Chapter Nine

Globalisation, WTO, and the Next Round of Trade Negotiations

This chapter examines the extent and causes of globalisation, the role of the World Trade Organisation (WTO) in fostering global economic integration, the scope for agricultural reforms under WTO to further that process, and the implications for Australia as WTO moves towards the next round of multilateral trade negotiations. Three technological revolutions have made major contributions to globalisation: the steam engine and telegraph last century, the internal combustion engine and telephone during this century, and most recently the digital revolution's impact on communication and information costs. Equally important have been the deregulatory policy reforms made by national governments. Those have been partly unilateral or regional, but the GATT/WTO has been crucial during the past half century in encouraging economies to open up more and to commit to staying open to international trade.

The potential welfare gains from further liberalising markets under WTO are still huge, but no more so than in agriculture. Should attempts to liberalise farm trade in the next WTO round follow the same pattern as the Uruguay Round, or might a more radical approach be required to bring agriculture more into the WTO mainstream? This question is explored in this paper by focusing especially on the Uruguay Round's 'dirty tariffication' and adoption of 'tariff rate quotas'. The paper also examines new agricultural issues, notably food safety and agriculture's so-called multifunctionality: both were the subject of contention in Seattle in late 1999. The WTO's prospective new millennium round offers the best opportunity yet for seeking faster reform of farm (and textile) trade by OECD countries. The implications of these developments for Australia are explored in the final section.

9.1 Introduction

Globalization could be defined as the decline in costs of doing business internationally. One of its key effects is to enhance the international integration of markets for goods, services, technology, ideas, capital and labour. An indicator of its progress is provided by the reducing differences in prices for those products and factors across space. That and other effects of globalisation are being felt by all countries of the world, especially in open economies such as Australia's.

As was evident in Seattle late last year, when trade ministers of World Trade

Organisation (WTO) member countries met with the intention of launching the next round of WTO trade negotiations, not everyone favours globalisation! Protestors included trade union representatives of some low-skilled workers in rich countries who fear it threatens their members' jobs; environmental groups, who believe it contributes to national and global environmental problems; and others who simply prefer their own countries to be more self-sufficient in producing what their citizens consume. Protestors from among such groups were sufficiently mobilised in Seattle as to at least contribute to the lack of an outcome from the talks. As a result, the launch of the next WTO round has effectively been postponed until at least 2001.

This raises the question: what are the interactions between globalisation, the role of the WTO and the policies of member countries? That question is explored in this chapter, with a view to drawing out implications for further action by Australia in the lead up to what, eventually, will be the next WTO round of multilateral trade negotiations. Special emphasis is given to agricultural policies not only because of their importance to Australia but also because they are among the world's most trade-distorting policies.

9.2 Definition and Extent of Globalization[1]

For present purposes, globalisation is defined as the decline in transactions costs of, or barriers to, doing business or otherwise interacting with people of other nations around the world. Its effect is to enhance the integration of markets for goods, financial and other services, technology, ideas, capital and labour, reducing differences in prices for those products and factors across space. Falls in transport costs, the huge decline in communication and information costs, and cuts in tariff and non-tariff governmental barriers to trade in goods and services combined in the late 20th century to accelerate globalisation to an unprecedented speed that shows no sign of abating.

The extent of the acceleration in globalisation cannot be captured in a single statistic, but several provide partial indications of what is involved. A standard indicator is the comparison between trade and GDP growth. As Table 9.1 shows, while merchandise trade has grown faster than output for all periods except between the two world wars, the gap has been larger in the 1990s than in any earlier period since the mid-nineteenth century. More than one-fifth of global output is now exported, double the proportion in the 1950s. As well, annual outflows of foreign direct investment grew more than six-fold between 1983 and 1990, and continued to grow more than twice as fast as goods trade in the 1990s. Intra-firm trade among multinational corporations (MNCs) is estimated to account for one-third of world trade, and another one-third is MNC trade with non-affiliates. During the 1990s international portfolio investment has been growing equally as fast as foreign direct investment. In just the last five years, the annual value of cross-border mergers and acquisitions has trebled, growing from $100 billion to $300 billion (UNCTAD 1998, p. 21). Daily foreign exchange transactions now exceed global currency reserves, with international capital flows more than 50 times the value of international trade flows. The 1990s have also seen an explosion in the world's capacity for electronic commerce. Table 9.2 shows a doubling in the number of telephone

[1] This part of the chapter draws on Anderson (2000a).

Table 9.1
Growth in World GDP and Merchandise Exports in Real Terms, 1720 to 1996
(Average Per Annum Per Cent Growth)

	1720-1820	1820-1870	1870-1913	1913-1950	1950-1973	1973-1990	1990-1996
Real GDP	0.8	1.9	2.5	1.8	5.4	2.7	2.9
Export Volume	1.4	4.5	3.9	0.5	9.8	4.0	5.9
Export Growth/ GDP Growth	**1.7**	**2.4**	**1.6**	**0.3**	**1.8**	**1.5**	**2.1**

Source: WTO (1998a, p. 34).

Table 9.2
Growth in Capacity for Electronic Commerce, 1991 to 2001
(Million Units)

	1991	1996	2001[a]
Telephone main lines	545	741	1,000
Cellular phone subscribers	16	135	400
Personal computers	123	245	450
Internet host computers	1	16	110
PCs with internet access	5	60	300

Note: [a] Projected by the International Telecommunications Union, Geneva.
Source: WTO (1998b, p. 8).

lines, a 25-fold increase in the number of cellular phones, a near quadrupling in the number of personal computers, and an expectation that two-thirds of those PCs will have internet access by 2001.

9.3 The Technological Dimension of Globalization

There have been three technological revolutions in transport and communication costs in modern times. The first involved the cost of transporting goods, which was lowered enormously in the 19th century by the advent of the steam engine, and hence the railway and steamship. Steel hulls for ships and refrigeration further lowered the cost of ocean transport late last century, particularly for perishable goods. The telegraph helped too (O'Rouke and Williamson 1999).

