1 per cent for sugar, to 8 per cent for wheat and to 20 per cent for cheese for Australia (Andrews *et al.* p.7), and from 6.5 per cent for butter and 30 per cent for cheese for New Zealand (Philpott and Nana, pp.4, 18 and 19); improved access to the major markets of the European Union (in particular for meat, dairy products and horticultural products), the United States (for beef,

dairy products and sugar) and Japan (for beef and rice); and greater certainty of access to third-country markets with the curbing of the use of export subsidies by the United States and the European Union. In addition, international prices should become more stable as tariffication of price-insulating import barriers occurs.

It is clear that the increases in export volumes will be modest and certainly substantially smaller than those which would have occurred had the Cairns Group proposal been implemented. The increase in the annual value of agricultural exports for Australia of A\$950m (Andrews *et al.*) represents 6.5 per cent of the annual average of farm sector export earnings (A\$14.6b) over the period 1988-89 to 1992-93. For New Zealand, there is a simulated increase of NZ\$488m (Philpott and Nana) or 4 per cent of the value in 1990.

An overall summary measure of the benefits to Australian and New Zealand agriculture is provided by estimates of increases in producer surplus. For Australia the benefits are broadly dispersed with the wheat sector gaining US\$176m, the beef sector US\$173m and the milk and dairy products sector gaining by US\$125m (Vanzetti *et al.*, Table 13.5). For New Zealand most of the total increase is accounted for by the milk and dairy products sector which benefits by US\$159m.

For Australia, results of a simulation experiment using the GTAP model in which the Uruguay Round outcome is examined gives outcomes for agriculture and for other sectors as well (Murtough *et al.*, pp.3-7):

For this analysis, 1988 was used as the base year in the model, which is consistent with the base period of 1986-88 used to specify assistance reduction commitments in the Uruguay Round agreement. The model has a medium term time frame which is sufficient for the capital stock to be reallocated between sectors within a country but not between countries.

⁸ The results reported below from the work by Andrews *et al.* are based on the SWOPSIM model and those from Philpott and Nana are based on a combination of results from SWOPSIM and a cge model referred to as JULIANNE. The GTAP model is a multi-region, computable general equilibrium model comprising 37 commodities/industries and 24 countries/regions. See Hertel and Tsigas for a description.

In the simulation ..., tariff equivalents for the non-agricultural and non-service sectors (forestry and fishing, minerals and energy, resource based manufactures and other manufactures) were reduced by 40 per cent. For the agriculture and processed food sectors, minimum market access arrangements were implemented and the volume of subsidised exports reduced, but reductions in tariff equivalents and domestic support were not included. As previously discussed, reductions in tariff equivalents for agriculture and processed food products could have little impact. Reductions in domestic support are not simulated for the agriculture and processed food sectors because the most important forms of domestic support, such as US deficiency payments, are exempt from reduction.

By the time that the trade liberalisation measures resulting from the Uruguay Round have been fully implemented, it is estimated that the volume of Australia's net exports of agriculture, minerals and energy, and processed food products will have increased significantly while resource based manufactures and other manufactures and services will have significantly decreased. The pattern of change in the volume of Australian net exports shows that the Uruguay Round liberalisation intensifies Australia's role of supplying agricultural, minerals and energy and processed food to other countries while importing manufactures.

According to the simulation results, output of Australian agricultural, minerals and energy and processed food products is expected to increase. The minerals and energy sector is expected to experience the largest expansion of about 16 per cent, while the agricultural and processed food sectors are expected to expand by 3.5 per cent each. Inputs are expected to shift into these sectors and away from the manufacturing sector, resulting in a decline in output for the natural resource based manufactures and other manufactures sectors. While some sectors will contract with trade liberalisation, this will be more than compensated for by a better utilisation of resources. The net result is an estimated increase in Australian real income of 1.3 per cent.

Trade liberalisation exposes import competing industries in individual countries to greater competition which is likely to improve the

productivity of these industries through innovation. This process is not captured by the GTAP model at its current stage of development. The model also does not feature the international mobility of capital stock. This will be more appropriately addressed in the dynamic global general equilibrium model currently being developed in ABARE.

5. The Unfinished Agenda

5.1 Regional Trading Agreements

As the Uruguay Round proceeded and uncertainty waxed and waned over the eventual outcome, there was growing interest amongst some governments to secure the benefits of freer trade through new regional groupings of more homogeneous economies⁹. Most of this interest centred on free trade areas rather than on customs unions (with the exception of the European Union) as a way of offsetting the risks of multilateral failure. The relationship of preferential groupings of economies with the most favoured nation principle of the GATT (Article I) has long been a contentious one.

