

SORTING OUT THE SPAGHETTI*

ON REDUCING THE DAMAGE CAUSED BY THE PROLIFERATION OF DISCRIMINATORY REGIONAL FREE TRADE AREAS

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ABSTRACT As a result of the difficulties in negotiating the liberalisation of trade, globally, countries seek liberalisation amongst smaller groups. We describe open regionalism as one such attempt to do this, and show why it failed as a strategy. The formation of discriminatory regional free trade areas (FTA) is another response to this problem. This paper points out what is wrong with this response – that it distorts trade patterns and thereby sets up an unpleasant prisoner’s dilemma – and suggests some ways forward. We propose the formation of Open Trade Areas (OTAs) and the establishment of a Trade Transparency Commission in each country that is participating in an OTA. We also suggest global regulation of trade diversions caused by all FTAs, whether OTAs or not.

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1 The Problem

Everyone wants to fix the WTO. But the negotiation of WTO rounds has become less effective and more costly. There are now a very large number of participants, and there are deep conflicts about objectives amongst these participants. Furthermore the institutional weakness of the WTO makes it very difficult to bring about effective bargaining between these many players. The failure of the WTO negotiations at Seattle in 1999, and then again at Cancun, and the only-partial reconstruction of these negotiations at Hong Kong, should not have come as a surprise. And we have not yet taken take anything like as long to get here as it took to finally complete the Uruguay round.

Alongside this global-system failure, countries are tempted to seek liberalisation amongst smaller groups. “Open regionalism” was one such response, in the nineteen nineties, which is, sadly, now a dead end. “Open regionalism” sought to encourage unilateral liberalisation amongst groups of countries, without discrimination against outsiders. The current proliferation of a “spaghetti” of discriminatory free trade areas is an ill-thought-out early-twenty-first century response, and it is deeply disturbing. This paper aims to point out what is wrong with this response – that it distorts trade patterns and thereby sets up an unpleasant prisoner’s dilemma. We suggest some ways out of the resulting difficulties.

2 Open Regionalism

2.1 The Advantages of Simultaneous Liberalisations

Of course, one possible response to the difficulty of fixing the WTO is unilateral liberalisation. This has been richly rewarding to those economies which have embarked upon it, as economic theory suggests that it should be. But there are domestic political difficulties¹ in the face of such liberalisation, and in the absence of clear-sighted and strong leadership these difficulties are decisive.

¹ These include (i) adjustment costs in responding to trade liberalisation, even if the eventual outcome is a potential Pareto improvement; (ii) distributional objections to liberalization (Stolper-Samuelson, specific factors, etc, etc.); (iii) the valid infant-industry

It is widely recognised that the major gains from such unilateral trade liberalisation come from the effects of liberalization *within* the domestic economy, in particular from the exposure of the domestic economy to foreign competition, in addition from the well understood benefits from more efficient resources allocation. Nevertheless, there are advantages to a country in helping it to overcome the obstacles to domestic liberalisation if it liberalises at the same time as others liberalise.

First, there is the optimum tariff argument. We must say at the beginning that the main strength of this argument is its amenability to mathematical exposition, which gives it a privileged place in economic theory. For most countries at most times, the real economic effects of deterioration in terms of trade as a result of domestic trade liberalisation are small—usually insignificant—compared with the resource allocation and competitive gains from liberalisation. In practice, such terms of trade effects rarely seem to motivate trade policy decisions: in the few cases where terms of trade advantages from restricting trade would seem to be large—United States agriculture and Chinese manufactures, for example—the policy response has been to subsidise the export or production of commodities whose international price would fall with export expansion. Be that as it may, the argument has been given legitimacy by theory and has to be taken seriously. If a country liberalises by itself then it will suffer from the switching of the demands of its own residents away from its own goods and towards imports. That will, *ceteris paribus*, cause its terms of trade to deteriorate. By contrast, if a group of foreign countries liberalises at the same time as the home country liberalises, then there will be an increase in the demand for the home country's exports, raising the prices of those exports. This will, *ceteris paribus*, counteract the deterioration in the terms of trade which its own liberalisation causes. That will increase its real per capita income, compared with what would have happened otherwise. In sum - by liberalising at the same time as a group of other countries a country can seek to defend itself from the terms-of-trade difficulties, and real income losses, which its own liberalisation might cause.

arguments for protection; (iv) and risk-management issues – the need to accompany a move to openness with better social safety-nets (see Kanbur and Vines, 2000)..

Second, and we think more substantially important, the prospect and better still the contemporary reality of liberalization by others abroad—especially if they are important regional trading partners-- can be used as a bargaining chip by trade-policy officials, and politicians, as they embark on the task of persuading protectionists at home to allow liberalisation. That is to say, participation in international discussions, and negotiations, about trade liberalization can be used as an argument at home in support of liberalisation. This was a powerful influence as virtually all Western Pacific economies embarked on far-reaching unilateral liberalisation in the high tide of internationally-oriented growth in East Asia, from the mid-eighties to the eve of the Asian financial crisis in 1997.

These two ideas, particularly the second, lay behind the strategy of “Open Regionalism”, from the mid 1980s to the mid of the 1990s, in the Asia Pacific Region of the world. (See Garnaut, 1996; Drysdale, House and Vines, 1998.)