The second technological revolution lowered hugely also the cost of moving people. It was dominated, in the middle half of the 20th century, by the falling cost of transport by car and aeroplane thanks to mass production of such goods and associated services. Ocean freight rates (helped by containerisation) and telephone charges also fell massively over this period.[2]

The third revolution in transport and communications technology, which began towards the end of the 20th century, is digital. Aided by deregulation of telecom markets in many countries, it is lowering

[2] Between 1920 and 1980, the real charge per tonne for ocean freight fell by almost three-quarters and between 1960 and 1980 the real cost of a telephone call from New York to London fell by 90 per cent. Meanwhile, between 1930 and 1980 the real cost of air travel fell 85 per cent (Hufbauer 1991).

enormously long-distance communication costs and especially the cost of rapidly accessing and processing knowledge, information and ideas from anywhere in the world.[3] A side-effect of the Internet's expansion is the growth in the use of the English language. It has been claimed that there are now more people using English as a second language than there are people for whom it is a first language (Cairncross 1997). This too is lowering costs of communicating between countries.

9.4 The Governmental Contribution to Globalization

The above developments have been reinforced by government decisions to liberalise trade, currency and investment regimes. Following the protectionist inter-war period, this began with the lowering of import tariffs on trade in manufactures between industrialised economies. Within Western Europe that trade was especially liberal following the Treaty of Rome and the formation of the European Free Trade Area. In the 1980s trade reform was followed by extensive liberalisation of foreign exchange markets and of restrictions on capital flows, leading (with the help of new digital technologies) to the development of new financial instruments. At the same time many non-OECD countries – including China and ultimately the Soviet bloc - began moving away from inward-looking to outward-oriented trade and investment policies. The 1980s also saw the deregulation of domestic markets in a growing number of countries, not least Australia and New Zealand, which reinforced the effects of deregulating transactions at national borders.

Such reforms provide most benefit to the countries making them, but they also benefit their trading partners. Hence the more countries who open up and reform, the greater is the gain to other countries as well. In particular, such a process expands the opportunities for developing and transition economies to access goods and services markets, investment funds and technologies, thereby raising the pay-off to those economies from joining the band-wagon of liberalisation. Those that have already done so have grown much faster than the rest, and have seen their incomes converge toward OECD income levels (see, e.g., Dollar 1992; Edwards 1993; Sachs and Warner 1995; and WTO (1998a, pp. 62-63) for a bibliography). The reasons for faster growth of more open economies have to do with the dynamics of trade liberalisation, something which is not just an abstract idea from new trade and growth theory (Grossman and Helpman 1991) but one that is well supported empirically (USITC 1997).

Inter alia, these technological and governmental revolutions that have given rise to globalisation have contributed increasingly to the drift towards urbanisation. The first technological revolution helped launch the industrial revolution in Western Europe, and by lowering the cost of exploiting natural resources abroad also allowed primary sectors in less-densely populated and tropical countries to expand. The second technological revolution accelerated industrialisation in the West and its spread to the Far East including via what has been described as the product cycle. The current technological revolution is increasing the scope to subdivide the processes of

[3] Two book titles summarise this 150-year history: Blainey's *Tyranny of Distance* which refers to Australia's early isolation from the Old World prior to steamships, and Cairncross' *Death of Distance* which refers to the latest communications revolution (Blainey 1966; Cairncross 1997). For comparisons of the nineteenth and late twentieth century episodes of globalisation, see Baldwin and Martin (1999) and Bordo, Eichengreen and Irwin (1999).

production and distribution into parts that can be relocated anywhere in the world according to ever-increasing changes in comparative advantages over time. Such out-sourcing can be via sub-contracting, licensing, joint ventures, or direct foreign investment by multinational corporations (Markusen et al. 1996).

The resulting productivity growth in industrial and service sectors is altering the key source of wealth of nations, which is moving ever-faster away from natural to human capital (that is, from raw materials and physical capital per worker to human skills and knowledge). In particular, wealth creation in the 21st century will depend especially on the ability to access and make productive use of the expanding stocks of knowledge and information, and to build on them through creative research and development (World Bank 1998). How well and how quickly people of different regions are able to do that will increasingly determine relative economic growth rates. But for all countries the extent and speed with which economic events abroad are transmitted to domestic markets will increase inexorably. Governments will have less and less capacity to isolate their economies from such trends - as derivatives and electronic commerce have made clear in the cases of international financial flows and a widening range of traded goods and services.

9.5 The GATT/WTO's Contribution to Globalization

History shows that the risk of market-opening being reversed is much more likely in the absence than in the presence of international constraints on national trade policy actions. For example, the Cobden-Chevalier Treaty of 1860, between England and France, contained a most-favoured-nation (MFN) clause. This required that the agreed cut in the tariff on each item in their bilateral trade was to be applied also to their imports from other countries. It also meant that every European country that subsequently signed a trade treaty with either England or France (and most did by 1867) signed onto MFN. The effect was a network of treaties that lowered hugely the level of MFN tariff protection in Europe (Kindleberger 1975), allowing world output and trade to boom for several decades until the First World War intervened.

Following that war, efforts to restore liberal trade centred on international conferences, but did not lead to renewed trade treaties with binding commitments to openness based on MFN. Then when recession hit in the late 1920s, governments responded with beggar-my-neighbour protectionist trade policies that drove the world economy into depression. The volume of world trade shrunk by one-quarter between 1929 and 1932, and its value fell by 40 per cent.

Out of the inter-war experience came the conviction that liberal world trade required a set of rules and binding commitments based on non-discriminatory principles. While there was not enough agreement to create an international trade organisation, at least a General Agreement on Tariffs and Trade (GATT) was signed by 23 large trading countries in 1947. The GATT provided not only a set of multilateral rules and disciplines but also a forum to negotiate tariff reductions and rules changes, plus a mechanism to help settle trade disputes. Eight so-called rounds of negotiations took place in the subsequent 46 years, the last one (the Uruguay Round) culminating in the 'interim' GATT Secretariat being

converted into the World Trade Organisation.

The GATT, and now even more so the WTO, contributes to globalisation in several crucial ways. The WTO has four key objectives: to set and enforce rules for international trade, to provide a forum to negotiate and monitor trade liberalisation, to improve policy transparency, and to resolve trade disputes. Apart from the transparency role, these were also the key objectives of its predecessor. However, the WTO is much more comprehensive than the GATT. For example, GATT's product coverage in practice was confined mainly to manufactures (effectively not including textiles and clothing), whereas the WTO encompasses all goods (including sensitive farm and textile products), services, capital to some extent, and ideas (intellectual property). As well, following the conclusion of the Uruguay Round negotiations, the interim GATT Secretariat was converted to a permanent WTO Secretariat with greatly strengthened trade policy review and dispute settlement mechanisms. It also has a new role: cooperating with the IMF and World Bank with a view to achieving greater coherence in global economic policy making.