The tension between preferential regional arrangements and the most favoured nation treatment can be explained in the following way (Snape, p.2):

The outcome in GATT was for all preferences by the contracting parties to be restricted to their current (1947) levels, except for preferences that went all the way to free trade on substantially all trade among the participants – that is free trade areas or customs unions – and where the barriers to outsiders are not raised (Article XXIV). As well as actual customs unions and free trade areas, interim agreements leading to customs unions and free trade areas "within a reasonable length of time" were also allowed. ...

Very few of the so called free trade agreements and customs unions which have been negotiated among the members of the GATT in fact have met the criteria of Article XXIV. A major breach was created by the formation of the European Communities, but these were

⁹ For an analysis of the implications for agriculture of regional trading blocs, see Josling.

regarded as of such political significance that the United States, at that time the leading opponent of discrimination, did not stand in the way but encouraged their formation. But although very few trade agreements have in fact fulfilled the requirements of Article XXIV on any reasonable interpretation of that Article, the GATT probably has constrained the formation of mutual preference schemes which do not at least pretend to be free trade areas or customs unions.

The Uruguay Round added little. In interpreting Article XXIV it specified that the "reasonable length of time" for an interim agreement should not normally exceed ten years; the tighter dispute settlement procedures of the Uruguay Round could encourage members to challenge those arrangements which do not conform to Article XXIV, but this cake has yet to be tasted (or perhaps baked). The General Agreement on Trade in Services attempts to extend the provisions of Article XXIV to services as a general obligation under that agreement, applying to all services and not just those for which specific commitments are undertaken, but the wording is very loose.

If preferential trade agreements are permitted to co-exist with non-discriminatory trade amongst GATT members, are there characteristics that such preferential arrangements should possess so that they minimise the damage which such discrimination has the potential to create? Discussion of this question was considered through drawing a distinction between impediments to trade which are intentional, i.e. border restrictions, and those which are the result of historical accident in sense that while they may impede trade, that was not the intention.

Agreement between countries which try to remove the accidental impediments may be termed trade facilitation; agreements which reduce or remove intentional barriers between parties to the agreement may be termed trade preferences. As a general rule I would suggest that trade facilitation is of general benefit, provided that common standards etc which are chosen or which emerge are not designed to exclude non-participants. Openness to join the common standards or to have mutual recognition is a good test.

Such general benefit is less clear when intentional trade barriers are being lowered prefer-

entially. The old distinction between trade creation and trade diversion is still a useful starting point here, but it is only as starting point. A free trade agreement (FTA) will tend to create trade among the participants but also divert trade from the rest of the world. If the terms of trade of the rest of the world are not worsened (that is, for example, if there is no change in trade with the rest of the world), the FTA will not harm the rest of the world as a whole – though of course a rearrangement of trade may harm some non-members. Of the participants, a rough and ready rule is that trade expansion will be beneficial to the participants while trade diversion will be harmful. There is more to it than that, particularly when economies of scale are important, but it is a reasonable starting point for direct and short run effects. Assuming that the FTA increases income of the participants there are then additional effects on participants and outsiders associated with growth and its effect on trade.

But in addition to these effects, which have been the traditional focus of attention of economists, there are also several effects which may be more difficult to model but which may be more important in practice.

One set of questions is the following (Snape, p.4):

What effects does the formation of an FTA have on the trading system more generally? Does the formation of a particular free trade agreement encourage other countries to form similar agreements? If so, what relations will there be between the various trading groups? Does the formation of a free trade area facilitate or retard more general liberalisation by the countries concerned and by other countries? Is the preferential group open to new members and if so on what terms? Is it closed to new members? Is it designed to exclude – that is, is it intended that outsiders be discriminated against?

Other questions of practical importance for the trade effects of a preferential free trade agreement surround the definitions used for rules of origin and the comprehensiveness of the commodity coverage. Rules of origin can easily distort trade by transferring protection from a highly protected to a lowly protected member country. Incomplete commodity coverage (e.g. often agricultural products have been excluded

from agreements), tends to create inefficient patterns of trade between the member countries.

Against this set of questions, the NAFTA and APEC developments can be evaluated (Snape, pp.6-8):

The recently released second report of the APEC Eminent Persons Group (APEC, 1994) ... [has] raised questions on the role and future of APEC.

Focusing on the Executive Summary it is hard to see how the parts fit together. The fundamental point of whether the EPG are talking of free trade by the APEC countries or within APEC remains obscure – "free trade in the Asia Pacific" covers both possibilities.

The full Report is more explicit. Here there is no clouding of the point that what is being recommended is an APEC free trade agreement: "we recommend that APEC couple its decision to achieve free trade in the region with a commitment to continue reducing its barriers to non-member countries as well". The Report states that such intra-APEC liberalization should conform to GATT's Article XXIV, and that Article should be strengthened to require all regional agreements to commit to reducing barriers against non-members. It argues against a GATT waiver for an APEC free trade agreement; instead "we recommend that APEC assure the GATT-consistency of its liberalization program by declaring its intention to dismantle its [intra-APEC] barriers on substantially all trade".

