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WTO Market Access Negotiations for Non-Agricultural Products, Doha Round: Implications for East Asia

Kate Flowers and Malcolm Bosworth

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Kate Flowers

and

Malcolm Bosworth Australian National University

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Australia–Japan Research Centre Asia Pacific School of Economics and Management The Australian National University Canberra ACT 0200

Telephone: (61 2) 6125 3780 Facsimile: (61 2) 6125 0767 E-mail: apseg@anu.edu.au URL: http://apseg.anu.edu.au

CONTENTS

List of figures and tables	iv
Introduction	1
A framework for multilateral tariff reforms to improve market access	4
Post Uruguay: state of play	7
The Doha Round	16
Proposals for improving market access in non-agricultural products	17
Key features of the proposals and their implications for East Asia	22
Proposed draft elements of modalities for negotiations	30
Contingency measures	35
Conclusion	41
Notes	46
References	47

FIGURES

Box 1	Chronological list of proposals	17
Figure 1	Impact on tariff rates of various line-by-line formulae on the hypothetical tariff profile	25
Figure 2	Applying different formulae to hypothetical trade weighted averages: initial and final tariff rates, Japan and Korea	26
Figure 3	Applying the NGMA proposed line-by-line formula to a hypothetical tariff schedule	32
App. A	Summary of the five key proposals	44
	Tables	
Table 1	Bound tariffs on industrial products: simple averages and MTN category; selected countries	11
Table 2	Bound tariffs on industrial products: simple average tariffs by stage of processing; selected countries	12
Table 3	Bound tariffs on industrial products	14
Table 4	Impact on tariff rates of various line-by-line formulae on the hypothetical tariff profile	25
Table 5	Applying different formulae to hypothetical trade- weighted averages: initial and final tariff rates, Japan and Korea	26
Table 6	Initial and final rates applying the NGMA proposed line-by-line formula to a hypothetical tariff schedule under various tariff averages and B coefficients	32
Table 7	Anti-dumping measures by importing country, 1 Jan 1995 to 30 June 2002	37
Table 8	Anti-dumping measures by exporting country, 1 Jan 1995 to 30 June 2002	38

WTO Market Access Negotiations for Non-Agricultural Products, Doha Round: Implications for East Asia

The East Asian economies continue to have a major interest in the global liberalisation of trade in industrial products. This interest is even more pronounced in the context of the deepening of the supply chain linkages in East Asia, a process that is associated in part with restructuring in Japan, Chinese Taipei and Korea and also the emergence of China in the world trading system. A number of formulae for negotiating industrial tariff reductions are now on the table in Geneva (including proposals from Japan, South Korea, China, Chinese Taipei, the United States and the European Union), and a first draft of the 'modalities' paper for achieving such cuts under the Doha Round was recently released. This paper reviews the impact of these formulae and comments on their relevance to countries in the East Asian community, including to the important goal of reforming their own tariff regimes. A genuine 'top-down' formula approach modelled on the Swiss approach is seen to offer the best economic prospects for multilateral tariff reform. Other risks in the approaches to industrial goods liberalisation, including more widespread application of anti-dumping and other safeguard measures, are also examined. The proliferation of anti-dumping action, including by developing World Trade Organization (WTO) members, as a multilaterally 'sanctioned' trade barrier, partly as an alternative to taking safeguards, is seriously threatening to undermine the benefits from global tariff reductions. Anti-dumping reform in the WTO to prevent its misuse as a protectionist trade measure is therefore seen as an essential corollary to further tariff reform. East Asian economies have strong common economic interests in ensuring that the Doha Round delivers meaningful trade liberalisation in industrial goods.

Introduction

Since the inception of the General Agreement on Tariffs and Trade (GATT) in 1947, significant reductions have occurred in industrial tariffs and non-tariff barriers. The initial Geneva Round, and subsequently the Kennedy and Tokyo Rounds, were particularly successful in reducing overall tariffs. The Uruguay Round also made some significant breakthroughs in reducing the average bound tariff level on industrial products and improving the coverage of bindings; it also accomplished reforms in the area of non-tariff barriers – for example, the abolition of voluntary export restraints and the phasing out of the Multifibre Agreement on textiles.

Despite these achievements, some industrial sectors remain unevenly protected. It is widely recognised that there is still 'unfinished business' from the Uruguay Round in relation to market access, particularly for developing economies and in terms of increasing reliance on contingent protection. High tariffs, associated with duty peaks and significant tariff escalation, impede market access for exporters and restrict global trade as well as the efficient flow of resources in the countries providing such high and disparate tariff protection. These problems, especially domestic economic efficiency, are further compounded by the persistent use of non-ad valorem tariffs, such as specific and compound tariffs, which apply non-transparent and potentially high trade barriers for industrial products. Moreover, while the Uruguay Round made significant progress on tariff bindings, there is still uneven coverage across products and between countries, and many areas where bound rates substantially exceed applied rates (high 'ceiling' bindings) – thereby making them less effective in guarding against future tariff increases.

In response to these ongoing market access issues, a number of proposals have been tabled in Geneva as part of the Doha Round work program. The proposals tabled to date suggest a variety of modalities for overcoming 'unfinished business' from the Uruguay Round. The approaches suggested include formula tariff reductions, sectoral approaches and various cocktail measures aimed at overcoming trade barriers. In addition, the proposals explore issues such as tariff bindings, appropriate base rates for reductions and developing country considerations.¹

East Asian economies need to play an active role in ensuring that substantial tariff reductions are achieved in the Doha Round, ideally in the most efficient, transparent and simple way. This will not only directly benefit East Asian economies which rely on manufactured exports, but also provide a significant development impetus for the round and substantially strengthen its contribution to enhanced transparency and the predictability of members' trade regimes.

However, the effectiveness of further tariff reductions will be undermined unless substantial reforms are also made to limit the proliferating misuse of 'sanctioned' multilateral forms of protection, especially anti-dumping. Addressing the anti-dumping problem is fundamental to reforming the multilateral trading system, as more and more developing World Trade Organization (WTO) members embrace such measures, much to the detriment of their own economies and the multilateral system. The Doha Round provides the opportunity to clarify and improve the Agreement on Implementation of Article VI of the GATT 1994. East Asian

economies therefore have a major interest in ensuring that the Doha Round also produces tangible reforms to anti-dumping as well as substantial tariff reductions; one without the other will seriously weaken the benefits to East Asian economies and will weaken the credibility and effectiveness of the WTO system.

Successful trade liberalising outcomes on industrial tariffs and anti-dumping will help East Asian countries restructure their economies by adopting a more global stance. Developments in the East Asian region – including the restructuring of the Japanese and South Korean economies, and in particular the recent accession to the WTO of China and Chinese Taipei – have added renewed dynamics to the multilateral negotiations and made the Doha Round a watershed for the future development of the region. East Asia comprises developed and developing countries; the interests of both are best served by ensuring these outcomes. There is plenty of scope to develop common positions, especially as the economic future of East Asian countries is heavily tied to export growth.

The first part of this paper establishes a conceptual framework for reforming tariff structures to improve market access. This is followed by a review of the state of play following the Uruguay Round, a summary of the relevant sections of the Doha Declaration and an analysis of the key negotiating proposals on industrial tariffs advanced during the Doha Round, focusing particularly on the implications for East Asia. The proposals analysed in detail are those of Japan, China, Korea, Chinese Taipei, Thailand, Hong Kong, the United States, and the European Community. The submission by the Negotiating Group on Market Access (NGMA) on 'Draft Elements of Modalities for Negotiations' is also reviewed. Analysis of these proposals reveals some interesting insights into the general modalities favoured and the technical difficulties that need to be addressed in order to achieve effective and balanced trade liberalisation.²

Concurrent with the negotiations on industrial tariffs are negotiations on anti-dumping. The second part of the paper focuses on why reforming WTO anti-dumping provisions – and to a lesser extent other contingency measures – is integral to achieving greater market access in industrial products. In fact, there are important interrelationships between decisions taken on anti-dumping and recourse to alternative forms of contingent protection. In particular, outcomes on anti-dumping are likely to have an impact on the capacity of the Doha Round to improve market access and to restrict the proliferating use of anti-dumping measures as a multilaterally 'sanctioned' trade restriction that is increasingly replacing tariffs and other measures as the main trade barrier.

The paper concludes by suggesting some key negotiating positions and outcomes that East Asian economies as a group could give priority to in the Doha Round.

A framework for multilateral tariff reforms to improve market access

Improved market access falls under an overarching objective of trade liberalisation. A whole body of economic trade theory is dedicated to determining the case for trade liberalisation. It is generally recognised that reducing tariffs and other trade barriers to cut protection for domestic industries and expose them to efficient international competition increases a country's national welfare. It does so by improving resource use efficiency and by allowing markets to allocate resources according to their most efficient use rather than according to which activity receives the most government assistance. Consumers also benefit from trade liberalisation through lower prices and a better range of quality products. Capturing such gains involves substantial structural adjustment to ensure that resources are able to flow from highly protected inefficient industries to less protected efficient industries. Some industries will contract with trade liberalisation, but others will develop and prosper as protectionist barriers are reduced.

The improvement of economic welfare by obtaining these tangible gains from trade should be the objective of all governments. This notion underlies the WTO's emphasis on encouraging international trade through a rules-based system that attempts to stem the use of trade barriers and other forms of protection.

Unilateral and multilateral gains

For any individual country, the most effective means of cutting protection is to pursue unilateral gains. This is based on the orthodox principle that the efficiency gains from trade liberalisation occur mainly to the country undergoing such reforms, irrespective of whether other governments liberalise. Trade liberalisation gains do not hinge on other countries liberalising, although the overall gains would be greater for every country if other countries also liberalised. This is the strength of the WTO and of its multilateral approach. These additional benefits of multilateral liberalisation $a \, la$ the WTO are widely recognised; the more a country is able to get its trading partners to liberalise, the more it benefits (Panagariya 2002, p.535).

It does not follow, however, that countries will only gain economically from their trade liberalisation if other countries also liberalise. Even if other countries do not liberalise, liberalising countries will mainly gain. This point is often lost in the world of WTO trade negotiations, including by developing countries that repeatedly argue for more 'special and differential' treatment within the WTO so that they can 'water down' their own commitments and slow down trade liberalisation. Since average tariff barriers in developing countries are higher than in industrialised nations, much of the potential welfare gain from reducing trade barriers will arise from their own liberalisation (Hoekman 2001, p.5).

Synergies between unilateral and multilateral liberalisation are therefore potentially greatest if the WTO can provide an effective mechanism for 'locking in' internationally the unilateral reforms of members. These are strengthened when negotiated multilateral reforms also make good unilateral sense. Although perhaps counterintuitive, the most effective means for a country to achieve increased access to the markets of trading partners is to improve its own efficiency by removing its trade barriers. This makes the country more efficient and, in turn, more competitive. A tax on inputs taxes exports, so liberalising trade will benefit a country's exporters. In practice, the greatest limit to a country's ability to penetrate export markets will be its competitiveness, which depends upon domestic policies, and not on the level of overseas barriers.

What makes good unilateral sense in reforming tariff structures should also be economically sensible at the multilateral level. The same principles for good tariff reforms apply to both unilateral and multilateral reforms.