GATT/WTO rules to govern international trade serve at least three purposes. First, they protect the welfare of small and weak nations against discriminatory trade policy actions of large and powerful nations. GATT Articles I (most-favoured-nation) and III (national treatment) promise that all WTO members will be given the same conditions of access to a particular country's market as the most favoured member, and all foreign suppliers will be treated the same as domestic suppliers. These fairness rules are fundamental to instilling confidence in the world trading system. In particular, they lower the risks that are associated with a nation's producers and consumers becoming more inter-dependent with foreigners - risks that otherwise could be used by a country as an excuse for not fully opening its borders.

Second, large economies have the potential to exploit their monopoly power by taxing their trade, but we know from trade theory that the rest of the world and the world as a whole are made worse off by such trade taxes. Thus while each large economy might be tempted to impose trade taxes, the effect of lots of them doing so simultaneously may well be to leave most if not all of them worse off - not to mention the welfare reductions that would result in many smaller countries. Hence the value of agreeing not to raise trade barriers and instead to 'bind' them in a tariff schedule at specified ceiling levels. This rule is embodied in GATT Article II, whereby WTO members are expected to limit trade only with tariffs and are obligated to continue to provide market access never less favourable than that agreed to in their tariff schedules. Again, the greater certainty which this tariff-binding rule brings to the international trading system adds to the preparedness of countries to become more interdependent and of business people to invest more.

The third and perhaps most important contribution of multilateral rules disciplining trade policy is that they can help governments ward off domestic interest groups seeking special favours. This comes about partly via Article II, which outlaws the raising of bound tariffs, as well as via numerous other articles aimed at ensuring that non-tariff measures are not used as substitutes for tariffs. This benefit of the system is sometimes referred to as the 'Ulysses effect': it helps prevent governments

from being tempted to 'sin', in this case to favour special interest groups at the expense of the rest of their economy.[4]

While no-one would argue that the GATT rules have been applied without exception, the fact that they are there ensures the worst excesses are avoided. They therefore bring greater certainty and predictability to international markets, enhancing economic welfare in and reducing political tensions between nations. More than that, by promoting interdependence the GATT/WTO indirectly has raised the price and hence reduced the likelihood of going to war.

But why do countries need the WTO to negotiate freer trade? One of the clearest lessons from trade theory is that an economy which is unable to influence its international terms of trade cannot maximise its national income and economic growth without allowing free trade in all goods and services. And while there may still be a few countries who so dominate supply or demand for particular products that they can affect the price of these products, it is increasingly the case that no country can substantially determine its international terms of trade. The vast majority of countries would not even be able to affect, on an international level, even the price of single products. Hence, for all countries, trade barriers mean consumers lose directly from the higher domestic prices of importables, while exporters lose indirectly because import barriers cause the nation's currency to appreciate (as there is less demand for foreign currency from importers). In addition, more-open economies also grow faster, thus boosting living standards more quickly.

Why, then, do countries restrict their trade, and why do they need to get together to agree to liberalise those protectionist trade regimes multilaterally, when it is in their national economic interests to do so unilaterally?

Numerous reasons have been suggested as to why a country imposes trade barriers in the first place, but almost all of them are found wanting (Corden 1997). The most compelling explanation is a political economy one. It has to do with the national income re-distributive feature of restrictive trade policies: the gains are concentrated in the hands of a few who are prepared to support politicians who favour protection, while the losses are sufficiently small per consumer and export firm and are distributed sufficiently widely as to make it not worthwhile for those losers to get together to provide a counter-lobby (Hillman 1989, Grossman and Helpman 1994, Anderson 1995). Thus the observed pattern of protection in a country at a point in time may well be an equilibrium outcome in a national political market for policy intervention.

That political equilibrium in two or more countries might, however, be able to be altered for the better through an exchange of product market access. If country A allows more imports it may well harm its import-competing producers if there are no compensation mechanisms; but if this liberalisation is done in return for country A's trading partners lowering their barriers to A's exports, the producers of those exports will enjoy this additional benefit. The

[4] Petersmann (1991, p. 83) goes so far as to say that "the primary regulatory function of the GATT .... [is] the welfare-increasing resolution of *domestic* conflicts of interest *within* GATT member countries among individual producers, importers, exporters and consumers ." Similarly, Roessler (1985, p. 298) claims that "the principal function of the GATT as a system of rules is to resolve conflicts of interest within, not among, countries. The function of the GATT as a negotiating forum is to enable countries to defend the national interest not against the national interests of other countries but against sectional interests within their own and other countries."

latter extra benefit may be sufficiently greater than the loss to A's import-competing producers that A's liberalising politicians too become net gainers in terms of electoral support. Likewise, politicians in the countries trading with A may well be able to gain from this trade in market access, for equal and opposite reasons. That is, a new opportunity for trade negotiations can stimulate trade liberalisation by altering the incentives to lobby politicians and thereby the political equilibrium in trading nations.[5]

Such gains from trade negotiations involving exchange of market access will tend to be greater, nationally and globally, the larger the number of countries involved and the broader the product and issues covered by the negotiations. Hence the wisdom in negotiating multilaterally with more than 100 countries over a wide range of sectors and issues, as in the Uruguay Round, despite the process being cumbersome. Now that there is so much more product coverage under the WTO than under the GATT, and the number and extent of participation by member countries keeps growing, the scope for exchange of market access has increased dramatically. This is especially true for exchanges between more- and less-developed economies, now that agriculture and textiles and clothing are back in the GATT mainstream, and services and trade-related intellectual property have been added, making a wider range of intersectoral tradeoffs possible.

This is not to deny the many challenges still confronting the achievement of a better global trading system. In particular, there is the challenge of actually launching a new round of multilateral trade negotiations in the next year or so, especially given the events of Seattle and the lack of agreement on the issues to be included in the next round of WTO talks.