... [I]f it were possible to establish the type of APEC free trade agreement that would be fully consistent with article XXIV of the GATT, did not have restrictive rules of origin, and if it were open to outside members to join readily on the same terms (join the free trade agreement, not APEC as such) then it would clearly promote the development of an open world trading system. But is such an agreement feasible? Are the United States and Japan prepared to have free trade with each other on substantially all products? Is any APEC country prepared to have free trade with China? If not, then what will be the exceptions? Would such an agreement become, in major areas, a network of bilateral agreements at least for lengthy transitional periods, as for agriculture

in NAFTA? How many volumes of rules of origin would there be? The NAFTA rules of origin are tailored to exclude imports from outside countries, many of them members of APEC.

In a desire not to be left out in the cold, Australia should be wary of promoting or entering into preferential arrangements which endanger the open multilateral and non-discriminatory trading system which has been of such benefit.

At the meeting of APEC members at Bogor, Indonesia in November 1994, it was agreed that the advanced members would adopt free trade by the year 2010 and the less developed members would achieve this outcome by the year 2020. It was also agreed that the APEC countries would adopt a policy of open regionalism. The benefits for Australia and New Zealand have been estimated at ABARE under two different scenarios. The first was that APEC members liberalise on an MFN basis and the second was that only the seven most advanced members liberalise on an MFN basis. Some of the results are reproduced in the accompanying (Murtough *et al.*, p.5, Table 3).

Comparing these results also allowed some insight into the timing of liberalisation from the viewpoint of the less developed members of APEC. The results showed that these countries should liberalise at the same time as the most developed if they are to maximise the benefits of membership. For example, Malaysia loses relative to the base period if she does not liberalise and the seven advanced members do so (column 3).

5.2 Environmental Issues and Trade Liberalisation

In the years during which the Uruguay Round negotiations took place, the concerns of the environmental movement began increasingly to move towards centre stage. These concerns ranged from landscape, conservation and water quality but also included a range of issues related to the quality of foodstuffs and to animal welfare. Of course, the issue of the quality of foodstuffs was certainly not new, the *Codex Alimentarius* having been established in 1963; nor were concerns over animal disease of recent origin, the International Office of Epizootics having been set up

Percentage Changes in Real Income: All Scenarios			
	Effects of Uruguay Round liberalisation %	Effects of APEC liberalisation on an MFN basis %	Effects of the liberalisation of seven advanced APEC economies ^b %
Australia	1.3	3.4	2.6
New Zealand	1.3	9.2	6.7
Malaysia	2.0	9.2	-0.5
APEC total	0.5	1.8	1.3
^a All changes are from the base year 1988. ^b The seven advanced APEC economies are Australia, New Zealand, Canada, the United States, Japan, South Korea and Taiwan.			

in 1924¹⁰. However, the link between trade policy and environmental policy became a matter for negotiation during the years of the Uruguay Round negotiations (Oxley, pp. 2-6):

Pressure is mounting on environmental grounds to constrain free trade, particularly in food products. Uruguay Round agreements remove the right of countries to arbitrarily restrict entry of food products on health and safety grounds.

There is ample economic analysis which concludes that restricting trade is a very second best means of containing actions which degrade the environment. Even the Rio Earth Summit concluded that the best means of environmental management was to contain or regulate the polluting activity at the source.

There are five broad areas where environmental restrictions on trade have been justified in the food and agriculture sector:

- controls in residue levels in food,
- use of biotechnology to enhance food production,
- requirements for environmentally friendly processes of production,
- restrictions on packaging, and
- animal welfare.

There is a sixth issue – animal disease. This is not a new issue, but it merges into the "environmental" complex.

Pressure has been mounting in a number of countries to increase restrictions on the amount of chemical residue in food. The in-

creasing capacity of technology to detect lower levels of residue has encouraged this process. Consumer groups have devoted greater attention to these issues in recognition of greater consciousness of these issues among consumers.

This has resulted in pressures in the Codex Alimentarius Commission to strike new international standards for Maximum Residue Levels. Conflicting pressures are at work – between health authorities pressing for higher standards and authorities representing commercial interests who are challenging the practical need for higher standards.

The new GATT Agreement on Sanitary and Phytosanitary Measures (SPS) is where today's main game is in the GATT. The Agreement has created a new regulatory environment in which these matters can be considered. Before that Agreement was negotiated in the Uruguay Round, countries had the right under the GATT to set quarantine standards unilaterally.