Efficient tariff reform

It is generally recognised that the most efficient strategy for reforming tariffs is a 'top-down' approach applied across the board. This provides proportionately much larger cuts in the highest duties, so as to flatten the tariff structure and to narrow disparities between rates. The biggest resource-use inefficiencies from tariffs depend upon the degree of rate dispersion. Thus cutting tariffs in a way that also widens tariff disparities between products or that raises tariff escalation by providing relatively higher duties on processed products than on unprocessed inputs may, perversely, worsen the country's tariff structure and make it more economically distorting. Partial or piecemeal tariff reforms or approaches other than 'top-down' reductions – such as lowering mainly low tariffs while leaving high duties relatively untouched – should be avoided, where possible, because the economic effects of such reductions are far less certain. 'Top-

down' approaches are also more effective and certain if applied comprehensively to all sectors; exempting certain products or activities from tariff cuts should be avoided or kept to the barest minimum.

Multilateral approaches to tariff reforms

Several approaches to negotiating tariffreductions have been used in multilateral trade rounds. Initially request—offer approaches were mainly used, but these proved very time consuming and tended to increasingly lead to piecemeal reductions that achieved minimal cuts in high tariffs and generally reduced low tariffs. Another non-comprehensive approach is to adopt sectoral approaches, such as zero-for-zero negotiations, where particular sectors are identified and all members can remove tariffs on these sectors. These approaches, which lead to non-comprehensive tariff reductions, have several economic drawbacks; in particular, they may reduce a country's welfare by increasing tariff disparities by including sectors that are likely to already have lower tariffs. Another issue in piecemeal approaches is that they can result in negotiations being biased in favour of countries that are more developed or powerful. In other words, they may not lead to reductions in the tariffs of significance to developing country exports. Francois and Martin (2002b) and Panagariya (2002) discuss the likely implications of various modalities.

An alternative multilateral approach to cutting tariffs is to adopt a formula approach. This has the distinct advantage of being across the board and making tariff cuts more comprehensive, thereby limiting the flexibility of governments to exempt certain sectors (that is, high tariffs) from reductions. However, the economic impact will depend upon the particular formula used. One that reduced lower rates more than higher rates (a 'bottom-down' approach) would, while lowering average tariffs, increase rate disparities and therefore be more likely to reduce welfare. For the reasons stated above, the best formula economically would be one that endorsed a top-down tariff reduction strategy with no exceptions.⁴

Different top-down formulae can be devised, ranging in their degree of 'compression' and complexity. A proportionate tariff cut that reduces all tariffs by a fixed percentage (for example, reducing all tariffs by 20 per cent) will reduce higher tariffs most, and thereby reduce disparities. However, non-proportional cuts that reduce higher rates proportionately more will narrow disparities faster and would be generally preferred on economic grounds. Such approaches are usually expressed in terms of cutting high tariffs down to a specified tariff ceiling, although they can also be adapted to achieve a certain average reduction goal. Generally speaking, simple

formulae are preferable to complex ones, which are contrary to transparency objectives and are more difficult to monitor in practice.

In the Tokyo Round, the 'Swiss formula' was used with some success in reducing tariffs. This is a relatively simple formula that embodies a substantial top-down approach, depending upon the selected tariff ceiling. The approach appears to have some merit in dealing with situations where there are large disparities in tariff rates. An across-the-board approach that lowers higher tariffs more, such as that based on the Swiss formula, would be the right choice to achieve maximum trade liberalisation. It minimises the room for successful lobbying by politically powerful sectors, which are also often the most protected sectors (see Panagariya 2002, p.539). A formula that lowers high tariffs to a greater degree reduces the dispersion in tariffs and hence lowers effective rates of protection in all sectors.

A flexible version of the Swiss formula has been advocated to provide governments with sufficient flexibility to handle current tariff peaks and dispersion (Francois and Martin 2002b). Any proposed tariff formula could be negotiated on two key features: the overall average tariff reduction and the variation in tariffs. Such a flexible approach could potentially allow for a 'Swiss family of formulas' or a 'Swiss Army set of instruments', with different trade-offs between tariff cuts on higher and lower tariff levels, designed to overcome any issues caused by the simple Swiss formula being too restrictive (see Francois and Martin 2002b for a full discussion of these options). While the flexible Swiss approach has the advantage of satisfying political economy objectives and 'special and differential' treatment concerns, it also runs the risk of excessive complexity. Thus decisions taken on both the choice of formula and the form of this formula – that is, rates of ceiling and/or flexibility options – will have a bearing on the efficiency gains from implementation.

Any Doha outcomes for reforming industrial tariffs should ideally incorporate a 'top-down' approach that meets basic economic efficiency considerations, meets transparency objectives and is administratively viable. This is clearly not an easy task. The relative success of multilateral trade reform using formula approaches will depend on the breadth and type of formula adopted.

Post Uruguay: state of play

The Uruguay Round made some progress toward greater market access. The approach adopted during the round used a range of modalities, including a broad tariff reduction goal with the

distribution of the cut between sectors being determined by the negotiators (Francois and Martin 2002b). This reduction was negotiated line by line. Zero-for-zero measures, such as reductions on certain pharmaceuticals and agricultural equipment, and request and offer approaches, such as on tropical products, were also used (Francois and Martin 2002b, p.1). The most significant gains were in improved participation by developing economies, greater binding coverage, reductions in average tariffs and reform of non-tariff barriers – for example, the abolition of voluntary export restraints and the phasing out of the Multifibre Agreement on textiles in 2005 (see WTO 2001a).

The Uruguay Round dramatically increased the share of industrial products with bound tariff rates. For developed economies, the percentage of industrial tariff lines bound increased from 78 per cent to 99 per cent. In the case of developing countries, bindings increased from 21 per cent to 73 per cent (Bacchetta and Bora 2001, p.1). While significant improvements in binding coverage were made, there remains a large gap between bound and applied rates for many tariff lines. That is because many countries adopted high 'ceiling bindings' - that is, bound rates well above applied levels. This gap may be beneficial in that it allows a margin for tariff backsliding in difficult circumstances (rather than resorting to less transparent, more distorting measures), but it has the downside of making the country's tariff regime less predictable and undermines the effectiveness of the multilateral system to 'lock in' members' tariff reforms. It also means that any multilateral reductions in bound levels, including using a formula, may potentially reduce applied rates unevenly across countries and sectors, depending on the relationship between the applied and bound rates. This divergence can make the economic implications of tariff reductions less transparent and more difficult to predict. Indeed, the system may be inherently biased towards increasing effective protection and dispersion, at least in the short run. This would be the case if high 'ceiling bindings' applied mainly on final goods, such that agreed multilateral tariff reductions initially reduced bound rather than applied levels while applied input tariffs were mainly lowered.

The Uruguay Round also reduced the average tariff rate on industrial products of both developed and developing economies. Developed countries cut the average tariff by 40 per cent on imports from all sources and by 37 per cent on those from developing countries. Developing countries achieved an average reduction of 25 per cent on imports from developed economies, and 21 per cent on industrial products from developing economies (Bacchetta and Bora 2001, p.2).

The Uruguay Round also successfully reduced non-tariff trade barriers. Of particular significance was the prohibition of voluntary export restraints and phasing out of the Multifibre

Agreement by 2005 (Bacchetta and Bora 2001, p.2). The phased removal of the Multifibre Agreement was considered a very significant breakthrough in textiles and clothing as trade barriers associated with this agreement have persistently hindered market access.

Despite these Uruguay Round achievements, developing countries were disappointed by the limited gains in market access and the high administrative costs involved in meeting WTO commitments.⁵ In addition, there are still difficulties in terms of the relative dispersion of tariff rates, the coverage of bindings, the setting of bound rates well above applied rates, and the persistence of non-ad valorem tariffs. Moreover, despite the breakthrough in the non-tariff barriers affecting textiles and clothing, high tariff barriers remain particularly problematic in this sector.

Developing country issues

In both developed and developing economies, tariffs on manufactured goods tended to be 'disproportionately' applied against developing country exports after the Uruguay Round (Finger and Schuknecht 1999, p.4). East Asia includes a number of developing countries. It also includes the new WTO members of China and Chinese Taipei. Disproportionate tariff barriers facing exports from these countries could impede their growth. Moreover, to the extent that developing economies are imposing these barriers on each other, excessive concessional treatment that delays tariff reductions could delay improvements in market access and compound domestic inefficiency.

Dispersion

Tariff dispersion occurs where there are substantial tariff peaks and/or escalation of duties by stage of processing while other rates, such as on inputs and raw materials, remain relatively low. Post-Uruguay tariff dispersion was an issue for East Asian economies as well as for many other WTO members. The extent of the problem varied across countries and sectors. Table 1, which gives bound tariffs on industrial products for selected Asian and other economies (for comparison), illustrates the variation in tariff peaks within Asia. For example, Japan has relatively low bound tariff rates, with slightly elevated simple average bound duties in certain sectors, such as textiles and clothing (6.8 per cent); leather, rubber, footwear and travel goods (15.7 per cent); and fish and fish products (6.2 per cent). Korea generally has higher bound tariffs

in these sectors and also in transport equipment and electrical machinery. In textiles and clothing the simple average rate was 18.2 per cent; leather, rubber, footwear and travel goods 16.7 per cent; transport equipment 24.6 per cent; electrical machinery 16.1 per cent; and fish and fish products 19.1 per cent. Thailand and the Philippines tend to have high average bound rates across a broad range of sectors. For Thailand, the highest bound rate was on transport equipment followed by a rate of 34.1 per cent on leather, rubber, footwear and travel goods. The Philippines had an average bound tariff rate of 32.7 per cent for the leather, rubber, footwear and travel goods.

Textiles and clothing not only have a higher proportion of tariff peaks, but also substantial tariff escalation. Table 2 summarises bound tariffs on industrial products by stage of processing for selected countries. In the Korean textiles and clothing sector, a simple average bound tariff on raw materials of 8.1 per cent rises to 14.0 per cent for semi-manufactured products and to 24.5 per cent on finished goods. Similarly, for the Philippines, an average bound tariff rate of 14.4 per cent on raw materials escalates to 25.7 per cent for semi-manufactured goods and to 31.2 per cent on finished products. Tariff escalation from higher tariffs (peaks) on processed products, often used by countries to promote domestic processing, can provide substantial protection (especially in effective rate terms based on the activity's value added) for inefficient processed products, thereby making the tariff structure highly distorting and reducing efficiency. Tariff escalation can also bias the country's tariff structure against imports of processed goods, thereby itself undermining efforts by developing countries to promote greater processing.

Tariff peaks and escalation remain an important issue for East Asian economies, which have plenty of scope to derive efficiency gains from reforming their own tariff structures. The extent of the problem varies across individual countries and sectors. Tariff dispersion is economically undesirable; the welfare costs increase as dispersion widens, partly because the economy's deadweight loss from tariffs rises more than proportionately to the increase in the tariff rate (Bacchetta and Bora 2001, p.6). Narrowing tariff rate disparities is therefore a worthwhile goal in the current negotiations. Greater uniformity at lower tariff levels will improve economic welfare for all members undergoing such reforms and provide a more equitable framework for future market access negotiations. In addition, to the extent that disparate tariff rates fall on intermediate goods, improvements are likely to affect supply chain linkages as trade increases between East Asian economies. More uniform and lower tariff structures will facilitate substantial gains for East Asian economies.