2.2 Open Regionalism as a Strategy

Open Regionalism was initiated as a strategy by Bob Hawke, then Prime Minister of Australia, in a speech in Bangkok in 1983, and used explicitly to launch the idea of Asia Pacific Economic Cooperation (APEC) in a speech in Seoul in 1989. His proposal to move in this way was a response to the difficulties which were then being experienced in launching and then making progress in what had become by 1989 the Uruguay Round of trade negotiations, in much the same way as difficulties are currently tying up the Doha round. (That round did not reach completion until 1993.) Australia’s initiative – quickly followed by moves by other countries in the Asia Pacific region - led to the creation of the APEC (Asia Pacific Economic Cooperation) process. This embodied a new approach to trade policy amongst a growing grouping of countries in that part of the world.

In the Asia-Pacific, liberalising, “open region”, a group of countries sought to liberalise trade collectively. That is, they sought to reduce restrictions on *all* imports, on an MFN basis, whether or not those imports came from within the region or not. The process is best described as "concerted unilateral liberalisation" – which became the term used to describe what was happening within APEC.

It is true that there are internal collective-action difficulties in the face of such liberalisation. In such a process, there is no *explicit* guarantee that demand for a country's exports will increase, at the same time as the country shifts its own domestic demand towards imports. This is because the trade liberalisations are all happening separately and are only loosely coordinated. There is also in this process no *explicit* quid pro quo which officials in a liberalising country can "offer up" to domestic protectionist interests, in seeking to convince those interests that liberalisation is desirable - or at least acceptable. Nevertheless, if a large enough group of countries liberalise together, in a large enough "open region", then increased demand for a country's exports, coming from the liberalisation in other countries, is likely to compensate the country for the switching of domestic demand away from home goods and towards imports which happens as the country itself liberalises. And it will be possible to persuade domestic protectionists that this is likely to happen. During the widespread Western Pacific liberalisations from the mid-1980s, the sheer facts of trade expansion throughout the region provided powerful arguments of this kind.

In the decade prior to the Asian financial crisis, such "concerted unilateral liberalisation" created a momentum of liberalisation right across the Western Pacific each of China, Thailand, Indonesia, the Philippines, Malaysia, Australia and New Zealand embarked on major unilateral liberalisations, far beyond anything that was done in the Uruguay Round. Northeast Asian countries - Japan, Korea and Taiwan - implemented substantial unilateral liberalisations in manufactures, but needed the Uruguay Round for the largest (but not all) of their steps in agriculture. Hong Kong and Singapore did not do very much during this period, but these countries were already the most free trade places on earth at the beginning of the period.

The culminating moment of the APEC push in this direction was the Bogor Declaration of 1995, in which the member countries of the APEC process pledged to collectively seek free trade amongst themselves by 2010 (for its developed country members) and 2020 (for developing countries).

Nevertheless the meeting in Bogor was also a case of (as the Chinese say), "same bed, different dreams".

Most Western Pacific countries at the Bogor meeting believed that what had been agreed upon was an open-regionalism process of trade liberalisation, along the lines of that described above. In subsequent APEC meetings in 1996 (in Osaka and Manila, 1996) it was agreed that moving towards an FTA, with discrimination against outsiders, was *not* what APEC would do, and that the way forward really was “open regionalism”. (See Garnaut, 1996).

But those at the Bogor meeting from North America did not share this vision. Led by Fred Berstgen, they had in mind a plan for a conventional FTA. The US and its North American neighbours thus began to set out on a path of accelerated interest in bilateral discriminatory arrangements. This was – after all - the time that NAFTA was being consolidated.

It is worth setting out the reasons for this difference of view.

2.3 The undermining of Open Regionalism by the US

First, already under the influence of the creation of NAFTA, many from the US held the view that bloc formation really was important as a way of leveraging trade liberalisation in foreign countries; they were keen to encourage others to join them in benefiting from this, both because it “would be good for them”, and also to force the opening of foreign markets to American goods in a way not possible in the unstructured, and MFN, process of open regionalism. At the same time they tended to discount the trade diversion to which bloc formation would lead.²

Second, the strategy of open regionalism is vulnerable to a free rider problem.³ Countries outside the liberalising group get access to the markets of liberalising

² We are grateful to Ann Krueger for insisting to us, in discussion, that this view was part of what was driving thinking about this in the US at the time, and that it was a view held by William Brock, the US Trade Representative from 1981 to 1985. We take what Anne Krueger has said to us as evidence of her willingness to attribute good will to those on the other side of a discussion from her. She was already sceptical about benefit of FTAs, describing some of the arguments presented in this paper in her own early paper on rules of origin (Krishna and Krueger, 1995). At the meeting in Manchester at which this paper was initially presented, she described to those present how the caution about FTAs, expressed in that paper of hers, was ridiculed in the US academic and policy community at the time.

³ See Sinclair and Vines (2006)

countries, without offering any liberalisation themselves in return. For a country outside a process of open regionalism, staying outside may be the best thing that it can do - from the point of view of narrow political calculation (as distinct from the real economic interests of the country.) It should simply hold out – rather than joining the countries in the liberalising region and liberalising itself.