Another obvious and urgent challenge is that which has been highlighted by the Asian financial crisis. This crisis has demonstrated how volatile short-term private capital can be in an integrated global capital market, where herd mentality and panic can take hold and spread quickly thanks to the digital revolution in communications. The consequent risk of contagion to other regions is thus now greater than in even the recent past. Such international spillovers magnify the adverse consequences of the crisis. Clearly, consideration needs to be given as to how to limit these 'over-reactions' and, more significantly, their adverse consequences.

One danger in the wake of these events in Asia is that it multiplies the probability that affected countries in Asia and elsewhere will slow or reverse their market opening policy stance – even though the opposite is what is required to pull these economies out of recession.

The possibility of policy reversals underscores the importance of getting another comprehensive WTO round underway early in this new century. Critical to such a round - and to Australian interests in particular - will be the inclusion of agriculture, to which attention now turns.

9.6 Issues for Reforming Agriculture in the Next WTO Round[6]

[5] Elaborations of this economists' perspective can be found in Grossman and Helpman (1995), Hillman and Moser (1995), Hoekman and Kostecki (1995) and Anderson (1996, Ch. 1). Political scientists are beginning to take a similar view. See, for example, Goldstein (1998).

[6] This part of the chapter draws on Anderson (2000b).

One of the great achievements of the Uruguay Round of trade negotiations was the bringing of agricultural policies under much greater multilateral discipline. The Uruguay Round Agreement on Agriculture (URAA) led to the conversion of non-tariff barriers to agricultural imports into bound tariffs,[7] with those bound tariffs being scheduled for phased reductions, as were farm production and export subsidies, between 1995 and 2000 (with developing countries having an extra four years). Since the URAA requires members to return to the negotiating table in 2000, the question is: what might the next round of negotiations involve?

This section of the chapter makes several claims. One is that agricultural market access issues remain the main priority for the next round, because agricultural protection rates in OECD countries remain huge. Large commitments in terms of bound tariff cuts and/or quota expansions will be needed if agricultural protection is to be reduced significantly. Whether that is done in the same way as in the UR (percentage cuts to bound tariffs, export subsidies and domestic support, and growth in the share of consumption imported), or whether a more radical approach is needed, is a moot point.

Secondly, for several reasons reforms in other sectors also are important for agriculture, not least because having them on the negotiating agenda can bring to the table groups that can counter farm protectionist lobbies. Adding new issues to the agenda can contribute in a similar way, albeit at the risk of diverting attention away from traditional market access issues.

Thirdly, among the other issues relating to agriculture that will be raised in the next WTO round are assertions that stricter technical barriers to farm trade are necessary for food safety reasons, and that agriculture's so-called 'multifunctional' nature requires that the sector be treated differently from other sectors. These arguments will be put forward by certain high income countries as reasons for continued protection of their agricultural sectors. If these arguments are handled badly in the millennium round, then the outcomes could be detrimental not only to developing country agriculture, but also to developed countries with a significant agricultural export sector, such as Australia.

9.6.1 The Legacy of the Uruguay Round Agreement on Agriculture

For most farm products and OECD countries, actual tariffs will provide no less protection at the beginning of 21st century than did the non-tariff import barriers of the late 1980s/early 1990s, according to Ingco (1996). This is because in most cases the outcome of the UR was that tariffs were bound well above the applied rates (or the tariff equivalents of the quantitative restrictions) in place at the end of the Uruguay Round. That is true in other sectors also, but to a much lesser extent. Table 9.3 suggests that for manufactures a bound tariff cut just 40 per cent greater than in the Uruguay Round would bring the average bound rate down to the applied rate average, whereas for

[7] This process has been called "tariffication". Bound tariff levels are tariff rates above which a country cannot go in setting its applied rates at any point in time.

Table 9.3
Depth of Uruguay Round Tariff Cuts and Post-UR Bound and Applied Tariffs on Import

	Depth of UR Cut in Bound Tariff Rate t (as % of 1+t)	Post-UR Bound Tariff Rate (%)	Post-UR Applied Tariff Rate (%)	Depth of Bound Tar of 1+t) to to Secto App
Agriculture				
OECD countries	1.5	15	14	
Developing economies	4.7	60	18	
All WTO members	2.6	24	14	
Textiles & Clothing				
OECD countries	1.4	11	8	
Developing economies	4.1	24	21	
All WTO members	1.6	12	10	
Other Manufactures				
OECD countries	1.0	4	3	
Developing economies	2.7	20	13	
All WTO members	1.3	6	4	

Source: Finger and Schuknecht (1999).

agriculture the depth of cut would need to be three times greater than in the Uruguay Round to close the gap (compare columns 1 and 4). The final column of Table 9.3 shows that a one-third cut in the bound tariffs on 'other manufactures' would bring its average down to each region's applied rate average for all goods, whereas for textiles and clothing a cut of about one-half would be needed, and for agriculture (including processed food) the cut would have to be about four-fifths.

Binding agricultural tariffs well above applied rates has also allowed countries to vary applied tariffs below the binding so as to stabilise 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 little of the reduction in fluctuations in international food markets this decade that tariffication was expected to deliver.

Even getting agricultural (and textile) bound tariffs down to currently applied rates on those products would require big cuts. Yet applied rates for textiles and clothing are 2.5 times, and agriculture's are 3.5 times, those for other manufactures. Clearly, action is needed on two tariff fronts: getting bound rates down to applied rates, and lowering applied rates on these two outlying industry groups.

As if that weren't enough, a third front requires attention. Agricultural-importing countries agreed also to provide minimum market access opportunities, such that the share of imports in domestic consumption for farm products subject to import restrictions rises to at least 5 per cent by the year 2000 (less in the case of developing countries). This would take place under a so-called tariff rate quota (TRQ): some imports would come in under a low or zero tariff (up to the quota restraint) while any above-quota imports would be subject to a higher tariff.

Even though within-quota imports attract a much lower tariff than out-of-quota imports, such tariff rate quotas (TRQs) have several undesirable features: they legitimise a role for state trading agencies, they generate quota rents, they introduce scope for discriminating between countries, and they can reduce national welfare by much more than similarly protective single tariff regimes.