Table 1 Bound tariffs on industrial products: simple averages and MTN category; selected countries (%)

furniture	wood, pup, revues paper and and furniture clothing	Leather, rubber, footwear and travel goods	Metals	Chemicals and photo -graphic supplies	Chemicals Transport and photo equip- graphic ment supplies	Non- electric machinery	Electrical machinery y	Mineral products and precious stones and precious metals	Manu- factured articles not elsewhei specified	Fish and fish products re
	0	0	0	0	0	0	0	0	0	0
	39.9	39.6	36.4	37.4	58.5	36.6	38.7	39.2	36.9	40.0
	8.9	15.7	6.0	2.4	0.0	0.0	0.2	1.0	1.1	6.2
	18.2	16.7	7.7	6.7	24.6	11.1	16.1	10.4	11.4	19.1
	0	0	0	0	0	0	0	0	0	0
	20.7	19.1	14.2	15.4	8.62	10.9	14.1	14.7	12.6	14.5
	27.7	32.7	22.9	22.6	26.1	22	26.2	28.5	29.5	29.4
	7.8	3.4	3.2	5	4.4	4.3	4.9	1.2	1.2	8.6
	29.5	34.1	25.6	29.3	38.5	23.4	30.5	25.9	29.5	12.5
	7.9	4.8	1.6	4.8	4.7	1.8	3.3	2.4	2.7	11.8
	8.9	8.4	1.8	3.7	2.7	1.2	2.1	3.3	3.0	2.5
	28.8	17.5	4.5	9.2	15.1	9.1	13.3	7.0	7.0	8.0

Adapted from Table 2 of Bacchetta and Bora (2001). Derived from WTO IDB loose leaf schedule and national customs tariffs (WTO 2001a). Sources:

Table 2 Bound tariffs on industrial products: simple average tariffs by stage of processing; selected countries

Import market	Stage of processing	Wood, pulp, paper and furniture	, Textiles and clothing	Leather, rubber, footwear and travel goods	Metals	Chemicals Transport and photo equip- graphic ment supplies	Transport equip- ment	Non- electric machinery	Electrical machinery	Mineral Manu- r products facturee and articles precious not elss stones & where metals specifie	Mineral Manu- Fish products factured and and precious fish precious not else-products stones & where metals	Fish and fish products
Hong Kong (China)	Raw materials	0	0	0	0					0		0
	Semi-manu- factures Finished	0	0	0	0	0			0	0		0
Todonosia	products	0	0	0	0	0	0	0	0	0	0	0
mannesia	materials	38.3	40	39	40					39.5		40
	factures	39.8	40	40	35.1	37.5				37.1		40
200	products	39.9	39.8	39.8	38.7	37.2 58	58.5	36.6	38.7	40	36.9	40
oapan	naw materials	0.1	2.6	0.1	0					0.2		5.2
	factures	1.9	5.9	10.4	1	2.9				0.5		10.4
:	Finished products	9.0	8.3	20.7	6.0	1	0	0	0.2	1.8	1.1	6.7
Kepublic of Korea	Kaw materials	2.1	8.1	9.4	1.2					5.6		17.8
	Semi-manu- factures	7.1	14	11.1	4.5	9				8.6		20
34.5	products	3.6	24.5	19.8	13.2	8.2 2,	24.6	11.1	16.1	14.9	11.4	22.5
(China)	materials	0	0	0	0				0		0	
	factures	0	0	0	0	0			0	0		0
Mologic	products	0	0	0	0	0	0	0	0	0	0	0
Malaysia	materials	19.7	5.2	10.2	5.8					5.4		8.6
	factures	19.7	19.6	21.1	12	14.7				13.3	.,	20.4
	products	20.5	23.5	24.4	19.5	16.8	8.62	10.9	14.1	21.4	12.6	22.9

Import market	Stage of processing	Stage of Wood, pulp, processing paper and furniture	, Textiles and clothing	Leather, rubber, footwear and travel goods	Metals	Chemicals Transport and photo equip- -graphic ment supplies		Non- Helectric r machinery	Electrical Mineral Manu- machinery products factured and articles precious not stones elsewhen and specified metals	Mineral products and precious stones and metals	Manu- Fish factured and articles fish not pro- elsewhere specified	Fish and fish products re
Philippines Raw mate	Raw materials	13.7	14.4	20.6	10.6					17.8	~~~	24.9
	Semi-manu- factures Finished	32.5	25.7	27.1	18.8	8.02				30.3		50
Singapore	products	37.2	31.2	40.3	33.6	28.4	26.1	22	26.2	35.6	29.5	41.9
omgapore	materials	4.2	8.9	6.3	0					0.3		10
	Semi-manu- factures	4.2	5.1	1.2	4.1	5.2				2.2		10
1000	r inisnea products Berr	1.8	9.6	က	2.1	4.6	4.4	4.3	4.9	1.4	1.2	8.8
ınanand	naw materials	8.3	29.3	28.6	28.8					17.4		8.8
	Semi-manu- factures	22.3	27.6	34.7	21.4	29.7				27.9		6.9
F	Finished products	24.8	30.4	35.8	31.9	28.1	38.5	23.4	30.5	33	29.5	27
European Commu-	Kaw materials	0	2.6	0.1	0					0.4	1	11.2
mty	Semi-manu- factures	1	9.9	2.4	1.2	5.2				2.4	-	13.3
Thit	r misnea products Dom	0.5	9.7	2	2.8	3.4	4.7	1.8	3.3	3.7	2.7	14.1
States	naw materials	0	2.8	0	8.0					9.0		0.7
	Semi-manu- factures	0.7	9.1	2.3	1.1	4.1				1.3		1.7
0:[cm+>:.V	products	0.7	9.1	11.7	2.9	2.3	2.7	1.2	2.1	5.3	က	4
Austrania	materials	0.3	1.5	4.2	9.0					2.4		0.4
	factures	7	22.9	11.5	8.0	8.6				9		0
	products	8.9	35.7	22	11.8	7.6	15.1	9.1	13.3	11.1	7	3.2

Adapted from Table 5 of Bacchetta and Bora (2001). Derived from WTO IDB loose leaf schedule and national customs tariffs (see WTO 2001a). Source:

Tariff bindings

Bound tariffs, by placing a cap on future tariff levels and thereby limiting potential policy backsliding, contribute to greater transparency in and predictability of trade regimes. There are some major discrepancies in tariff bindings. First, there are incomplete tariff bindings, predominantly by developing countries. Second, many tariffs of most countries are bound well above the applied rate (that is, ceiling bindings). This undermines the effectiveness of bindings, since it allows greater scope to raise rates in the future. It can also make the effects of multilateral reforms on applied tariff rates, based on bound levels, less predictable across member countries (see Bacchetta and Bora 2001). Some East Asian economies show considerable differences in the coverage of bindings (Table 3). Macao China, for example, had bound only 9.9 per cent of industrial tariffs after the Uruguay Round. In contrast, Japan's bindings covered 99.2 per cent

Table 3 Bound tariffs on industrial products (all shares are expressed as a percentage of the total number of industrial tariff lines)

Import market	Share of bound tariff lines	Share of bound duty free tariff lines	Share of non-ad valorem tariffs	Simple average bound tariff	Std deviation	Simple average applied tariff ^a	Share of tariff lines with duties above 15%
Northeast Asia							
Hong Kong China	23.5	23.5	0.0	0	0	0 (1998)	0
Macao China	9.9	9.9	0.0	0	0	0 (1997)	0.0
Japan	99.2	47.4	3.5	3.5	6	4.2(1998)	1.8
Republic of Korea	90.4	11.6	0.2	11.7	9.6	7.9 (1998)	19.1
Southeast Asia							
Malaysia	61.8	1.6	3.2	17.2	13.4	9.2 (2001)	58.3
Philippines	58.6	0	4.1	26.1	12	9.5 (1998)	82.7
Singapore	65.5	15.2	0.2	4.6	4.8	0 (1996)	0.2
Thailand	67.9	0	19.7	27.5	10.6	14.6 (1999)	87.1
Other							
United States	100	39.4	4.2	3.9	5.6	4.3 (1999)	3.5
European Union	100	26.9	0.5	4.1	4	5 (1998)	1.5
Australia	95.9	17.7	0.8	14.2	14.7	5.8 (1998)	25.3

Notes: a Applied tariff rates are not directly comparable with bound rates.

Source: Adapted from Table 11.1 and Table 11.4, WTO (2001a).

of tariff lines; it also had the highest share of duty-free bound lines in 2001. For all countries (developed and developing), bound rates tend to be high for textiles and clothing; on these products, developed economies have average bound rates of 12 per cent, compared with 19 per cent for developing and transition economies (WTO 2002, p.31).

Bound versus applied rates

Differences between bound and applied tariff rates also vary significantly across regions. For example, average bound rates in Southeast Asia were $2\frac{1}{2}$ times higher than applied rates (WTO 2001a). Japan generally has a close relationship between the bound and applied tariff rate. For Korea, the average bound rate was 11.7 per cent while applied rates were 7.9 per cent. The Philippines had a much larger difference between bound and applied rates: the average bound rate on industrial products was 26.1 per cent while the applied rate was 9.5 per cent (1998 figures). Such differences between bound and applied tariff rates across East Asian countries are themselves of concern. They also complicate any assessment of the economic effects of multilateral tariff reductions, such as using a formula approach, in which reductions to tariff rates based on initial bound duties could deliver vastly different applied duty structures across countries and sectors depending on how bound and applied rates coincide. Cutting high bound tariffs that are well above actual rates will have little impact on applied duties.

Non-advalorem tariffs

Non-ad valorem tariffs comprise specific, mixed and compound duties. Generally, non-ad valorem tariffs are less desirable economically: they are less transparent; they provide uneven protection levels between similar products, depending upon price (and hence quality), with lower-priced imports receiving the highest tariffs; and protection levels change over time as import prices change (Bacchetta and Bora 2001). When expressed as formula duties, non-ad valorem tariffs can be structured to provide floor prices for imports whereby substantial falls in world price below these set levels are largely compensated for by higher duties. Hence, they can have a protectionist impact similar to agricultural variable levies, which were 'tariffied' in the Uruguay Round. Non-ad valorem tariffs are prevalent in certain East Asian economies. For example, they comprise 19.7 per cent of tariff lines in Thailand, 3.5 per cent in Japan, 3.2 per cent in Malaysia and 4.1 per cent in the Philippines. Even where overall use of such duties is low,

their incidence is often much higher in particular product groups. For comparison, the United States had non-ad valorem duties on 4.2 per cent of its industrial tariff lines, the European Community on 0.5 per cent and Australia on 0.8 per cent (WTO 2001a, p.9).

Contingent protection

The Uruguay Round made some important changes to the anti-dumping provisions of the GATT (Article VI) and the safeguard provisions (Article XIX). Despite the changes made with a view to improving the accessibility of safeguard actions and curbing the use of anti-dumping measures, a disproportionate number of anti-dumping investigations are still initiated. Ensuring that safeguard provisions work effectively in the WTO can be an important complement to achieving tariff reforms in that they may encourage members to negotiate greater tariff bindings at levels closer to applied rates and larger reductions.

The Doha Round

The Doha Round has many unresolved issues to tackle. The Doha Ministerial Declaration, adopted on 14 November 2001, includes extensive negotiations and work programs on trade in non-agricultural goods and also in a diverse range of other areas, including trade in agricultural products and services (WTO 2001b). This paper focuses on non-agricultural (industrial) products.