The US players, particular Bergsten, were deeply aware of this free-rider problem. In Bergsten (1997), a paper published soon after the Bogor meeting, a theory of “Open Regionalism” is presented, which is not “open” at all. “Why should we collaborate in a process of market opening in Asia which gives the *French* extra access to our markets?” Bergsten, and others in the US policy-making process in the mid 1990s, whilst claiming to liberalise and to promote “free trade”, also aimed to remain sufficiently protectionist that they would have something to use “against the French” (we speak metaphorically) if “the French” did not somehow offer something in return. Indeed one can see the reasons for this position. The US, with its hegemonic power, and its unequalled influence, through the exercise of this power on the policies of others, may have had legitimate concern that its own participation in “concerted unilateral liberalization” with one set of countries would reduce its influence in seeking reductions in protection in others.

For some years before and after the Bogor meeting there was a degree of compromise between the two positions. As already noted, concerted unilateral liberalisation made considerable progress within the western Pacific until 1997. Nevertheless, countries which were unilaterally liberalising chose to do so mainly in industries in which the increase in imports that resulted from the liberalisation would be disproportionately concentrated on exports from countries within the region. This made it possible to argue – on the one hand - that the region really was practicing “open regionalism”, but that – on the other hand - that any final move free trade in 2010, or 2020, would be contingent on moves towards greater openness in the rest of the world.

One of us, in a paper written more than ten years ago, a year *before* the Bogor conference (Vines, 1994) provided an extended discussion of the difficulties involved in this compromise and the need there would be, in the end to make a choice. Given the importance of the US in the region, it was always the intention of the key players in the region to involve the US in any region-wide trade-

liberalisation strategy. And in the era of greater doubt about economic openness, in the immediate aftermath of the Asian financial crisis, the position of United States, and the example which it gave, became more influential. This eventually meant that the US had the power to determine the future of open regionalism as a regional strategy.

The US moved decisively to kill this strategy at the turn of the century.

3 The Move to FTAs – led by the US

The *need* to do something of course about supra-national trade liberalisation became even more urgent with the failure of the WTO summit at Seattle in 1999. And the *wish* to do something about this, in a way which the US would *lead*, was propelled by the election of a new Administration in the US in 2000. Immediately after the election, the US moved decisively away from APEC, in the direction of FTA-creation. The consequence was immediate. Since late 2000, the proliferation of conventional, discriminatory “Free Trade Areas” has been the main trade policy game throughout the Asia Pacific region, led by the US.

3.1 The FTA Move and the Imposition of Free Riding

Since 2001 the new US administration has set out itself to create bilateral and regional, “free trade areas” with partner countries (FTAs); i.e. trade blocs which are discriminatory. In such blocs, trade is liberalised within the bloc, but trade is not liberalised with those outside. Of course the US had experience of going this way in the face of difficulties in the earlier Uruguay round of trade negotiations. NAFTA was created with Canada and Mexico, at the same time as the APEC process was created in Asia, in response to those difficulties.⁴ Moves in this direction in the past five years have been important. A discriminatory FTA was established early-on between the US and Singapore. And such an FTA was also signed last year between the US and Australia. That country has now abandoned its enthusiasm for “open regionalism”, something which was important for the

⁴ NATFA was also, importantly, a response to the problem of how to stem the flow of Mexican immigrants into the US – it enabled people to stay in Mexico but enabled Mexican exports produced by them to more easily enter the US market.

energy underlying APEC long beyond its initial foundation and well into the middle 1990s.

One can also describe such moves as imposing free riding on the rest of the world. This is because, as is well understood, the creation of FTAs leads to trade diversion as well as trade creation. One might imagine the US and its partners saying the following.

“Of course a WTO deal is important. But such deals are difficult to bring about. And meanwhile we will fix something for ourselves, pursuing trade liberalisation with our friends through the formation of FTAs with these friends, in search of the ‘trade creation’ which such an FTA can bring. Of course, such an approach does lead to trade diversion, but, well, too bad, this is the best that we can do in the circumstances.”

It is widely believed that, when *one* such bloc is formed, the effects *on the welfare of the members of the bloc*, of the creation of that bloc *alone* are positive. Thus it is widely believed that, for the participants, the effects on welfare of the trade creation to which NAFTA has led has dominated the effects on welfare of the trade diversion to which it has also led. This view largely comes, we believe, from the experience of the European Union, in which trade creation has been very substantial. But the EU has undoubtedly also caused trade diversion. And there are other examples of such diversion, such as the fact that imports of textiles from Mexico have displaced those from China into the US, and that Canada’s trade with the Asian countries has grown much less rapidly than it might have been expected to grow, and certainly much less rapidly than Australia’s trade with the Asian region has grown. Nevertheless the US view has been that – for both itself and other members of the blocs that it creates - the creation of these blocs is a good step forward.