The SPS agreement alters that. It obliges countries to consider adopting pre-existing standards set for example by Codex, to base national quarantine standards on a formal process or risk management and, when coun -

¹⁰ Background on sanitary and phytosanitary issues and trade are discussed in Hillman (pp.222-224) while Petrey and Johnson outline the measures used in the Pacific Rim countries for meats and the relationship of these to the SPS Agreement in the Uruguay Round.

tries adopt national standards instead of international standards, to have a scientific justification for those standards. Parties to the GATT have the right to challenge observance of these principles under the GATT dispute settlement procedures.

In Australia's case, it creates opportunities that did not exist before to query and challenge restrictions on Australian exports to a number of markets. It also means that foreign exports will be able to challenge quarantine restrictions which Australia applies to food imports.

The Australian Quarantine and Inspection Service (AQIS) recognises the importance of these changes. It intends to undertake a systematic review of the implications of the changes to international quarantine arrangements for access by Australian exports to foreign markets. This program is at the planning phase. ...

There is apprehension in industry that environmental pressures will impact in a significant way on trade in the agriculture and food sector, but no understanding of the likely direction or impact of these pressures.

Australian farmers, food processors and industry and government officials are highly conscious that environmental pressures will impact on international trade. In almost every sector, there is experience with at least one major environmental issue which has impacted on trade. All consider that environmental factors will impact further in the future.

[Yet] [n]o comprehensive analysis of the generic issues referred to above has been undertaken in Australia or in other major agricultural countries. ...

5.3 Looking Forward to 1999

The outcome of the Agreement on Agriculture is a new set of binding and enforceable rules rather than a substantial liberalisation of agricultural trade. In the so-called "mini round" of 1999, progress will need to be achieved in a number of areas. First, less creative arithmetic will need to be employed in the tariffication process if substantial increases in market access are to be achieved. Second, in order to curb production in politically sensitive and over-supported sectors, the AMS should be applied on a more disaggregated basis and not on the aggregate output of the agricultural

sector. Third, further reductions will be required in the use of export subsidies and in the use of such subsidies as tools of market development.

Progress in each of these three areas will depend partly on what happens between now and 1999 in four other areas. The first is the content of the 1995 Farm Bill in the United States: whether the forces for substantial change win over those for marginal amendments to existing legislation¹¹. The second is whether the reforms to the CAP agreed to in 1992 are continued in an imaginative way beyond 1996 or whether the *ad hoc* tinkering of the 1980s will again become the *modus operandi*. The third is the degree to which state trading agencies, e.g. the Japanese Food Agency, continue to be dominant entities in international trade in agricultural products: their activities were practically ignored in the market access and income assistance components of the Uruguay Round negotiations¹². And the fourth concerns the operation of the SPS Agreement and the extent to which the intent of this Agreement will be corrupted by countries continuing to use regulations as technical barriers to trade. Developments in each of these areas will determine how probable it is that the new Dispute Settlements Procedure will be severely put to the test.

6. Conclusions

The Agreement on Agriculture took more than seven years of negotiation to be completed, reflecting in part the technical complexity but, perhaps more so, the political sensitivity, of negotiating domestic agricultural policies and trade policies. This Agreement, when viewed in the light of the history of agricultural trade negotiations in the GATT, has been very successful and innovative. It has been successful because matters of substance emerged from the negotiations on three previously intractable matters, namely, market access and the use of non-tariff barriers, domestic support, and assistance to exports. The outcome was also innovative because the concept of bindings was extended from tariffs to levels of domestic income support and to levels of export subsidy. The effective-

¹¹ For a discussion, see the paper by Penn and the Report by Roberts and Andrews.

¹² Some observers, e.g. Hathaway (1994b), are extremely concerned that the activities of state trading agencies were ignored in the context of improving market access and tariffication.

ness of the new rules will depend on the willingness of governments to abide by them, something that has been conspicuously absent in the past, and on the ability of the WTO Committee on Agriculture to monitor that adherence.

It must be acknowledged that much remains to be achieved in the mini-round negotiations of 1999. In particular, the emphasis should be switched from rules and bindings to ensuring that the bindings are modified to force real reductions in agricultural protectionism. Some commentators, e.g. Hathaway (1994a), remain very sceptical that such further liberalisation will be forthcoming. They see new issues such as trade and the environment emerging and believe that politicians will be reluctant to jeopardise progress there for the old issue of agricultural protectionism which they have been told, wrongly, has been solved by the Agreement on Agriculture. Nevertheless, the increased consciousness of governments about the unsustainable budgetary costs of agricultural policies that do not achieve the targets for which they were implemented was apparent during the course of the Uruguay Round and may continue. During the same period, it was also apparent that governments were becoming slightly more willing to accept the role of markets in determining the levels and distribution of farm incomes. This change of emphasis is to be welcomed. It is ironic, therefore, that the new and technically complex and politically sensitive issues of environment and trade will require the design of appropriate new intervention policies together with a high degree of international cooperation.

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