The Doha Declaration (paragraph 16) seeks to improve market access, chiefly by cutting tariffs on industrial products so as to 'reduce' – or 'eliminate' where appropriate – 'tariff peaks, high tariffs and tariff escalation, as well as non-tariff barriers'. It focuses on developing country needs and products of export significance to them. The negotiations are to take fully into account the special needs and interests of developing and least-developed country participants, including through less than full reciprocity in reduction commitments (WTO 2001b). Thus, the Doha Round is especially relevant to East Asian developing countries. It also aims to 'clarify' and 'improve' disciplines on anti-dumping (contained in the Agreement on Implementation of Article VI of the GATT) while 'preserving the basic concepts, principles and effectiveness' of these arrangements (WTO 2001b). The mandate therefore appears to disallow any fundamental changes to the system, but to cover possible rule changes within the existing anti-dumping framework. If this interpretation were correct, wholesale anti-dumping reforms would seem

unlikely. However, if rule changes are defined broadly, this nevertheless may provide sufficient scope to tighten the disciplines to make anti-dumping less open to misuse.

Proposals for improving market access in non-agricultural products

Many WTO members have proposed formula tariff cuts on industrial products in the Doha Round. In East Asia, Japan, China, Korea, Chinese Taipei, Thailand and Hong Kong have put forward key proposals. The United States and the European Union (EU) have also put forward significant proposals. These proposals are worth considering as they provide useful insights into possible formula approaches for cutting tariffs, especially in assessing their impact on tariff dispersion, tariff peaks and escalation, tariff bindings and developing country considerations. The proposals also cover issues such as timing, base year, mix of modalities, choice of initial (base) rate to apply reductions to (in other words, the bound or applied rate) and year. Box 1 shows the chronology of the proposals and the way they are cited in the text and list of references. Appendix A summarises the main characteristics of each proposal.

Box 1 Chrone	ological list of proposals		
Document number	Proposer	Date	Reference
TN/MA/W/11	European Community	31 Oct 2002	WTO NGMA (2002b)
TN/MA/W/12	Hong Kong	12 Nov 2002	WTO NGMA (2002c)
TN/MA/W/15	Japan	20 Nov 2002	WTO NGMA (2002d)
TN/MA/W/18	United States	5 Dec 2002	WTO NGMA (2002e)
TN/MA/W/19	Chinese Taipei	20 Dec 2002	WTO NGMA (2002f)
TN/MA/W/20	China	24 Dec 2002	WTO NGMA (2002g)
TN/MA/W/6/Add.1	Korea	7 Jan 2003	WTO NGMA (2003f)
TN/MA/W/26	Thailand	17 Feb 2003	WTO NGMA (2003g)

Summary of proposals

Japan

Japan proposes that each member set a targeted trade-weighted average tariff rate according to a suggested formula that helps to harmonise tariffs to take account of members' different development stages (WTO NGMA 2002d). All members except least-developed countries would be required to convert specific type tariffs to ad valorem rates, and then to reduce tariffs using the following formula:⁹

$$t_t = t_0 * A/(t_0 + A) + \alpha$$

where α = 0.3, t_t = the trade-weighted target tariff rate and t_0 = the bound rate (trade-weighted average). The value of A changes with the relevant tariff boundaries:

$$\begin{aligned} &t_0 \leq 10\%, & A = 10 \\ &10\% < t_0 \leq 20\%, & A = 20 \\ &20\% < t_0 \leq 30\%, & A = 30 \\ &30\% < t_0, & A = 40 \end{aligned}$$

In principle, the base for the reductions should be the 2002 harmonised schedule. As bound and applied rates differ, 'due attention' is to be given to applied rates to make meaningful market access improvements possible. Japan's proposal calls for members to improve binding ratios (that is, reduced ceiling bindings) to make the framework more predictable and credible, and to increase coverage of tariff bindings (WTO NGMA 2002d).

The proposal notes that implementation periods can act as a 'shock absorbing measure' to enable further tariff reductions. The proposed staging period could be five years with equal instalments, beginning in 2005. Longer periods should be allowed for developing countries implementing deeper than average cuts. To encourage developing countries to participate, the Japanese proposal suggests that special arrangements may be negotiated for zero-for-zero or harmonisation reductions.

The Japanese proposal considers that tariff peaks and escalation in clothing and motor vehicles can be reduced using line-by-line harmonisation or zero-for-zero approaches. It makes special note of textiles and clothing, and refers to Japan's liberalisation in this area while other members maintain wide tariff disparities. Given the special issues in textiles and clothing,

Japan proposes a sectoral approach for textiles and clothing involving line-by-line harmonisation (see WTO NGMA 2002d, p.7).

China

China proposes a uniform formula for tariff reductions that takes account of uneven development across members by making reduction commitments of developing countries based on less than full reciprocity (WTO NGMA 2002g). The proposed formula is:

$$T1 = (A+B*P)*T0$$

$$(A+P^2) + T0$$

where T0 = base rate, T1 = final rate, A = simple average of base rates, P = peak factor (P = T0/ A) and B= adjusting coefficient (for the year 2010 B = 3; for the year 2015 B = 1, etc). 10

The Chinese proposal suggests that base rates should reflect development levels. For example, developed members should use applied rates in 2000 as their base rates for reductions; developing members should use as their base rates the simple average rate between their applied rates in 2000 and their committed Uruguay Round bound rates; and newly acceded members should use as their base rates the simple average of their applied 2000 rates and their final bound rates committed on accession (WTO NGMA 2002g).

Korea

The proposal put forward by Korea is complex and varies with the initial tariff rate. Korea proposes that each member reduce its trade-weighted average tariff by 40 per cent (WTO NGMA 2003f). The bound tariff rate for each non-agricultural product will be reduced by a minimum 20 per cent, with no exceptions. Tariff lines with bound rates exceeding twice the national average, after minimum reductions of 20 per cent, are to be reduced by more than 20 per cent by subtracting from these tariff rates 70 per cent of the difference between them and twice the simple national average. In other words:

$$T1=(T0*0.8)-0.7*(T0-2*Ta)$$

where T1 = maximum tariff rate after the reduction, T0 = tariff rate before the reduction (greater than two times the national average) and Ta = national average. Tariff rates remaining above

25 per cent after the minimum reduction of 20 per cent will be further subtracted by 70 per cent of the difference between them and 25 per cent. In other words:

$$T1=(T0*0.8)-0.7*(T0-25)$$

where T1 = maximum tariff rate after the reduction and T0 = tariff rate before the reduction (greater than 25 per cent) (WTO NGMA 2003f).

If the tariff rate is above double the simple national average and at the same time above 25 per cent, the final tariff rate will be the lower of these reductions.

If applying the formula resulted in less than a $40\,\mathrm{per}$ cent reduction, members would make further reductions at their own discretion to reach this target (WTO NGMA $2003\mathrm{f}$) .

The base rates proposed are the bound levels agreed after the Uruguay Round and 2001 applied rates for unbound tariffs. Ad valorem equivalents should be used for non-ad valorem tariffs, with members retaining discretion as to whether to convert these rates. The proposed reductions would need to take account of current tariff structures and the needs of developing countries. Implementation would be by equal annual cuts over five years for developed economies and seven years for developing economies (WTO NGMA 2003f).

Chinese Taipei

Chinese Taipei's proposal favours a sector-by-sector approach covering all sectors (WTO NGMA 2002f). It favours no particular modality; rather, it suggests a variety of modalities to allow for optimal flexibility. The proposal also calls for a broadening of participation in existing zero-for-zero agreements. The suggested cocktail approach is favoured for its capacity to take account of the different development stages of members. Bound rates are considered as the only legitimate base rates to use for the negotiations. Where unbound duties apply, 2002 rates are preferred. An overall goal of all members should be to commit to bind all tariffs by the end of the Doha Round.

On tariff peaks and escalation, a request—offer approach is favoured as tariff structures vary between members. Only nuisance tariffs that are 'truly burdensome' should be eliminated since the administrative collection costs may not exceed revenue.

A staging period of five years is suggested, with longer periods for newly acceded members (WTO NGMA 2002f).

Thailand

Thailand proposes the formula approach in conjunction with a zero-for-zero approach (on a voluntary basis) for important export goods for developing countries (WTO NGMA 2003g). Request-offer modalities are suggested as a supplementary approach to further support formula reductions. Thailand supports the use of a national peak indicator of high tariffs. The proposed base rate for negotiations is the bound level from the previous round of negotiations or, for non-bound rates, the national statutory rate. Thailand suggests that non-tariff barriers should be identified and be part of the current negotiations. It proposes that special and differential treatment be met by applying different target tariff cuts, formula components and staging. Environmental goods should be treated the same as other non-agricultural products.

Hong Kong

Hong Kong supports phasing out all tariffs on non-agricultural products within a reasonably short period after the conclusion of the Doha negotiations – say five years (WTO NGMA 2002 c, p.2). Developing economies would have longer to phase out tariffs to limit adjustment implications.

The proposal recommends a formula approach initially to achieve a one-off reduction or elimination of tariffs. It is suggested that a different tariff cut be applied to developed and developing economies while ensuring a common minimum reduction (WTO NGMA 2002c, p.2). The formula would also tackle tariff peaks and escalation would have deeper cuts for higher tariffs, and may include other features, such as a cap on maximum tariff levels and elimination of tariffs below a certain rate. This approach could be supplemented with other modalities in exceptional circumstances.

The initial one-off tariff reductions could be followed by further annual cuts for developed members to eliminate tariffs over time. Developing countries could follow with cuts over a longer period by re-applying the formula or through other means.

United States

The United States proposes the elimination of duties by 2015 (WTO NGMA 2002e). The initial phase (2005–10) involves some elimination (mainly tariffs at or below 5 per cent), other reductions and harmonisation. The harmonisation is to be achieved through a Swiss formula with a coefficient of 8 (tariff rate cap of 8 per cent). In other words:

$$T1 = (T0*a)/(T0+a)$$

where T1 is the new tariff, T0 is the current tariff, and a=8.

Under the US proposal, members would bind tariffs and maximise the use of ad valorem rates. Reductions should be based on applied rates as at 1 January 2000 or Uruguay Round final bound rates, whichever are the lowest. All tariffs in Uruguay zero-for-zero sectors would be eliminated by 2010, as would rates covered by the Information Technology Agreement and the Agreement on Trade in Civil Aircraft.

In the second phase (2010–15), tariffs would be eliminated through linear cuts. Reductions would be based on the lower of applied rates as at 1 January 2000 or final Uruguay Round bound tariffs.

'Special and differential treatment' would be afforded developing countries. This would be achieved by members agreeing on modalities and a 'common vision' to provide customised approaches to ensure full developing country participation (WTO NGMA 2002e).

European Union

The European Community (EC) proposal is to compress tariffs into a 'flatter' range to eliminate peaks and escalation (WTO NGMA 2002b). It also suggests additional steps to compress disparities between tariff headings on products at different production stages (that is, raw materials, semi-processed goods and finished goods).

The EC supports larger tariffcuts on products of particular interest to developing and least developed countries – for example, bringing tariffs on textiles, clothing and footwear within a common narrow range as close to zero as possible. The proposal includes unilateral tariff elimination for all products from least developed countries, with particular attention given to reducing dispersion on products of main interest to developing countries. The EC also proposes that developed economies provide quota-free access for all products from least developed countries.

 $Tariff reductions \ are \ to \ be \ phased \ in \ gradually. \ Countries \ at \ different \ development \ stages$ might follow different time tables.