More specifically, the Appendix to Anderson (1999) shows, among other things, that:

- in the presence of TRQs the national welfare cost of agricultural protection can be considerably greater than under a similarly protective tariff-only regime, and that cost tends to rise more when there is (as in the latter 1990s) a fall in international food prices;
- with a TRQ regime, a cut in the out-of-quota bound tariff may have only a fraction of the effect on prices and quantities traded (and possibly none at all) of a cut of the same size under a tariff-only regime, not only when the bound rate exceeds the applied rate but also when the applied rate is above the prohibitive tariff in the presence of a TRQ;
- the effect of a tariff cut on national welfare, by contrast, may be much greater when a TRQ rather than a tariff-only regime is in place, depending on how the quota is being administered before and after that reform; and

- an expansion of the market access (quota) commitment need not expand trade and welfare, for it is always possible for the quota administrator to allocate the quotas so as to ensure under-fill such that no more or even less imports in total flow in.

The low in-quota and very high out-of-quota tariffs mean potentially huge benefits are going to those allocated quota licenses. In numerous cases quotas are far from being filled however, one possible reason being that quotas are allocated (inadvertently or deliberately) to imports from high-cost suppliers incapable of making full use of them. And the fact that the quota often represents a high proportion and sometimes 100 per cent of actual imports suggests some out-of-quota tariffs are virtually prohibitive.

Another 'agreement' from the UR was that the aggregate level of domestic support (or Aggregate Measure of Support (AMS)) for industrial-country farmers was to be reduced to four-fifths of its 1986-88 level by the turn of the century. That too required only modest reform in most industrial countries. The problem being that there are many forms of support that need not be included in the calculation of the AMS, the most important being direct payments under production-limiting programs of the sort adopted by the US and EU. A danger is that the use of such exceptions may spread to other countries and other commodities as farm income support via trade and direct domestic price support measures is gradually curtailed through the WTO.

Thus, without underrating the Uruguay Round's achievement of establishing rules for agricultural trade and securing some reform, it has to be recognised that very limited progress has been made over the past five years in reducing agricultural protection and market insulation.

9.6.2 The Potential Gains from Further Trade Policy Reform

When the implementation of the Uruguay Round is complete in 2005 what will be the potential for *further* gains from reforming agricultural markets of OECD countries compared with the gains from protection cuts in other sectors; and how large are those potential gains from OECD liberalisation compared with gains from developing country reforms? According to recent estimates using the global economy-wide model known as GTAP, the gains from removing remaining tariffs and subsidies would be huge (Anderson et al. 2000). Table 9.4 suggests that if all merchandise trade distortions were removed globally, almost half (48 per cent) of the estimated global economic welfare gains (ignoring environmental effects) would come from agricultural and processed food policy reform in OECD countries – even though such products in those countries contribute only 4 per cent of global GDP and less than one-tenth of world trade. Another one-sixth would come from reform of farm and food policies of developing countries.

Textiles and clothing reforms appear pale by comparison with agricultural reform: their potential global welfare contribution is barely one-tenth that of agriculture's (7 per cent compared with 65 per cent). This big difference reflects two facts: one is that projected distortions to prices (i.e., relative to free market prices) for agriculture are more than twice those for textiles and clothing in 2005; the other is that textiles and clothing contributes only 1.5 per cent to the value of world production and 5 per cent to the value of world trade, roughly

Table 9.4
Sectoral and Regional Contributions to the Economic Welfare Gains[a] from Completely Removing Trade Barriers Globally, Post-Uruguay Round, 2005

Liberalising Region	Benefiting Region	Agriculture & Food	Other Primary	Textiles & Clothing	Other Manufactures	Total
			In 1995 US$ billions			
High Income	High Income	110.5	-0.0	-5.7	-8.1	96.6
	Low Income	11.6	0.1	9.0	22.3	43.1
	Total	***122.1***	***0.0***	***3.3***	***14.2***	***139.7***
Low Income	High Income	11.2	0.2	10.5	27.7	49.6
	Low Income	31.4	2.5	3.6	27.6	65.1
	Total	***42.6***	***2.7***	***14.1***	***55.3***	***114.7***
All Countries	High Income	121.7	0.1	4.8	19.6	146.2
	Low Income	43.0	2.7	12.6	49.9	108.1
	Total	***164.7***	***2.8***	***17.4***	***69.5***	***254.3***
			In Per Cent of Total Global Gains			
High Income	High Income	43.4	0.0	-2.3	-3.2	38.0
	Low Income	4.6	0.1	3.5	8.8	16.9
	Total	***48.0***	***0.0***	***1.3***	***5.6***	***54.9***
Low Income	High Income	4.4	0.1	4.1	10.9	19.5
	Low Income	12.3	1.0	1.4	10.9	25.6
	Total	***16.7***	***1.1***	***5.5***	***21.7***	***45.1***
All Countries	High Income	47.9	0.1	1.9	7.7	57.5
	Low Income	16.9	1.0	4.9	19.6	42.5
	Total	***64.8***	***1.1***	***6.8***	***27.3***	***100.0***

Note: [a] No account is taken in these calculations of the welfare effects of environment changes associated with trade liberalisation, which could be positive or negative depending in part on how environmental policies are adjusted following trade reforms.

Source: Provisional GTAP modeling results, a revised version of which is to appear in final form in Anderson et al (2000).

half the shares for farm products (Anderson, Hoekman and Strutt 1999).

However, two assumptions are crucial in generating the results reported in Table 9.4. One is that China and Taiwan are assumed to join the WTO soon and enjoy the same accelerated access to OECD markets under the UR Agreement on Textiles and Clothing (ATC) as other developing countries that already are WTO members. The other crucial assumption is that OECD countries fully implement the ATC. The latter is far from certain to happen though, particularly if China were to join WTO soon and phase out its 'voluntary' export restraints (VERs) on textiles and clothing by 2005. Dropping either of those assumptions reduces very substantially the estimated gains from Uruguay Round implementation (Anderson 1997), and therefore would raise the potential gains from textile and clothing reform in the next and subsequent WTO rounds.

Even so, agricultural protection would remain far more costly to the world economy than barriers to textiles and clothing trade – and more than twice as costly as protection to other manufactures, despite the latter having much bigger shares in the value of world production and trade.

Moreover, if OECD governments did

renege on the spirit of the ATC, for example by using 'safeguards' such as anti-dumping measures to limit their textile imports after 'voluntary' export restraints are abolished at the end of 2004, the industrialisation of developing countries as a group would slow down and hence their need to depend on farm products to trade their way out of poverty would be greater.