The US has sought to make a further *systemic* argument – that the creation of such blocs is a useful stepping stone towards more trade liberalisation at the global level. Famously, the Special Trade Representative in the first Bush administration, Bob Zoellick, argued that such small-group FTAs provide an “alternative route” to more liberal global trade to the one provided by the

complex unsatisfactory global negotiations at the WTO.⁵ The formation of such blocs appears to offer a path to liberalisation with a much shorter timetable. Potential partners with the US, for example Australia, have seen this apparently speedier route to trade creation as attractive. More than this, it appears to the US that progress on the “Singapore issues” (in particular intellectual property, investment, and government procurement) can be reached faster in such bilateral negotiations than it could globally. (See below for a discussion of aspects of this issue in the case of the US-Australia FTA.) And, finally, it has been argued that such preferential moves help to create, globally, a process of “competitive liberalisation”, in which countries seek to emulate each other’s pursuit of the benefits of liberalisation. Overall, there has been much pressure from the US for selected countries to form FTAs with the US, coupled with assertions by the US that such moves could act as “stepping stones” to globally freer trade.

3.2 Difficulties with this Kind of Free Riding

In fact, this free riding has turned out to be quite difficult to organise – “the best that we can do with our friends in the circumstances” has turned out to be not very good. There is an important analytical reason for this: when one is playing the game of non-unilateral trade liberalisation, all free riding must be done *in teams* of at least two players. In the face of *differences of objectives amongst potential free riders*, free riding, of a kind which is Pareto-improving for all of the free riders, turns out to be difficult to arrange. These are four aspects to this.

First, as already noted, bilateral FTAs in their nature contain welfare-destroying trade diversion as well as welfare-enhancing trade creation. The political economy of the policy-making process tends to push these blocs towards trade diversion and away from trade creation. This is because the trade creation brought about by an FTAs has its costs for the producers for the home market, the demand for whose products is reduced by the increase in imports which happens when the bloc is created; the political economy of the policy-making process tends to emphasise these costs. As a result, those seeking to establish FTAs tend to avoid establishing blocs with partners that would lead to high levels of trade creation. An example is the avoidance by Japan of a Japan-US

⁵ Anne Krueger has saying to us that she believes that this belief has been part of the views of those in the US favour of FTAs, since long before the election in 2000.

FTA, or a Japan-Australia FTA, because of the difficulties to do with agriculture. In addition, they also seek to make exceptions for sectors which would involve high levels of trade creation. An example of this is the complete exclusion of sugar and the gradualism to the point of imperceptibility in other major agricultural products in the US-Australia FTA, and in US indications of acceptable limits in any FTA with Brazil. None of the established or mooted FTAs have considered reductions in agricultural subsidies as a part of the agreement. Also some market opening decisions are harder to take in a bilateral context than in a multilateral one. Thus difficulties over access to American agricultural markets in the setting up of the Australia-US FTA might have been easier to deal with if, say, European pressure and reciprocal offers could have been brought to bear during the negotiations. By contrast with all of this, there is no domestic lobby whose role in the political economy of the policy-making process is to emphasise the costs to the members of the bloc coming from trade diversion. Thus, on balance, the political process pushes bloc creation in the direction of trade diversion.

Second, the creation of small-group FTAs in fact mainly has negative affects on the political-economy for subsequent multilateral liberalisation. This happens for an important political economy reason. Those benefiting from the trade diversion will of course be threatened by further multilateral trade liberalisation – precisely because they are inefficient suppliers of these goods compared with the most efficient suppliers in the rest of the world. They will thus resist the erosion of their regional preferences which would happen with multilateral WTO liberalisation. It has been suggested that Mexico may have been influenced by such considerations in Cancun. Those developing countries with preferences in Europe, particularly countries in Africa, have always sought to resist the multilateral liberalisation of European agricultural trade. Fiji and other South Pacific countries have asked for compensation for the effects of unilateral liberalization on their margins of preference in the Australian market.

Third, the rules of origin that are required to protect the preferential privileges in an FTA are themselves a source of distortion and economic loss. For this reason, even a complete matrix of bilateral FTAs, with wires of spaghetti joining every country with every potential trading partner, would not produce welfare effects that were in any way comparable to multilateral free trade. Transactions costs in

international trade and investment would be very much higher, and trade in final goods and intermediate goods would be distorted into sub-optimal patterns by arbitrary incentives created by these rules of origin. Of course, industries supported by rules of origin add to the pressures against further liberalisation described in the previous paragraph.

Finally, it appears that in the US today views access to the US market as a benefit which should be granted only to supporters of US foreign policy on whatever are the big issues of the times. Such an approach politicises moves towards further trade liberalization, and introduces a risk that political and cultural divisions will be exacerbated and entrenched.⁶

3.4 The Australian Example

The Australian case makes clear how hard it is for countries forming an FTA with the US to get a good deal. There are three points to make about that FTA

(i) Some primary commodity sectors have been left out because of protectionist pressure in the US. Australia was simply told “no sugar exemption, no deal”, and the liberalisation of US imports of beef from Australia has been stretched over eighteen years after the signing of the deal. The limited agricultural liberalisation is subject to reversal if trade grows more rapidly than tightly defined maximum limits.

(ii) It has become apparent that what is most important for the US in this deal is not really “more and freer trade” but instead the inflicting on Australia - and through this example eventually on others - of an economically indefensible extension of the protection of US monopoly power over intellectual property, particularly in the drugs, film and publishing industries. There is already significant upward pressure on price of drugs in Australia, as a result of the agreement. It has been said to one of us (Vines) that the most important thing for the US about the Australian deal was to give it practice in extracting monopoly rents on drugs, so that it could get ready for trying to do this in Canada.