Key features of the proposals and their implications for East Asia

The key objective of the Doha Round is to improve market access for non-agricultural products while taking account of the special needs of developing economies. In their analysis of the Doha Round, François and Martin (2002b, p.1) observe that there are two desirable qualities for the

modalities selected. First, such an outcome should be based on modalities that would reduce barriers in all countries, ensuring a 'balanced exchange of concessions'; second, they should 'reduce relatively high barriers by more than lower barriers', so as to increase the size of the market access concessions exchanged and the economic benefits to importing countries.

Although the modalities proposed by members differ somewhat, an analysis of the specific formulae – especially those proposed by Japan, Korea, China, the United States and the EC – identified a substantial common ground. In particular, the proposed formulae all resemble top-down approaches, and will be able to tackle high tariffs, peaks and escalation, albeit with varying levels of success (WTO NGMA 2002a, Add.1).

The proposals provide the basic parameters in most cases, but not all give precise details on how they would operate. Issues such as the choice of base rates, bound versus applied tariffs, timing of reductions and developing member participation are raised but are to be negotiated. Decisions on these issues will have an important bearing on the effects of the Doha Round on East Asian economies, and on its success. As proposals are negotiated and refined, and new proposals advanced, it is important not to lose sight of the key goals. Excessive tinkering can be largely wasted effort and can distract from more important issues, such as ensuring economically desirable, across-the-board tariff reforms.

A comprehensive approach

Although the proposals broadly meet the Doha requirement for a comprehensive approach without a priori exclusions, there are some differences in the breadth of product coverage proposed, because of differences in the trading priorities of East Asian economies. Some proposals (for example, Japan's) call for formula approaches coupled with sectoral harmonisation in key areas such as textiles and clothing. Others call for differences in the breadth of coverage in order to take account of implications for developing economies. The decisions taken on exemptions will be vital to the success in cutting high tariffs and associated peaks and escalation. The more individual sectors are singled out for special treatment, the greater the scope for country-specific exemptions. This is likely to impede tariff reform.

Broad 'top-down' approach

A top-down approach to tariff reductions is the most economically efficient option and offers several advantages. An across-the-board approach that lowers higher tariffs proportionately more is the best alternative because it necessarily narrows tariff dispersion as well as the

average tariff. It therefore provides most market access and maximum liberalisation, because tariffs are cut most where they are likely to be the greatest barrier (that is, the highest rates are cut). The benefits of this approach therefore include reducing dispersion and effective protection in all sectors; overcoming power imbalances; and allowing simpler negotiating procedures.

The five key proposals – those of Japan, Korea, China, the United States and the EC – all call for a broadly top-down approach. However, there are substantial differences in the actual formulae suggested. The Korean and Japanese formulae focus on trade-weighted tariff averages. The US approach adopts a simple Swiss formula. The Chinese formula is similar to a Swiss formula but includes a variable factor, peak factors and other parameters to represent the year of implementation (WTO NGMA 2003b, p.2). The Chinese proposal also uses differential bases for countries according to stage of development.

The precise impact of these various formulae on a country's tariff structure will depend upon its initial regime. Thus, any full assessment requires the application of the various formulae to a country's bound and applied tariff rates to ascertain the change in applied duties. This is a time-consuming task. A far easier approach is to apply the various formulae to a hypothetical structure of tariffs, assuming implicitly that bound and applied rates are equal. The WTO Secretariat used a hypothetical tariff structure in its review of the formula proposals. This provides an indication of reduction paths in both percentage and absolute terms as well as some crude assessment of the impact of the proposed formulae on tariff disparities (Figures 1 and 2). The Secretariat's analysis noted that the key proposals would reduce higher tariffs more than lower rates, albeit through different specifications (WTO NGMA 2003b).

The US proposal is likely to result in the most dramatic cut to high tariffs (Figure 1). In the hypothetical schedule analysed in Table 4, an initial tariff of 60 per cent would be reduced to 7.1 per cent (88.2 per cent reduction). As can be seen in Table 5, the same rate under the Japanese approach would be reduced to 24 per cent (60 per cent reduction). The Chinese proposal would result in a corresponding reduction to either 20 per cent or 23 per cent, depending on the year of implementation. Korea's estimated reduction is to 24 per cent (61 per cent reduction). In other words, each proposed formula significantly reduces high tariff rates, especially the US proposal.

This reflects the basic configuration of the US formula around the Swiss formula, which is relatively simple and very effective at reducing high tariffs (especially if a maximum cap of an 8 per cent coefficient is applied). It can also be fine-tuned to provide the necessary flexibility to deal with developing country issues. The lower the coefficient (the maximum tariff cap), the

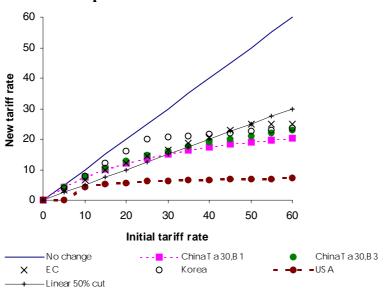


Figure 1 Impact on tariff rates of various line-by-line formulae on the hypothetical tariff profile

Notes: a The Chinese formula has a variable based on a tariff average of 30 per cent. To the extent that this may be different it will affect the outcome. B1 is an adjustment coefficient for the year of implementation, in this case 2015. B3 represents a year of implementation of 2010.

b The EC formula is not parameterised; the WTO has parameterised it for the analysis.

Source: Based on tables in WTO NGMA (2003b).

Table 4 Impact on tariff rates of various line-by-line formulae on the hypothetical tariff profile

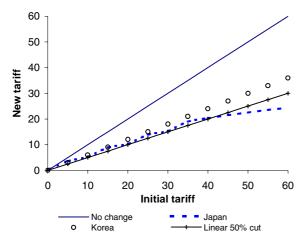
	ТО	Т1	Т2	ТЗ	Т4	Т5	Т6	Т7	Т8	Т9	T10	Т11	Т12
	10	11	12	13	14	10	10	17	16	19	110	111	112
Initial tariff	0	5	10	15	20	25	30	35	40	45	50	55	60
China Ta 30,B1a	0	4.3	7.6	10.1	12.2	13.8	15.2	16.4	17.5	18.3	19.1	19.8	20.4
China Ta 30,B3	0	4.4	7.7	10.4	12.7	14.6	16.2	17.7	18.9	20.1	21.1	22.1	23.0
European Union ^b	0	3.3	6.7	10.0	12.1	14.3	16.4	18.6	20.7	22.9	25.0	25.0	25.0
Korea	0	4.0	8.0	12.0	16.0	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5
USA	0	0.0	4.4	5.2	5.7	6.1	6.3	6.5	6.7	6.8	6.9	7.0	7.1
Linear 50% cut	0	2.5	5.0	7.5	10.0	12.5	15.0	17.5	20.0	22.5	25.0	27.5	30.0

Notes: a The Chinese formula has a variable based on a tariff average of 30 per cent. To the extent that this may be different it will affect the outcome. B1 is an adjustment coefficient for the year of implementation, in this case 2015. B3 represents a year of implementation of 2010.

b The EU formula is not parameterised; the WTO has parameterised it for the analysis.

Source: Based on Table 1 in WTO NGMA (2003b).

Figure 2 Applying different formulae to hypothetical trade-weighted averages: initial and final tariff rates, Japan and Korea (40% cut)



Source: Based on tables in WTO NGMA (2003b).

Table 5 Applying different formulae to hypothetical trade-weighted averages: initial and final tariff rates, Japan and Korea (40% cut)

	то	T1	T2	Т3	Т4	Т5	Т6	Т7	Т8	Т9	T10	T11	T12
Initial tariff	0	5	10	15	20	25	30	35	40	45	50	55	60
Japan	0.3	3.6	5.3	8.9	10.3	13.9	15.3	19.0	20.3	21.5	22.5	23.5	24.3
Korea	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0
Linear 50% cut	0.0	2.5	5.0	7.5	10.0	12.5	15.0	17.5	20.0	22.5	25.0	27.5	30.0

Source: Based on Table 3 in WTO NGMA (2003b).

more efficient the Swiss formula would be economically in reducing higher tariffs, peaks, escalation and dispersion. However, if the ceiling is set too low, it may be seen to be too restrictive, thereby limiting its success (Francois and Martin 2002b). Equally, however, if set too high, the price of gaining widespread acceptance could be high. This could happen if, as a result, tariff reforms were slowed down considerably and the economic benefits to reforming countries from improved resource-use efficiency delayed.

Applying the Swiss formula with a coefficient of 8 to the United States would reduce average tariffs from 5.9 per cent to 2.9 per cent. However, for a transition economy like Thailand, with a much higher initial average tariff of 24 per cent, the average would fall to 5.7 per cent, representing a very significant absolute and percentage reduction (Robertson 2002). Such a formula would affect East Asian economies differently, depending on the level of applied rates and the sector under consideration. For an economy like Japan, with relatively low tariffs, the percentage reduction would be less significant. Countries such as the Philippines and Thailand, which have higher tariff structures, would experience much larger reductions. Reducing high rates would improve economic efficiency, thereby facilitating growth. The main benefits of tariff reforms would accrue to these countries. Moreover, reductions in high tariffs would improve market access for Asian economies seeking to export to these countries.

Treatment of low and nuisance tariffs

The proposals contain different approaches to low tariffs. The United States suggests elimination of all duties below 5 per cent in the initial phase. The EU also suggests that tariffs below a negotiated floor should be eliminated. China believes that the treatment of low tariffs should be adapted according to stage of development. This position takes account of the revenue-raising function that low tariffs may play in developing economies. Overall, the proposals examined would cut an initial tariff of 10 per cent to between 4.5 per cent and 7.6 per cent, depending on the formula chosen.

Low tariffs can have small resource allocation implications in that they may attract resources from activities with lower rates of assistance. Thus, their removal may improve resource allocation and efficiency. Low tariffs also pose certain administrative costs in terms of monitoring and compliance. Thus, removing nuisance tariffs may be beneficial for efficiency and in reducing compliance costs. This could lead to additional benefits where goods can cross borders a number of times without being subject to an import tax. Developed economies tend to have a greater incidence of these low or nuisance tariffs. However, the counter-argument is that removing only low tariffs could in fact contribute to greater dispersion and higher effective rates of protection for already highly assisted activities, and could therefore reduce efficiency and national welfare. Moreover, the savings in transaction costs of scrapping low tariffs may not be as great as envisaged, given that customs operations will usually have to be maintained on affected products to collect consumption taxes such as value-added tax.

The resource implication of removing low nuisance tariffs is largely an empirical question that is likely to vary between countries, depending upon the tariff structure and the types of products covered by such duties. ¹² However, the efficiency effects of removing low tariffs alone will be uncertain. Therefore, the best means of ensuring that the removal of low nuisance tariffs will improve resource-use efficiency is to include them in a package of tariff reforms that also substantially reduces high tariffs. Removing low tariffs by themselves can be a risky strategy that, even if successful, is likely to produce only small increases in efficiency.

Use of initial tariff rates

The key proposals all use the initial tariff rates in the formula (WTO NGMA 2003b). Setting reductions dependent on the initial tariff rate can provide scope for them to achieve higher tariff reductions for higher rates and may allow some continuity with previously negotiated positions. The significance of this will depend on the size of the cut, the modality adopted and how proportionately it impacts on existing tariff levels for East Asian countries.