The distribution of the gains across regions that would result from full trade liberalisation is clear from Table 9.4. As always, most of the gains accrue to the liberalising region. For example, all but one-tenth (12/122) of the gains from high-income countries removing distortions to their trade in farm and food products accrues to those countries. As for developing countries liberalising their own farm and food policies, three-quarters of the benefits stay with the developing countries themselves (31/43).

WTO members were right, therefore, to insist that agricultural reform must continue into the new century without a pause. In particular, developing countries as a group have a major stake in the process of farm policy reform continuing: according to the model results in Table 9.4, farm and food policies globally contribute 40 per cent (17/43) of the cost to developing economies of global goods trade distortions. Textile and clothing policies also harm them greatly, but nowhere near as much as farm policies.

9.6.3 What Should be Done to Further the Agricultural Reform Process?

In terms of farm *export subsidies*, nothing less than a total ban is needed to bring agriculture into line with non-farm products under the GATT. They are, after all, almost exclusively a Western European phenomenon apart from sporadic US involvement: five-sixths of all export subsidies in the mid-1990s were granted by the EU, and all but 2 per cent of the rest were accounted for by the US, Norway and Switzerland (Tangermann and Josling 1999, p. 16).

With respect to *domestic subsidies*, gradual reform of policies of the US and EU, in particular the further de-coupling of farm income support measures from production as with America's FAIR Act of 1996, may allow further reduction commitments.

But the most important area requiring attention has to do with *import market* access. Tariffication appeared to be a great step forward. However, the combination of 'dirty' tariffication by developed economies (setting bound rates well above applied rates) allows many countries still to vary their protection as they wish in response to changes in domestic or international food markets. Reducing bound tariffs from the 50-150+ per cent range to the 0-15 per cent range of tariff rates for manufactures is one of the major challenges ahead. If the steady rates of reduction of the past are used, it will be several decades before that gap is closed – and some time even before many of those bound tariffs reach current applied rates.

There is also a pressing need to focus on in-quota imports, that is, those that meet the minimum access requirements in the UR Agreement on Agriculture (generally 5 per cent of domestic sales by 2000 for developed economies). Those quotas were introduced ostensibly to guarantee traditional exporters a minimum level of market access, equal at least to what was available before tariffication, given that tariffs have been bound at rates greatly above applied rates. As many as 36 WTO member countries listed TRQs in their Uruguay

Round schedules, of which at least half actively use them. But as the Appendix to Anderson (1999) makes clear, this system of tariff rate quotas ensures that agricultural trade policies continue to be very complex. In particular, their existence reduces the extent to which future tariff cuts will lead to actual import growth in the medium term, and it is worrying that quotas have on average been barely two-thirds filled according to the count of notifications to the WTO Committee on Agriculture during 1995 and 1996 (Tangermann and Josling 1999, p. 26).

Agricultural-exporting countries are understandably reluctant to suggest TRQs be removed, because TRQs provide at least some market access at low or zero tariffs. Nor would allowing TRQs to be auctioned be seen by all as a solution, because that would be like imposing the out-of-quota tariff on quota-restricted trade that the TRQ was designed to avoid. If banning TRQs is not yet possible, the next-best alternative may be to expand them, so as to simultaneously reduce their importance, increase competition, and lessen the impact of high above-quota tariffs.

One can imagine an outcome from TRQ expansion that is either optimistic or pessimistic from a reformer's viewpoint. On the one hand, optimists may say: if the TRQs were to be increased by, say, the equivalent of one per cent of domestic consumption per year, it would not be very long in most cases before the quota became non-binding. Expanding the TRQ could thereby be potentially more liberalising in the medium term than reducing the very high above-quota tariffs. Such an approach may require binding within-quota tariffs at a reasonable level (such as that for manufactures).

On the other hand, negotiators familiar with the tortuous efforts to reform the quota arrangements for textiles and clothing trade point to the fact that the inception of textile quotas, to be phased out by 2005 for most countries but probably no earlier than 2008 for China, was around 1960. Will the expected lifetime of agricultural TRQs similarly be fifty or so years?

Those with this more pessimistic view may wish to put the case for a more radical approach to the next round of agricultural negotiations, namely to bring agriculture much more into line with the treatment of non-agricultural goods in the WTO. For example, they might call for the total elimination of agricultural TRQs (along with export subsidies and export credits) and a major reduction in bound (out-of-quota) tariffs.

9.6.4 Why Agriculture Needs Other Sectors in the Next WTO Round

There are at least three reasons why including non-agricultural negotiations in the next WTO round is relevant to agriculture. One is that the government of a WTO member that imports farm products and exports non-farm goods and services will be more interested in lowering its impediments to agricultural imports if agricultural-exporting members lower their impediments to non-farm imports. This is because its loss in political support from farmers will be compensated by political support from non-food exporters (Grossman and Helpman 1995, Hillman and Moser 1995). The second reason has to do with the fact that many non-farm goods and services are needed by farmers as intermediate inputs or to get farm products to the final consumer. If because of trade impediments those non-farm products are more expensive than they need be, costs are raised so net farm

incomes are reduced. Since the WTO negotiations focus on reciprocal exchange of market access concessions, export-oriented farmers have a negotiating interest not only in better access to food markets abroad but also in more competition from abroad in their own economies' markets for non-farm products and services. And the third reason is that farmers compete with non-farm sectors for mobile factors of production, most notably investment funds and labour. To the extent that a country's non-farm sectors are supported by trade impediments, so its farmers can be disadvantaged by having to pay higher prices for those factors.

For all these reasons, the probability of the next WTO round delivering further agricultural reforms will be significantly greater if negotiations also seek to achieve protection cuts for other sectors, including services.

9.6.5 Agriculture and 'New' Trade Issues

Inclusion of new trade agenda issues in the next round is considered by some negotiators as undesirable because it would distract attention from the market access issues that are deemed to be of greater importance. However, inclusion of new issues could have the advantage that more OECD non-agricultural groups would take part in the round which, depending on the issue, could counter-balance forces favouring agricultural (and other sectoral) protection. As well, better rules on some of those new issues would reduce the risk of farm trade measures being replaced or made ineffective by domestic agricultural measures and technical barriers to trade that may be almost as trade-distorting– a risk that has grown considerably in the past year or so.