⁶ It is possible to read Kissinger (2001) this way.

(iii) As if that is not enough, the rules of origin in the US-Australia deal have been written in a way which in practice discriminates against Australia. Take cars. The very inefficient car industry in Australia of 20 years ago (too many producers serving a small protected market very inefficiently) has recently been transformed into a quite efficient export processing zone, taking a lot of components from abroad and turning them into cars in a moderately high tech way. Since Australia is small economy, a quite high proportion, call it α , of the components for these Australian-made cars must necessarily come from abroad. The rules of origin on cars in the Australia-US FTA deal have been written so that to get into US tariff free, cars from Australia must have had a proportion $(1 - \alpha + \epsilon)$ of their value added in Australia or the US. Thus car production in Australia cannot benefit from the creation of the FTA. The rules-of-origin document associated with this agreement is immensely long and complex, modelled on the NAFTA rules of origin, which themselves emerged from the protectionist processes of US politics. A sceptical reader might wonder whether it is so longer precisely so as to choose the appropriate $(1 - \alpha + \epsilon)$ for each industry, in the way described above. Of course since the US is large, many more components of US manufactures are themselves produced in the US. So Australia cannot play this game in reverse. This is one reason why political enthusiasts in Australia for the US-FTA prior to its coming into effect (but not the practitioners of economic analysis) are surprised to find that Australian exports to the US have not increased at all. In fact they have shrunk, in *nominal* terms, since the commencement of the FTA, at a time of considerable growth in US imports from the world as a whole.

3.5 Difficulties for the US

For the US, “pursuing trade liberalisation with our friends”, has thus turned out to be rather difficult. This is partly because the US negotiates in the way it has negotiated when forming the US-Australia FTA. That is, protectionist groups in the US have made it almost impossible for the US to offer enough to make anyone want to join an FTA with the US. This seems to be why the Free-Trade-in-the-Americas initiative has largely collapsed.

4 Systemic Risks – FTA Creation as a Prisoners’ Dilemma Game

We have just reviewed the difficulties facing the US, and its friends, in

organising free riding so that it is beneficial to them, when, on their own, they try to form FTAs. But these are as of nothing compared with the systemic problems which arise when others start to copy the behaviour of the US.

The advocacy of FTAs, and actions, by the current US administration since early 2001 has generated just such a response in East Asia. That pressure has reinforced tendencies which had already been set in train in East Asia successively by the effects of trade diversion in NAFTA, by political incoherence in Southeast Asia following the financial crises of 1997-8, and by the failure of the Seattle Ministerial Meeting of the WTO in 1999. The outcome has been the transformation of East Asian policy attitudes. East Asia was – as described above – the region of the world which, in the 1990s was the region of the world most committed to even-handed multilateralism. Within a couple of years it has become the locus of the most intensive discussion of discriminatory arrangements. The failure at Cancun added momentum to this rush into FTAs in the East Asian region.

4.1 The Prisoner's Dilemma Argument

It is first of all worth thinking conceptually about what happens when not one, but many, regions of the world start promoting FTAs. It was Krugman (1991) who, we believe, first analysed what happens if all regions of the world seek to form blocs. This form of analysis enables us to go beyond the arguments in Section 3, which considered only the formation of a single bloc in one region of the world, holding the behaviour in all of the rest of the world constant. We now consider the systemic consequences of what happens when lots of regions do this.

Krugman set the whole story up as a bloc formation game. Famously Krugman obtained the result that welfare actually *falls* as the number of blocs falls. He showed that welfare kept on falling, as the number of blocs falls, all the way down to three blocs. This was eerily like the 3 bloc world of Europe, NAFTA, and APEC, that seemed to some to be forming as Krugman wrote. Some parameter choices of Krugman's model even suggested that welfare might be lowest when there were just two blocs left. This extreme result was very striking, since – of course – if those two blocs were turned into one there would at last be global free trade and the best outcome possible.

Krugman's result is important. It is worth presenting his argument in a little detail, since, famous though his result was, he never explained it properly and as a consequence his finding was extensively criticised. In our view this criticism is quite erroneous.

Krugman imagined a world in which initially there are many separate countries, say n , each with a positive Nash optimal tariff. These tariffs are not zero, because the n countries are assumed to produce differentiated goods. Some people have immediately argued that this assumption makes Krugman's model inappropriate, since most countries are so small that they do not have enough market power for their Nash optimal tariff to be much different from zero. But Krugman's argument is perfectly capable of being recast so that the initial positive Nash optimal tariffs arise not from such market power. They might arise instead for political economy reasons; because those determining trade policy set tariffs above zero because they wish to reward those producers who compete with imports.