Cocktail approaches

Many of the proposals mention formula approaches with other initiatives, such as zero-for-zero approaches or request-offer approaches for particular sectors. Chinese Taipei prefers a cocktail approach, for example. Given the large number of countries participating in the Doha Round, it would be desirable to keep the approach as simple as possible and to avoid overly fragmented outcomes. A broad, comprehensive approach seems to have merit in terms of ensuring that countries perceive that they have been treated fairly and also in avoiding the continuation of significant dispersion brought about by high tariffs in most countries. Too many cocktails make it difficult to follow what is happening! The best alternative seems to be a well-negotiated formula with minimal exceptions applied consistently across members that can result in tangible tariff reductions.

Base rates

Choosing the base rate for the negotiations is also important. Assuming that the formula is to apply to the initial tariff, a consensus is needed on which schedule to use. Japan suggests using

bound rates based on the 2002 harmonised series. The Chinese formula has a differential approach to choosing the base rate, depending on the country's stage of development. This seems in practice to be quite problematic and may lead to further distortions. The US approach supports applying the formula to the lower of the bound rate or the applied rate. Each scenario would have major implications for the effectiveness of the formula applied and also for the extent of the reductions across members.

There is also the question of deciding what tariff averages to use in applying formula reductions. Traditionally, trade-weighted average tariffs are used, and several of the proposals refer to these. However, such averages can introduce an undesirable bias into the process by encouraging countries to reduce low to moderate tariffs, which have the biggest import weights, while leaving high tariffs, which have only low import weights. Thus, allowing countries to meet average tariff reductions based on import-weighted averages provides them with much more scope to meet commitments by lowering mainly relatively low tariffs. In the agricultural agreement, tariff negotiations are based on simple-average reductions, which would appear to be a more liberalising alternative to using import weights.

Binding coverage

Many proposals raised the extent of bindings as a critical issue for the Doha Round. These issues need to be addressed so that meaningful reductions in applied tariffs can be achieved. When countries impose formula cuts in bound tariffs, the lack of binding coverage and the widespread existence of ceiling bindings make it very difficult to determine the exact impact of reduced bound tariffs on applied rates. While the formula may provide sensible cuts in bound levels, this may result in very uneven cuts in applied tariffs. To the extent that bound rates have been set above applied rates, it seems useful to negotiate some upper limit on the extent to which these rates may differ.

Meeting the needs of developing countries

The Doha Declaration requires that negotiations take account of the special needs and interests of developing and least developed countries, including requiring them to make less than full reciprocity in commitments. The proposals generally acknowledge these issues, but take different approaches. These range from allowing greater time to achieve target reductions

through to special access arrangements for least developed countries. The Chinese proposal actually builds these considerations into the choice of the base rate.

Many East Asian economies are developing countries. For developing economies with distorted tariff structures, there are significant benefits in reducing high tariffs and dispersion. By improving resource allocation and efficiency, such tariff reforms can provide a vehicle for growth. However, developing countries may show resistance to major tariffcuts. Such resistance is generally mistakenly based on the view that tariff cuts are 'concessions' and a cost (when in fact they amount to sensible economic reforms); however, there is a widespread tendency for developing countries to support 'special and differential' treatment, and they are likely to insist on such treatment. The most appropriate means (that is, the least harmful economically) would be to provide longer phase-in periods for tariff reductions, rather than to reduce the depth of committed tariff cuts. If concessions in the timing of the reductions are still regarded as insufficient, minimal variations in the application of the formula reductions may be possible, but these should be kept to the barest minimum. While some commentators have argued for a flexible application of the Swiss formula (Francois and Martin 2002b), too much flexibility may also prove costly to developing economies. To the extent that developing economies already have higher rates of protection, the formulae do take account of their starting position (that is, their initial tariff rate).

Proposed draft elements of modalities for negotiations

A first draft of the 'modalities' paper for achieving the objectives of the Doha Round on industrial tariffs was released on 16 May 2003 by the Chairman of the NGMA (WTO NGMA 2003d). This paper aimed to expedite the process by which members would reach agreed positions on modalities, based on individual country proposals. It reflects formal and informal work undertaken by the NGMA. While the paper does not claim to represent an agreed position, it provides 'a set of basic elements for possible modalities, which will need to be adjusted, completed, refined, or further expanded on' (WTO NGMA 2003d, p.1).

The draft paper addresses several key elements, such as the choice of formula (including the selection of base rates and year), non-ad valorem duties, import data, sectoral tariff elimination, provisions for developing and least developed participants, treatment of newly acceded members and supplementary modalities.

Proposed formula

The NGMA proposes the application of a line-by-line reduction to base tariff rates using the following formula: 13

$$t_1 = \frac{B^* t_a^* t_o}{B^* t_a^* + t_o}$$

where \mathbf{t}_1 is the final rate, to be bound in ad valorem terms, \mathbf{t}_0 is the base rate, \mathbf{t}_a is the average of the base rates and B is a coefficient with a unique value to be determined by the participants.

The draft supports a broad 'top-down' approach but builds in some flexibility regarding the value of the adjustment coefficient B. This value is to be negotiated by members. These 'unknowns' make it difficult at this stage to analyse precisely the impact of this formula or to make comparisons with individual country proposals. The impact of the draft formula on tariff levels will depend largely on two factors: the value negotiated for the coefficient B and how the tariff average (t_a) is ultimately determined. These two issues are being widely discussed by member countries (WTO NGMA 2003e, p.1). Other important factors will include the extent to which members are allowed to negotiate special arrangements and the final choice of tariff lines to apply the formula to. The decision to allow newly acceded members a higher coefficient in the formula to take account of their substantial liberalisation from accession will need to be further analysed (WTO NGMA 2003d).

Some broad indications of the draft formula's impact on tariff structures can be gauged by using a hypothetical tariff schedule to explore the possible consequences of various tariff averages and B coefficients. The analysis conducted in this paper does this for a range of coefficients using a constant tariff average of 30 per cent; this is the average the WTO used in its hypothetical analysis of China's proposal and is followed here for consistency (Table 6 and Figure 3). The analysis also examines the implications of different tariff averages (10 and 50 per cent) while holding B constant. These are not meant to reflect real tariff rates; rather, they provide a hypothetical means of testing the implications on members with higher or lower tariff averages.

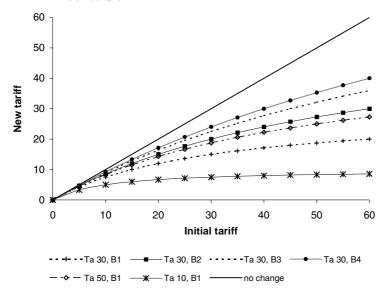
The analysis illustrates that including the member's tariff average and B coefficients in the formula increases its complexity and makes interpretation of likely impacts less certain than from the application of a simple Swiss formula such as the one proposed by the United

Table 6 Initial and final rates applying the NGMA proposed line-by-line formula to a hypothetical tariff schedule under various tariff averages and B coefficients

Initial tariff	0	5	10	15	20	25	30	35	40	45	50	55	60
Ta 30, B1	0.0	4.3	7.5	10.0	12.0	13.6	15.0	16.2	17.1	18.0	18.8	19.4	20.0
Ta 30, B2	0.0	4.6	8.6	12.0	15.0	17.6	20.0	22.1	24.0	25.7	27.3	28.7	30.0
Ta 30, B3	0.0	4.7	9.0	12.9	16.4	19.6	22.5	25.2	27.7	30.0	32.1	34.1	36.0
Ta 30, B4	0.0	4.8	9.2	13.3	17.1	20.7	24.0	27.1	30.0	32.7	35.3	37.7	40.0
For comparison													
Ta 50, B1	0.0	4.5	8.3	11.5	14.3	16.7	18.8	20.6	22.2	23.7	25.0	26.2	27.3
Ta 10, B1	0.0	3.3	5.0	6.0	6.7	7.1	7.5	7.8	8.0	8.2	8.3	8.5	8.6
No change	0	5	10	15	20	25	30	35	40	45	50	55	60

Source: Adapted from the draft 'modalities' formula in WTO NGMA (2003d). Hypothetical tariff profile only; Ta will vary with the 6-digit subheading and the members' tariff profile. The B coefficient is to be negotiated.

Figure 3 Applying the NGMA proposed line-by-line formula to a hypothetical tariff schedule



Source: Adapted from the draft 'modalities' formula in WTO NGMA (2003d). Hypothetical tariff profile only; Ta will vary with the 6-digit subheading and the member's tariff profile. The B coefficient is to be negotiated.

States. Any negotiated outcome on the value of the B coefficient also becomes more problematic. For a given initial tariff rate and constant value of B, a lower tariff average (for example, t_a = 10) will tend to result in a larger absolute tariff cut than a higher tariff average (for example, t_a = 50). For a given initial tariff, and holding the tariff average (ta) constant, higher B values generate smaller absolute tariff cuts. If the B coefficient is set at unity, the formula operates similarly to the US proposal, except that the average tariff acts as the ceiling. This is not strictly the case for higher levels of B.

The draft 'modalities' paper proposes that the tariff average be derived in two steps using the standard harmonised system (HS) nomenclature up to the six-digit subheading level to calculate (a) tariff averages for each non-agricultural HS six-digit subheading from the simple arithmetic average of ad valorem duties or ad valorem equivalents (AVEs) for each tariff line; and (b) simple tariff averages for each member from six-digit averages (WTO NGMA 2003d, p.3).

This significantly differs from the ceiling rate proposed by the United States. Decisions regarding the calculation of tariff averages and whether to use each member's tariff average in the calculation could lead to substantial variations in outcomes across members, and is therefore likely to detract from transparency and predictability.

Base rates

The NGMA draft proposal generally supports the application of the formula to members' bound tariff rates after full implementation of negotiated Uruguay Round reductions. For unbound tariffs, formula reductions are proposed to apply to double the applied MFN rate (WTO NGMA 2003d).

Using the bound tariff level as the base rate means that actual cuts in applied tariffs may be significantly 'watered down' for members with substantial ceiling bindings (that is, that there are large differences between applied and bound rates). For such countries, minimal changes in applied rates may result, unless the negotiated reductions based on bound rates are very large. This especially holds for unbound tariffs where the rate used for the formula reductions is to be twice the applied MFN rate. Thus, a substantial cut based on bound rates is needed, especially when, in practice, using bound rates is likely to lessen the degree of 'top-downwardness' on applied rates of any 'top-down' formula. Using bound rates also makes it more difficult to predict the effects of formula reductions on a county's applied tariff structure; therefore, an outcome based on larger 'top-down' cuts in bound tariffs is more likely to lead to economically sensible tariff reforms.

Sectoral tariffelimination

Problems with the proposed formula and the selection of base rates are overshadowed by the 'cocktail' approach adopted by the NGMA to combine formula reductions with a sectoral approach to eliminate tariffs and to bind rates on products of particular interest to developing and least developed members (WTO NGMA 2003d, p. 3).

Seven sectors are proposed for special treatment: electronics and electrical goods; fish and fish products; footwear; leather goods; motor vehicle parts and components; stones, gems and precious metals; and textiles and clothing. The reductions are envisaged to occur in three equal annual stages. Developed participants would eliminate tariffs at the end of the first stage. Other members would implement more lenient reductions to lower tariffs to a proposed level of not more than 10 per cent at the end of the first stage; to maintain this level in the second stage; and to eliminate tariffs at the end of the third stage (WTO NGMA 2003d).