Such issues as competition policy and investment policy are as relevant for agriculture as for other groups. However, since they may not be included in the millennium round, and their implications for agriculture are in any case discussed well elsewhere (e.g., Tangermann and Josling 1999), attention in the rest of this section is focused on two emerging issues that very directly affect agriculture. They are the issues surrounding (a) technical standards, including SPS and food safety in the wake of the new biotechnologies, and (b) agriculture's so-called multi-functionality.

9.6.6 Technical Standards, Including SPS and Food Safety Measures

The inability of the Standards Code that came out of the Tokyo Round of the 1970s to adequately address sanitary and phytosanitary (SPS) issues, plus the desire to reduce the risk of re-instrumentation of agricultural support to SPS measures in response to the reforms committed to under the URAA, gave birth to the SPS Agreement during the UR. That agreement defined new criteria that had to be met if a country chose to impose regulations more onerous than those agreed in international standards-setting bodies. It, together with the UR's strengthening of the dispute settlement procedures at the WTO, was bound to raise the profile of SPS matters. That profile has been raised even more dramatically, especially in Europe, with the emergence of several food safety issues: 'mad-cow' disease, beef hormones, and transgenic food products or genetically modified organisms (GMOs).

Agricultural-exporting countries have a complex set of interests in these developments, including in maintaining and increasing access to other members' markets that are protected by SPS

measures. Numerous countries use very blunt quarantine instruments that excessively restrict imports well beyond what is necessary for protecting the health of their plants and animals, or their citizens in the case of food safety concerns. Without some form of notification requirement on WTO members that forces members to disclose the degree to which trade is restricted by such measures, reform in this area is likely to be confined to the very small proportion of those cases that are brought before the WTO's dispute settlement body (DSB). The resource requirements of such legal proceedings ensures the pace of reform by that means alone would be glacial, and would be skewed towards concerns of those richer WTO members able to afford to bring such cases to the DSB.

Domestic consumers are unlikely to be a source of pressure for liberalisation of quarantine barriers. This is not just for the usual reasons (poor information, high costs of collective action because of free riding, etc.), but also because citizens are often concerned about possible risks to the natural environment from importing exotic diseases and/or about the safety of imported food. And their demands for higher quality, safer food and for environmental protection are going to continue to rise with their per capita incomes.

However, perceptions about the safety of different foods and food production and processing methods, and conformity assessment procedures, differ greatly—even among countries with similar income levels. The WTO Dispute Settlement case brought by the US/Canada against the EU over its ban on imports of beef that had been produced with the help of growth hormones, shows that standards differences across countries are difficult to resolve even with a great deal of scientific advice. So too does the controversy over the banning of intra-EU beef trade over the 'mad-cow' disease scare. How much more, then, are trade disputes likely to arise over issues in which the scientific evidence is far less complete?

In the case of policy dialogues surrounding GMOs, far more heat than light has been generated so far. Attempts to promote science-based assessment of the risks involved have met with extreme versions of the precautionary principle, manifest in the form of complete bans on their production, importation and/or sale in numerous markets. Proposed solutions such as segregating GMO products and identifying them via labels on affected food items have been rejected by many consumer groups; they have also been resisted by the major producing countries in North and Latin America, who claim that 'like' products are involved and so no costly GMO labelling is warranted. The fact that the production of some GMO products is less damaging to the environment than is the production of traditional farm products has done little to dissuade civil society groups of their opposition to GMOs.

While such agricultural issues will arise increasingly under the Uruguay Round's SPS and Technical Barriers to Trade (TBT) agreements, they will also arise in other, non-agricultural-related contexts. As with state-trading, subsidies and competition policies, there is a strong case for developing common disciplines for all types of products, whether agricultural or not. In the case of TBT, there is nothing special about food as compared with, say, dangerous chemicals or heavy metals involved in the production or disposal of manufactured goods. A key advantage of having a common set of rules for risk

analysis and risk management is that inconsistencies in current arrangements, and the problems that will keep causing for dispute settlement, would be reduced.

9.6.7 Agriculture's So-Called Multi-functionality[8]

Considerable attention has been given in some OECD countries to the term 'non-trade concerns', which appears in Article 20(c) of the URAA. WTO members agreed that, in negotiating the continuation of the agricultural policy reform process after 1999, 'non-trade concerns' would be taken into account. While not spelt out in any detail, the preamble to the URAA defines those concerns to include security of food supplies and protection of the environment. A third concern is the viability of rural areas. The governments discussing these three items are characterising them as positive externalities and in some cases 'public goods' that are jointly produced along with food and fibre. Hence their use of the word 'multifunctionality' to describe these features of agricultural production.

These 'non-trade concerns' are not really new, but they are being packaged a little differently than in the past. Despite their 'non-trade' adjective, these concerns need to be dealt with in the WTO because they certainly can affect trade. Ideally they should be handled in the same way for all sectors (for example, under an expanded Agreement on Subsidies and Countervailing Measures), but until that is done they cannot be ignored in the up-coming agricultural negotiations.

For a case to be made that farming should receive more assistance from government than other sectors, it needs to be demonstrated that agricultural production not only is a *net* contributor in terms of externalities and public goods, but also is *more* of a net contributor than other sectors and especially the sectors that would expand if agricultural supports were to shrink. Demonstrating that is an almost impossible task, given the difficulties in obtaining estimates of society's ever-changing (a) evaluation of the myriad externalities and public goods generated by the economy's various sectors and (b) marginal costs of their provision. Hence the practice of intervening only in the most obvious situations requiring a correction.

Even if a clear case could be made for an intervention however, the appropriate measure is unlikely to be import restrictions or output price supports for a broad range of marketed farm commodities. Rather, the most appropriate response will more likely be a finely tuned measure to encourage the optimal extra amount of just the public-good or external aspect that has been under-supplied (or would be under laissez faire).

The policy task thus involves several steps: to get a sense of *society's willingness to pay* for the non-marketable by-product; to determine the *most efficient policy instrument* for encouraging farmers or others to supply that by-product for society; and then to determine the *optimal level of encouragement* so as to equate the marginal social benefit with the marginal social cost of that intervention.

With respect to food security, the most efficient policy instrument for boosting it above that provided under free markets is probably subsidies to stockholding of staple foods. That is already allowed for in Annex 2 of the URAA. Import restrictions to boost self

[8] This sub-section draws on Anderson (1998).

sufficiency, far from helping, may even diminish food security for vulnerable groups struggling to pay the high price of protected domestic food. And once bound tariffs are lowered to applied rates, greater stability in international food markets will prevail which will boost food security in all parts of the world.