Krugman describes a sequential game in which this n country world is first aggregated first into $n/2$ regions, each consisting of two countries, and then into $n/4$ regions each of 4 countries, and then into $n/8$ regions, each of 8 countries, etc, etc. Krugman's model is such that, at every stage of this bloc-formation game, all countries in any *individual* group of countries that is proposing to form a bloc will, as their own bloc is formed, (i) gain from trade creation and (ii) also experience costs from trade diversion. In his model it is the case that, for those considering forming the bloc, the effects from (i) dominate the costs from (ii), when considering the formation of their own bloc. By contrast the rest of the world would lose from the trade diversion, as the result of the formation of this one bloc. Krugman's very striking result is that, when all countries form such blocs simultaneously, it is the case that, for any one country, the effects of trade diversion imposed on it by the formation of all the other blocs *outweigh* the benefits of trade creation that it gets from the formation of its own bloc. The payoffs of this game, said Krugman, thus really do have a prisoner's dilemma structure. This is a world in which the Nash response of all players is to form blocs, so as to increase their welfare. (We have examined the real-world details of doing in section 3 of this paper.) But when they all play Nash and do this, then they will all end up worse off. But they will keep on doing it over and over

again, making the blocs bigger and bigger and fewer and fewer in number. But at each stage the Nash outcome is one in which they are worse off: welfare just keeps on falling as the number of blocs gets fewer and each bloc gets bigger.

Krugman initially presented his argument really badly. He said that the reason that he got the prisoner's dilemma outcome, which we have just described, in which the costs of trade diversion dominate the benefits of trade creation, is because he had supposed that as the blocs become bigger the monopoly power of the bloc in world markets increases and so its Nash optimal tariff rises. If countries really can do this then it is obvious why world welfare decreases – as the number of blocs becomes smaller they all become more protectionist. A complex model is not really needed to make this point. And everyone listening to Krugman pointed out that tariff rates are “bound” by the WTO. This prevents countries from raising them, as Krugman had suggested that they do. As result his paper was not taken seriously.

Krugman had another go at this argument in Krugman (1993). Very importantly, he showed that his prisoners dilemma result is true *even if the tariff rates of all players are bound at their initial starting rates*. This is a very important additional argument. The trouble with this second paper of Krugman's is that he nowhere explains why this argument should be true. But Krugman's claim is indeed correct. We owe our understanding of this fact to Peter Sinclair of Birmingham University. We do not believe that this argument has appeared anywhere in print.

The point is very simple. It is to do with the number of distortions in international trade. Consider the first stage in the bloc formation game. Before the formation of any blocs the consumers in each country buy the products which are produced at home free from tariffs, but they pay tariffs on imports from $n-1$ countries. This means that there are $n-1$ distortions, namely between the home good and all of the $n-1$ other goods.

After the formation of the two-country bloc two sorts of goods reach domestic consumers tariff-free, those produced at home and those produced in the partner country. Tariffs are now only paid on the imports of goods from $n-2$ countries. But, nevertheless, there are now $2(n-1)$ distortions, $n-2$ distortions between home goods and all the $n-2$ other goods, and also $n-2$ distortions between goods

produced in the partner country and all of the $n-2$ other goods. It is clear that when the bloc forms with four countries in it there are $4(n-3)$ distortions, which is a larger number.

The attractive structure of Krugman's argument is that everything is so symmetrical that after the formation of blocs there are no changes in the international terms of trade (because everyone is moving in the same manner in the creation of blocs). And, by assumption, tariff rates are not changing. Thus welfare depends only on the number of distortions: the larger the number of distortions, all at constant tariff rates, the lower the resulting level of welfare. And it is easy to see that this number of distortions goes on increasing, as blocs are formed, all the way until there are only two blocs left. This simple argument suggests that the level of welfare will go on falling, as the number of blocs falls, right down to two.

The *general* point to take from Krugman's two papers is that welfare can go on falling as the world consolidates into fewer bigger blocs, because as it does so the extent of interference with international trade will grow and grow. Krugman's model is too simple for us to be able to extract much more from it than this. But this in itself is a valuable thing to have used the model to say very clearly.

4.2 The Prisoners' Dilemma in the Real World

Many steps have already been taken down this route.⁷ A number of FTAs have already been formed with Western Pacific economies as members: Singapore-Japan; Singapore-New Zealand; Singapore-Australia; Singapore-United States; Australia-Thailand; Australia-US, and China-Hong Kong. None of these is of huge importance in itself, although each adds new layers of complexity to these countries' relations with each other and with third countries through the increase in transactions costs from rules of origin. More importantly, each adds credibility and momentum to the drift towards discriminatory trade in the Western Pacific and globally. At recent ASEAN heads of government meetings and ministerial meetings involving China, Japan, Korea, and India, announcements have been made that ASEAN would negotiate separate FTAs with each of these partners. While the ASEAN-China FTA was said to be still

⁷ See Gibbs and Wagle (2006) for a very thorough presentation of the relevant facts.

under negotiation, an “early harvest” of duty-free access for fruit and vegetables came into effect successively from October 1, 2003, and is now having large effects on agricultural trade in both directions. So much for the desideratum of comprehensiveness as a guiding principle in the setting up of discriminatory trading blocs.⁸ Negotiations are proceeding on Thai-US, Japan-Korea, Australia-China, New Zealand-China, from early 2006 Korea-United States, and several other bilateral FTAs. Following much talk and some action on single-country and ASEAN bilateral free trade agreements, discussion of an East Asian FTA has risen in profile and credibility. Evenett *et al* (2004) have argued that such moves can give rise to a self-reinforcing domino tendency. Once an FTA begins to form, firms within the region but outside the FTA seek competitive advantage from joining and lobby their government for this advantage.