The draft proposal incorporates a cocktail approach calling for certain sectoral reforms in generally sensitive areas. These reductions would be substantial and would improve market access for developing economies. They would also significantly benefit those East Asian members that faced tariff peaks on exports from identified sectors. It appears that in the first phase developed members would be required to eliminate tariffs in key sectors, along with other participants 'who so decide'. Other participants will have a longer period to adjust, but are to ultimately eliminate tariffs in identified sectors. If this could be achieved broadly, it would help address tariffs peaks and dispersion barriers. Any such success, however, would be undermined if sectoral reforms occurred in an ad hoc manner subject to extensive exclusions. A potential downside of the cocktail approach can be that it invites negotiation and debate over those sectors to be covered and the degree of market access.

Special provisions for developing and least developed countries

Longer implementation periods for developing countries are supported subject to certain limitations. Least developed countries would not be asked to make reduction commitments but would be required to significantly increase tariff bindings (WTO NGMA 2003d). Such special and differential provisions therefore allow slower tariff reductions and a maximum share of tariffs to remain unbound. However, it is highly dubious whether slowing down such tariff reforms is in the economic interests of developing countries. By doing so, developing countries are electing to forgo the unilateral gains of improved domestic economic efficiency, which are

likely to swamp any commercial gains associated with improved multilateral market access abroad.

The proposal recognises the importance of 'appropriate studies and capacity building' to allow least developed members to fully contribute to the negotiations. More specifically, it suggests that these members should identify critical issues and technical needs, and that the WTO Secretariat can help through its links with other international bodies.

Supplementary modalities

The NGMA recognised the need to further identify and examine non-tariff barriers. Various modalities, including request—offer and horizontal or vertical approaches, could then be used. Non-tariff barriers covered by other negotiating areas should be dealt with there, and progress reported to the NGMA (WTO NGMA 2003d). Non-tariff barriers remain at a preliminary stage.

Contingency measures

Trade remedies

Governments may use a range of trade measures to provide contingency protection if the need arises. These measures include the WTO Agreement on Safeguards and the WTO Anti-dumping Agreement. Because these trade-restrictive remedies are sanctioned by the WTO, they potentially have the disadvantage of being able to undermine trade liberalisation if they effectively become an alternative means of protection. Thus, if tariff reductions are to be effective, it is vital that anti-dumping and safeguard measures do not become increasingly used as a form of protection against competitive imports.

These agreements were modified during the Uruguay Round, partly to try and put some limits on the scope of their use. However, recent practice indicates that such changes, especially for anti-dumping, have been inadequate.

Anti-dumping measures

An examination of the use of anti-dumping since 1995 indicates that it has increased greatly, even though use is uneven across countries (Wooton and Zanardi 2002 and Table 7). The major players have also changed substantially. The traditional developed country users – the United

Table 7 Anti-dumping measures by importing country, 1 Jan 1995 to 30 June 2002

Importing country	1995	1996	1997	1998	1999	2000	2001	2002ª	Total
Argentina	13	20	11	12	9	16	15	17	113
Australia	1	1	1	7	6	5	10	5	36
Brazil	2	6	2	14	5	9	13	0	51
Canada	7	0	7	10	10	14	19	0	67
Chile	2	0	2	2	0	0	0	0	6
China PR	0	0	0	0	0	0	0	5	5
Chinese Taipei	0	0	0	0	0	0	0	0	0
Colombia	1	1	1	0	6	2	0	0	11
Czech Republic	0	0	0	0	0	1	0	0	1
Egypt	0	0	0	5	13	0	0	1	19
European Community	14	17	18	25	18	41	13	14	160
Guatemala	0	0	1	0	0	0	0	0	1
India	7	2	8	22	22	57	38	21	177
Indonesia	0	0	4	2	7	0	1	0	14
Israel	1	0	0	6	4	0	1	0	12
Jamaica	0	0	0	0	0	0	1	1	2
Japan	1	0	0	0	0	0	0	0	1
Republic of Korea	0	5	10	8	0	5	0	1	29
Malaysia	0	2	2	4	1	1	0	1	11
Mexico	16	4	7	7	7	7	3	1	52
New Zealand	3	4	0	1	0	1	2	0	11
Nicaragua	0	0	0	0	1	0	0	0	1
Paraguay	0	0	0	0	1	0	0	0	1
Peru	2	1	2	0	3	4	1	3	16
Philippines	0	2	0	1	2	3	0	0	8
Poland	0	0	0	1	0	6	0	0	7
Singapore	2	0	0	0	0	0	0	0	2
South Africa	0	8	18	14	34	13	5	8	100
Thailand	0	0	1	2	0	0	0	0	3
Trinidad and Tobago	0	0	0	2	0	1	2	0	5
Turkey	11	0	0	0	1	8	2	8	30
United States	33	11	20	16	24	32	33	16	185
Uruguay	0	0	0	1	0	0	0	0	1
Venezuela	2	0	4	0	8	9	0	0	23
Total	118	84	119	162	182	235	159	102	1161

Note: a Figures for 2002 are only for the first six months.

Source: WTO (2003), accessed on 11 February 2003.

States, the EC, Canada and Australia – are no longer the only ones to target developing countries. Developing countries are becoming heavy users, often against each other. From 1995 to 2002, India was the heaviest user among developing countries, with a total of 177 measures.

Use of anti-dumping measures by East Asian countries varies significantly. For example, Korea has used anti-dumping measures 29 times since 1995, while Japan has used them sparingly. Initiations of anti-dumping procedures are even higher (WTO 2001a, p.22). Moreover, initiations are being increasingly launched by developing and transition economies. China, for example, imposed 17 anti-dumping measures between mid-1999 and 2002, and had 42 initiations in train as of November 2002 (Whitwell 2003, p.3). Increased use of anti-dumping measures followed a period when many WTO members introduced such legislation; evidence suggests that it tends to be used once introduced.

East Asian economies also faced many anti-dumping measures against their exports (Table 8). Between 1995 and mid-2002, 196 measures were applied against Chinese exports. Korea faced 74 actions over the same period and Japan 61 (see WTO 2003). Given the number of actions taken against key East Asian economies, it is clear that decisions taken in the Doha Round could have major implications for market access for exports from these economies. A danger with these measures being taken against exports from East Asian countries such as China is that there may be a temptation for affected countries, in turn, to make greater use of these provisions.

There is considerable evidence to suggest that increased use of anti-dumping provisions is closely related to reduced tariff rates and also to retaliatory (tit-for-tat) motives (Wooton and Zanardi 2002). Indeed, some major traders, such as the United States, have argued in the past that anti-dumping relief is needed to assist governments to undergo further trade liberalisation and to maintain the multilateral trading system. Such arguments are misdirected: this is not the role of anti-dumping; it is the role of safeguards.

The evidence overwhelmingly suggests that anti-dumping action is increasingly being seen as a 'sanctioned' multilateral measure of protection. If correct, and allowed to continue, anti-dumping measures could threaten the multilateral liberalisation efforts of WTO members. While the WTO does not insist that countries use anti-dumping action, many members have been quick to seize the opportunity such measures present to assist domestic producers.

Anti-dumping in the current round

Despite opposition, especially from the United States, the Doha agenda included 'clarifying and improving' anti-dumping rules but also included 'preserving the basic concepts, principles and effectiveness' of anti-dumping.

 Table 8
 Anti-dumping measures by exporting country, 1 Jan 1995 to 30 June 2002

Exporting country	1995	1996	1997	1998	1999	2000	2001	2002ª	Tota
Algeria	0	0	0	0	0	1	0	0	1
Argentina	3	0	0	0	1	1	3	0	8
Australia	0	0	0	1	2	2	0	0	5
Austria	1	0	0	3	0	2	0	0	6
Bangladesh	0	0	0	0	0	0	1	0	1
Belarus	0	1	0	0	0	3	1	1	6
Belgium	0	1	0	3	5	0	0	0	9
Bosnia Herzegovina	0	1	0	0	0	0	0	0	1
Brazil	9	10	6	5	5	8	2	2	47
Bulgaria	1	0	1	0	2	1	1	1	7
Canada	1	0	0	2	1	0	0	1	5
Chile	0	1	1	3	0	0	4	2	11
China PR	26	15	33	24	20	30	30	18	196
Chinese Taipei	$\overset{-\circ}{2}$	2	6	11	7	18	9	8	63
Colombia	1	0	0	0	1	0	0	0	2
Croatia	0	$\overset{\circ}{2}$	0	0	0	1	0	1	4
Cuba	0	0	0	0	0	1	0	0	1
Czech Republic	1	1	1	0	1	4	1	1	10
Denmark	1	0	0	1	0	1	1	0	4
Dominican Republic	0	0	0	0	0	0	0	1	1
Ecuador	1	0	0	0	0	0	0	0	1
	0	0	1	0	$\frac{0}{2}$	0	0	0	3
Egypt			0			0			$\frac{3}{2}$
Estonia	0 0	0	1	$0 \\ 1$	$\frac{1}{4}$	5	0 8	1 1	$\frac{2}{20}$
European Community									
Finland	0	0	0	0	1	2	0	0	3
France	1	1	2	4	7	3	4	1	23
Germany	4	2	2	6	5	6	1	3	29
Greece	0	0	0	2	0	0	0	0	2
Honduras	0	0	0	0	1	0	0	0	1
Hong Kong	0	3	1	1	1	1	1	1	9
Hungary	0	1	0	0	2	2	0	0	5
India	4	1	5	6	9	7	6	4	42
Indonesia	0	2	4	5	4	11	5	6	37
Iran	0	0	0	0	0	1	2	0	3
freland	0	0	0	0	2	0	0	0	2
Israel	1	0	0	0	0	0	1	0	2
Italy	2	2	1	6	5	1	2	3	22
Japan	5	6	5	7	10	19	8	1	61
Kazakstan	0	0	2	2	4	0	1	2	11
Korea, Republic	4	5	3	12	13	21	12	4	74
Latvia	0	0	0	1	1	0	2	0	4
Libya	0	0	0	0	0	0	0	1	1
Liechtenstein	0	0	1	0	0	0	0	0	1
Lithuania	0	0	0	0	1	1	0	1	3
Macedonia	0	1	0	Õ	1	0	1	0	3
Malawi	0	0	0	0	0	0	1	0	1
Malaysia	3	$\overset{0}{2}$	$^{0}_{2}$	4	$\overset{0}{2}$	4	1	$\overset{0}{2}$	20
Mexico	0	$\frac{2}{2}$	3	1	3	4	1	1	15
Moldova	1	0	0	0	0	0	2	0	3

N 1	0	0	0	0	0	0	0	-	-
Nepal Netherlands	$0 \\ 2$	0	$0 \\ 1$	$0 \\ 1$	$0 \\ 1$	$0 \\ 3$	$0 \\ 1$	$rac{1}{2}$	1 11
New Zealand	0	0	0	1	0	0	1	0	2
	0	0	1	0	0	0	0	0	1
Norway Oman	0	0	0	0	0	0	0	1	1
Oman Pakistan	-	0		0		0	1	0	$\frac{1}{2}$
	1 1	0	0	0	$0 \\ 1$	0	0	0	$\frac{2}{2}$
Paraguay							0		
Philippines	0	0	0	0	0	1	-	0	1
Poland	1	1	3	1	4	2	4	0	16
Portugal	0	0	1	1	1	0	0	0	3
Romania	2	1	1	2	2	4	1	2	15
Russia	8	2	9	4	15	9	6	1	54
Saudi Arabia	0	0	0	0	1	1	1	1	4
Singapore	0	0	0	3	0	3	0	3	9
Slovak Republic	0	0	1	0	2	1	0	2	6
Slovenia	0	1	0	0	0	0	0	0	1
South Africa	2	3	2	2	3	4	3	3	22
Spain	3	0	0	4	4	3	3	1	18
Sweden	0	0	0	3	1	1	0	0	5
Thailand	5	7	2	5	1	13	7	4	44
Trinidad and Tobago	0	0	1	1	0	0	0	0	2
Turkey	1	1	1	2	4	3	3	1	16
Ukraine	5	0	3	5	7	8	6	3	37
United Arab Emirates	0	0	0	0	0	0	1	1	2
United Kingdom	3	0	2	3	3	1	2	2	16
United States	8	4	9	11	8	13	4	5	62
Uruguay	0	0	0	0	0	0	1	0	1
Venezuela	4	1	0	1	0	2	0	1	9
Viet Nam	0	0	0	1	0	1	1	0	3
Yugoslavia	0	1	0	0	0	1	1	0	3
Zimbabwe	0	0	1	0	0	0	0	0	1
Total	118	84	119	162	182	235	159	$10\overline{2}$	1161

Note: a The figures for 2002 are only for the first six months.