Environmental protection has many facets and so requires a range of policy instruments. Reducing farm output price supports, as under the URAA, probably provides the single biggest potential contribution to the rural environment in agricultural-protectionist OECD countries, through lowering the level and intensity of farm production. While those supports are still in the process of being phased down, there should be additional taxes, charges or other regulations on pollution from farm inputs to offset the extra damage caused by them via output price supports. Such input taxes are of course permitted under WTO rules. In so far as agriculture provides positive externalities or public goods, appropriate policies are de-coupled payments for their specific provision to the optimal level in each location (assuming that optimal level is above the level that would otherwise prevail, bearing in mind the marginal social cost of further provision). Since most of those goods can be provided independently of farming per se, de-coupling is not only possible but also desirable, because non-farmers may be able to provide some of those goods or services at lower cost than farmers. Some provision for such payments is made both in the URAA and in the WTO's Agreement on Subsidies and Countervailing Measures.

Ensuring the viability of rural areas also is a laudable goal, but again the blunt instrument of general farm product price supports is far from optimal, particularly since agriculture is not even the dominant source of income in many (particularly near-urban) rural areas. Far more appropriate are WTO-consistent targeted adjustment assistance (including re-training) packages and perhaps subsidies to essential services that would otherwise be withdrawn from strategic left-behind remote areas.

In short, WTO rules and URAA reform commitments are not at all incompatible with the adoption of efficient measures for addressing the so-called 'non-trade' concerns discussed above. There is plenty of synergy and no need for trade-offs between domestic policy objectives and agricultural protection reform objectives as embodied in WTO rules. However, it needs to be recognised that some re-instrumentation of farm support measures is inevitable and is already evident as traditional measures (tariffs, export subsidies and domestic price supports) are phased down. Getting a particular measure included on the list of 'green box' measures, in order for it to be excluded when calculating the Aggregate Measure of Support, will be a much sought-after prize by agricultural protectionist forces during the next round of WTO negotiations. Careful scrutiny of the grounds for such inclusions is likely to be a high payoff activity for Australian trade negotiators in the period ahead.

Both exporting and import-competing countries should welcome the call for closer scrutiny of instruments used for addressing 'non-trade' concerns. This is partly because once those superior instruments are identified and adopted at closer to optimal levels, greater food security and environmental protection will result. But perhaps equally importantly, the current blunt instruments of support to farm product prices could then be dismantled more rapidly, as there would be even less

reason to maintain them. Consumers, taxpayers and exporters of non-farm products in the countries protecting farmers, together with the world's more-efficient farmers, could then join with those anxious to conserve global resources in celebrating this joint improvement in the management of our economy and environment.

9.7 Implications for Australia

For a long time Australia was a somewhat reluctant participant in GATT matters: the lack of success of its trade negotiators in getting agricultural protection on the negotiations agenda prior to the Uruguay Round caused the government to offer little in the form of market opening prior to the 1980s. That changed dramatically with agriculture's inclusion on the agenda of the Uruguay Round.

However, it is not only agricultural trade reform that is of interest to Australia's economy. This is so for two reasons. One is that rural products make up barely one-fifth of Australia's exports of goods and services these days, compared with two-fifths in the early 1980s, two-thirds in the early 1960s, and five-sixths in the early 1950s. The other is that more than 60 per cent of Australia's exports go to East Asia (up from barely 20 per cent prior to the mid-1950s), so growth in those exports is very much dependent on a return to rapid economic growth in Asia. Hence Australia has a strong interest in the implementation of the Uruguay Round's agreement on textiles and clothing: directly, because it could expand exports of Australian wool to Asia; and indirectly, because freer textile trade means faster economic growth and structural change in densely populated Asia and hence faster growth in their imports of many other products from natural resource-rich economies. Australia, being geographically on the periphery, also has a strong interest in open trade in skill-intensive products whose production location need not matter, such as electronic commerce. And being in the East Asian time zone gives it a potential comparative advantage in financial services. Hence keeping trade in services open and liberalising such markets more in the next WTO round will help to further the transformation of the Australian economy into a high-tech service provider.

As a small economy Australia benefits greatly from the reduced uncertainty that a rules-based trading system provides, even if that system took until recently to begin prising open agricultural markets. Australia is now considered a very responsible WTO member, particularly with the substantial amount of unilateral economic reform it has undertaken in the past 15 or so years. To keep building on that reputation, and the disproportionately large influence that allows Australia to have in shaping the WTO's future path, the remaining vestiges of our protectionist past need to be removed. The most glaring areas are restrictions on imports of motor vehicles and parts and of course textiles and clothing, whose reforms are to be on hold during 2000-2004. But even in the agriculture area Australia may have to polish its image. Its quarantine policies are being perceived as excessively protectionist (James and Anderson 1998, 1999), and the Wheat Board as a single-desk exporter is also being targeted. Even its food quality standards (e.g., for wine) could be subject to challenge, which is why ANZFA is in the process of replacing Australia's Food Standards Code and the comparable New Zealand code with a minimalist joint Australia New Zealand Food Standards Code. If Australia wishes to again take a leading

role in the next round of WTO negotiations, accelerating the reforms it has begun in those areas also would be wise.

The WTOs 'millennium' round thus offers probably the best prospects ever for agricultural-exporting countries in general – and their rural communities in particular - to secure growth-enhancing reforms abroad. Traditional agricultural market access liberalisation should be the key priority issue in the next WTO round of multilateral trade negotiations, given the enormous potential for global welfare gains from reducing agricultural protection.

This next round will, however, be conducted in an environment in which globalisation forces (including ever-faster development and international transfers of information, ideas, capital, skills and new technologies) will, by having ever-stronger impacts on domestic markets, simultaneously trigger insulationist policy reactions. For example, further reductions in traditional measures of farm protection will meet significant resistance in numerous OECD countries, as farm groups join with food safety and environmental groups to argue for new forms of agricultural protection. In these circumstances the mercantilist nature of trade negotiations may require that the agenda of the next WTO round include not only other sectors but also some "new trade agenda" items such as investment and competition policies, so as to provide the potential for beneficial issue linkages and tradeoffs.

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