Typically, the new FTAs breach WTO rules in one way or another. Generally there are excessively long transition periods, or exclusion of significant areas of potential trade, or -- in the case of the China-ASEAN “early harvest” -- the beginnings of trade discrimination in particular areas before there is a plan and a schedule for movement to free trade in substantially all items. In no case has this been seen as a reason for hesitation on entering the FTA. The long transition periods in the Australia-Thai and Australia-US FTAs are an example of the breach of WTO rules on account of its long transition periods.

So far as can be established from information on the public record, every one of the recently negotiated FTAs has different rules of origin from all other existing FTAs, and every one of the new FTAs still under negotiation is also to have different rules of origin from existing FTAs. Sometimes we cannot tell very much: for almost a year after the announcement that the Thai-Australia FTA was executed, no information on the rules of origin was publicly available through official channels.

These moves in the Asia Pacific region have followed, and to a significant extent have received impetus from, the enhanced priority of FTAs under the Bush-Zoellick approach to trade policy in the US from early 2001. Such moves are creating obvious and major systemic risks for the international trading regime, risks which are perhaps especially large for developing, moderately

⁸ This is a guiding principle of Article 24 of the old GATT, and of the relevant article of the WTO

sized and small economies. There are serious risks for all Asia Pacific economies. But there are also such risks for Europe, and, indeed for the US itself.

4.3 The response to this problem for the US

The response by the US, to this problem, which it has helped to cause, has been confused.

Until a few of years ago the US believed that it could simply see-off such moves by ASEAN, and by China, through direct heavy-handed diplomatic pressure. In discussions it became clear that US officials believed that discriminatory trading blocs, including ones which break WTO rules, are perfectly acceptable, providing only that they are blocs of which the US is a member. It is a good thing, if you are playing the prisoner's dilemma game, to force everyone else to play on the diagonal, whilst you play off diagonal. You can only do this if you are the global hegemon.

But 9-11 has seen off the ability of the US to conduct its trade policy in quite this way. The search for allies in the war on terror has significantly compromised its ability to use trade policy in such a selective way. In the face of what is now clear evidence that the US will not succeed in confining discriminatory blocs only to those which include the US, commentators like Fred Bergsten in the US are increasingly despairing about having let the cat out of the bag.

The problem is a classic one which afflicts all free riding situations. It is best to be against everyone else free riding. But if everyone does it, then the activity needs to be regulated. What are we to do?

The response of Bergsten (2005) is interesting. He proposes responding to the problem by creating an Asian-wide FTA, which would include the US. This is something which looks like a highly implausible outcome. But putting that problem to one side, it would avoid some of the difficulties described above, only by leading the world towards a two-bloc conflict between the US and Europe. Perhaps Bergsten thinks that the US would win such a battle against Europe. Indeed his later paper (Bergsten, 2005a) suggests that doing this might

promote a solution to the failed Doha round and lead the whole world towards a freer-trade outcome. This does not look plausible.

Some other suggestion seems necessary.

5 A New Global Response: creation of Open Trading Arrangements

We suggest that the problem described above can be remedied most effectively through the development of an Open Trading Arrangement (OTA). An OTA could be then be a framework in which all future discussions FTAs are built. We have thought about this most clearly with regard to East Asia. But the idea may have global significance.⁹

An OTA would be governed by Four Principles.

- (i) Membership of an OTA would be available to any country that agreed to meet the arrangement's rules.
- (ii) Each member of an OTA would agree to extend to its partners terms of market access at least as liberal in each sector as it had made available to any other country in a preferential trading agreement.
- (iii) Within an OTA, any new FTAs would embody the simplest and most liberal of the rules of origin amongst those who joined it. The ASEANFTA would be a good model, with its across-the-board requirement for 40 percent of value to be generated within the FTA . All members of OTA would accept value-added within any OTA member as regional value added for rules of origin purposes.
- (iv) In recognition of the reality that improved market access has little meaning if members apply subsidies for exports or production, all members would agree to constraints on trade-distorting subsidies.

⁹ This is the subject of a major piece of work by one of us, Garnaut, at the Australian National University. The following is a brief description of our proposals. See also Garnaut (2005).

The key conceptual ideas are Principles (i) and (ii). An OTA would be an FTA that anyone could join. It would not be exclusionary. That provision – taken on its own - would provoke an instant rush for membership. It is hard to see that principle, being, on its own, incentive compatible for those within the bloc. However this is importantly balanced by principle (ii). Any country seeking membership would have to give, to the existing members, terms of entry into its own market which were as liberal as it had given to any other existing trading partner. For example, Australia, which has a very liberal trading relationship with New Zealand, would need to give equivalently generous access to its own market to other FTA members.

It is possible to see an OTA developing over time in a valuable way. Each of the members would be encouraged to provide OTA partners with liberal market access. However, the first objective of an OTA would be to reduce the practice and the costs of trade discrimination. For this objective, ease of entry for new members is more important than liberalization at the point of entry – all a country would need to do to join a bloc would be to offer the existing members access to its markets at least as liberal as the access that it had already given to its own market to any other trading partner.

As a result of this, the entry of subsequent members would not be the subject of demanding case-by-case negotiations, because of Principle (i). Apart from acceptance of the OTA's rules of origin, the extension to other members of the most favoured preferential arrangements that it had offered to others, and the commitment to accept new members on these terms, each member would need only to offer market access to the extent necessary to meet the requirements of Article 24 of the GATT and Article 5 of the GATS.

How a move towards OTA-creation would work clearly needs further study. An important question has been posed to us in discussion by Andrew Charlton and Joe Stiglitz. This concerns the extent to which the asymmetries noted above, which would make it difficult for a country which had already made liberal concessions to join an OTA, would come to block the formation of such OTAs. As already noted, Australia, which has already has a very liberal trading relationship with New Zealand, would find the requirement that it give equivalently generous access to its own market to other potential FTA members

a demanding one. It is important to know whether this kind of difficulty would inhibit the formation of OTAs.¹⁰

It is important, too, to recognise that an OTA could not be expected to deal with the problems of agriculture. In practice and in general, bilateral FTAs have been unproductive as vehicles for liberalisation of agriculture. The major challenges of global agricultural protection lie in three different regions of the world: in Northeast Asia, in the European Union and in the United States. These can only be addressed in multilateral negotiations, under the auspices of the WTO.

5.2 Further Strengthening of OTAs

It would be possible to introduce two other elements into the OTA that would generate some tendency for liberalisation over time.

First, each member could agree to establish an institution for transparent, independent analysis of the effects of trade policy choices, along the lines of Australia's Productivity Commission. This would not in itself involve new trade liberalisation commitments. The Commission's function would be to raise awareness within each member country of the national rewards from reducing its own , domestic barriers.

Second, each member would commit itself to cooperation within OTA to achieve a liberal outcome from WTO negotiations. OTA members would work through the WTO to achieve free and open global trade and investment by a definite date.

Would membership of OTA be attractive? For all members, it would reduce, and, if and when OTA's membership had expanded to include a significant number of countries, remove, the important cost of exclusion from components trade that has accompanied the shift to preferential trade with their rules of origin in the world as a whole and in East Asia in particular. Developing

¹⁰ It is likely that a country which has already made a liberal FTA arrangement already has low external tariffs against trade from all other countries. This would make the requirement that such a country offer equally liberal access to its markets to all members of any OTA that it was proposing to join. Nevertheless this whole question needs much further investigation.

countries with significant Asia Pacific trading interests would find membership relatively straightforward.

While the domestic political economy constraints may postpone US interest in membership for some time, an OTA would not threaten essential US interests, beyond the threat already present in the current proliferation of bilateral FTAs in Asia. There would be some large pluses for the US. A substantial OTA would be a useful partner of the US in global and Asia Pacific trade liberalization discussions.

There would be economic advantages, as well as gains to external political relationships, if any country chose to extend OTA terms of market access to all its trading partners. To achieve this desirable outcome, countries could even announce a programme for removal of the last of their barriers to imports as part of the formation of OTA.

We do not pretend that the genuinely liberalising dimensions of an OTA would be as easy to implement politically as the protectionist FTAs that have been negotiated recently. The political resistance to such an open FTA might best be challenged by a return to independent, authoritative and transparent analysis of trade policy options as a basis for public education and discussion. This is the approach that facilitated trade liberalization in many countries in East Asia in the 1980s and 1990s.

6 A Second Global Response: Global Prevention of Trade Diversion

A second global response would be to seek to exert global discipline over each and every FTA formed, whether an OTA or not. This is work which is discussed in detail in Sinclair and Vines (2006). Here is a sketch of the idea.

We know that FTAs impose trade-diversion on outsiders, given an initial positive tariff rate, t_0 . And, analytically it is also known that there exist Kemp-Wan tariffs, at rate $\beta < t_0$ would prevent net welfare losses. These tariffs would leave outsiders at least as well off as they would have been had the bloc not been formed.

Conversely, we have argued above that open regionalism creates free rider opportunities for outsiders. Analytically, it lowers tariffs on outsiders to zero, who gain more than participants, at least in the ways in which protectionists view these issues. (This is the free-rider problem that we have discussed at length). It is clear that there is a tariff on outsiders, above zero, which would prevent this ability of outsiders to free-ride. Call this tariff rate α ; $\alpha > 0$

It is clear that there must be a range of tariffs, at rate t , $\alpha < t < \beta$, which would ensure that there are positive benefits, for both participants and outsiders, from the formation of an FTA. One aspiration for rewriting Article XXIV might be to insist that that the WTO were enabled enforce a choice of external rates of protection, by those choosing to form an FTA, whether an OTA or not, such it was the case that, in general, $\alpha < t < \beta$.

7 Conclusions

We have proposed

- (i) formation of OTA(s),
- (ii) a Trade Transparency Commission in each country participating in an OTA, and
- (iii) global prevention of trade diversion caused by all FTAs (whether OTAs or not).

Within a potential member of an OTA the politics of joining would not be easy, but a Trade Transparency Commission in each country would help. The global supervision of trade diversion would also not be easy to manage but seems important. It would require, at the least, a WTO which is much stronger as an institution than the WTO is now.

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