Source: WTO (2003), accessed on 11 February 2003.

It is hard to dispute that tighter rules are needed to curb anti-dumping misuse. In the current arrangements, there is a mismatch between the intention of the anti-dumping rules and their application. Lindsey and Ikenson (2002) found that anti-dumping measures are not restricted to 'unfair' trade but instead tend to be imposed on exports that are part of normal commercial trade. This study of the US situation found that stiff anti-dumping duties were routinely imposed against foreign firms that are engaged in perfectly normal and unexceptional commercial practices, and that the root of the problem was serious flaws in the current rules for conducting anti-dumping investigations. These flaws mean that in practice there is very little connection between the stated objectives of anti-dumping policy and the actual effects of anti-dumping actions (Lindsey and Ikenson 2002, p.3).

It will be difficult to make significant changes to tighten the misuse of anti-dumping provisions, especially given the United States' clear support for existing arrangements and opposition to major changes that would provide for tighter controls on use. In an attempt to strengthen their impact on reforming anti-dumping provisions, several WTO members – including the East Asian economies of Hong Kong, China, Japan, Korea, Singapore, Chinese Taipei and Thailand – have grouped to form the 'Friends of Anti-Dumping. ¹⁶ The group has presented several papers to the WTO suggesting the need to tighten the rules for invoking anti-dumping action, including the reduction of administrative discretion in a number of areas, public interest provisions and more effective sunset provisions aimed at preventing continual use of such action. Members have also raised issues to do with special and differential treatment for developing countries; treatment of confidential information; improved transparency and procedures; and circumvention.

Other countries, including East Asian economies, should be encouraged to join the group to push for tighter controls on anti-dumping. Without such controls, anti-dumping will continue to be one of the major risks to the multilateral system and to undermine moves for greater market access through further tariff reductions. Both China and Chinese Taipei are likely to be critical players in future reforms. These countries are new WTO members that have experienced heavy anti-dumping action on their exports; it will be interesting to see whether they are going to push for anti-dumping reforms within the WTO to safeguard their export interests, or whether they will themselves become major users of anti-dumping measures to protect import substitution industries at home.

A major problem with the anti-dumping provisions is that they are so fundamentally flawed that it is difficult to see how rule changes themselves will sufficiently overhaul the system. For example, the definition of anti-dumping – exporting at a price below the domestic (normal value) level – has no economic sense. However, major changes appear to be outside the scope of the Doha Round. This suggests that any negotiated rule changes will need to be substantial if they are to prevent misuse by members. In this context, two fundamental changes could be supported by East Asian economies. The first is to make the five-year sunset provisions introduced in the Uruguay Round effective. At the moment, the provisions have been very ineffective in phasing out anti-dumping measures in many countries, such as the United States (Lindsey and Ikenson 2002, p.35). The second is to introduce a public interest clause to remove the bias in the anti-dumping provisions towards the interests of producers of concerned products. This would allow governments to consider other parties, including downstream producers and

consumers, who can be harmed by anti-dumping action. Changing the rules to remove the emphasis from normal values being determined based on average costs to marginal costs would also help restrict the use of anti-dumping measures largely as a protectionist tool.

Safeguards

Article XIX of the GATT was reworked as part of the Uruguay Round (the WTO Safeguard Agreement). Despite these changes, safeguard provisions remain relatively underutilised when compared with anti-dumping provisions. Only 20 safeguard actions were undertaken in the first five years of the Safeguard Agreement (Bown 2002). This represents only a fraction of anti-dumping initiations over the same period. Countries seem to be increasingly using anti-dumping provisions instead of safeguards, probably because they are easier to invoke (for example, because they have tended to have a less onerous definition of 'material' rather than 'serious' injury) and can more effectively target offending world exporters by picking off emerging competitive suppliers. According to Bown (2002) the low rate of usage of these provisions is also influenced by the fact that this agreement has compensation requirements (under the new agreement these can be waived over the first three years). Under existing dispute settlement procedures, the compensation provisions also create difficulties. These have tended to make anti-dumping measures that are certain to result in a formal trade dispute preferable to utilisation of the safeguard provisions (Bown 2002, p.4).

The choice of anti-dumping provisions over safeguards has a number of negative implications. The reluctance to employ safeguard provisions has meant that there is greater resort to 'unfair trade' rules as opposed to 'fair trade' rules. Furthermore, price undertakings used as part of an anti-dumping investigation can have welfare implications similar to those of voluntary export restraints (Bown 2002). Thus, redressing the imbalance between anti-dumping and safeguards use by primarily tightening the anti-dumping rules will be an important outcome for Doha Round.

Conclusion

The Doha Round of negotiations has a challenging task ahead of it to improve market access in industrial products through comprehensive tariff reductions. Such reforms are made even more difficult by the fact that earlier rounds have made good progress in rationalising tariffs, thereby

leaving only the more sensitive and politically difficult products to be dealt with in many countries. Nevertheless, significant tariff reforms are an integral part of the current negotiations, and need to be addressed in ways that will lead to sensible economic outcomes by reducing tariff levels to ensure that dispersion in rates is narrowed substantially, and not increased. And this must be done in a way that embraces developing and least developed economies by meeting their development needs. To ensure that the benefits of such tariff reforms are realised and to maintain the multilateral system's credibility, anti-dumping provisions must be tightened to control their proliferating misuse by governments to protect domestic industries facing increased competitive pressures from imports following tariff reductions.

Formula tariff reductions are the favoured approach toward addressing these issues. Several proposals have already been tabled in Geneva, and the draft 'modalities' paper recently released by the NGMA recommends such an approach. Such approaches are desirable because they can be applied comprehensively with few exceptions and in a way that ensures sensible economic outcomes – provided, of course, the adopted formula is itself rational economically. Tariff reform is not simply about cutting tariffs; negotiating rates by request–offer or on a zero-for-zero basis seriously risks the creation of a more distorting tariff structure for members and a reduction in welfare. An inappropriate formula, such as cutting lower tariffs most, would also be economically undesirable.

It is encouraging that the formulae so far proposed tend to acknowledge the economic need for a 'top-down' approach, although their methodology varies – for example, in the degree of 'top-downwardness', the treatment of low level tariffs and the base rates used to apply the reductions. The precise modalities used will have different implications for the East Asian economies, depending on the base rates selected, the treatment of specific tariffs, the selection of tradeweighted approaches as opposed to Swiss style alternatives, or flexible variations of these approaches.

Despite such differences and their varying stages of development, it would be in the best economic interests of East Asian economies to adopt a common strategy in the current negotiations that would support substantial, comprehensive, across-the-board tariff reductions using a formula approach to reduce tariff disparities by lowering higher duties most. While individual parameters and the formula itself will be negotiated outcomes, the emphasis should remain on implementing 'top-down' tariff reductions. In this regard, the US proposal based on the Swiss formula with a tariff ceiling of 8 per cent is by far the best. This has advantages over the formula more recently proposed by the NGMA, as its impact is more transparent, simple

and predictable. At this stage, it is difficult to precisely assess the impact of the NGMA formula on tariff structures. Its success in cutting tariffs and reforming a country's tariff structure in economically sensible ways depends largely on how it is to be applied and on the adoption of certain parameters, such as tariff averages and B coefficient values. These remain unknowns at this stage, yet to be negotiated. If the proposed formula is to be adopted by members, future negotiations should focus on ensuring that its application will generate substantial 'top-down' tariff reductions.

East Asian economies would benefit from such a liberalising outcome in several ways. First and foremost, the outcome would reform their tariff structures, thereby improving economic efficiency and export competitiveness. Secondly, it would ensure much greater market access for their exporters, in products of most interest to them, including processed industrial goods, by substantially reducing tariff dispersion.

East Asian economies should be primarily focused on achieving multilateral outcomes that serve their export interests rather than on protecting inefficient domestic industries. A substantive 'top-down' formula approach to multilateral tariff reductions would also help APEC East Asian economies to meet their voluntary targets of 'free and open trade and investment' by 2010 or 2020, and would dovetail best with any additional unilateral tariff reductions.

However, substantial tariff reductions must be accompanied by significant reforms to WTO anti-dumping provisions. Liberalising trade by cutting tariffs will serve little purpose if countries increasingly use anti-dumping measures as a 'sanctioned' means to restrict trade. Anti-dumping use is significant amongst both developed and developing economies. Resort to anti-dumping provisions not only threatens the credibility of the multilateral trading system, but also will harm the export interests of East Asian economies. Their best response is therefore not to embrace anti-dumping measures – though, unfortunately, some developing economies are already doing this, and hurting themselves – but to strengthen the multilateral rules to curb misuse. Shifting the entrenched negotiating positions of some major WTO members, especially the United States, which continues to widely use anti-dumping measures as a form of protection, will not be easy. However, within the WTO negotiations, East Asian economies, through individual efforts and as part of the group 'Friends on Anti-dumping', need to insist on anti-dumping reforms as part of a package that delivers substantial formula tariff reductions. Such an outcome on industrial products would be a win–win outcome for all East Asian economies, irrespective of their stage of development.

Appendix A Summary of the five key proposals

Country	US (TN/MA/W/18)	EU (TN/MA/W/11)	Japan (TN/MA/W/15)	China (TN/MA/W/20)	Korea (TN/MA/W/6 and Add.1)
Approach	Comprehensive: no exclusions. Participation of all WTO members.	• The mechanism shall apply without sheltering any sector.	· Comprehensive approach with no a priori exclusions. · Seek overall balance in the outcome of negotiations · Situation surrounding individual products to be considered.	Balancing interests of WTO members at various stages of development.	Comprehensive approach based on key principles. Balance of benefits between developing and developed economies. Transparency. Convergence of tariff structures. Consideration of stages of development.
Tariff measures	Two-phase approach Initial phase (2005–10) Elimination of tarifis for all products with tariffs or valorem. Harmonising Swiss no for all tariffs above 5%. No later than 2010: elimination of tariffs in the Uruguay Round zero-for-zero sectors in addition to tariffs covered by the Information Technology Agreement and the Agreement of ciril Aircraft. Elimination, as agreed by members, of tariffs on wood products, non-ferrous metals, bicycle parts, certain chemicals and allied products. Second phase By 2015, eliminate all remaining tariffs through linear cuts.	or The mechanism must include labour-intensive manufactures. Or Deeper cuts for textiles, clothing and footwear, with a view to bringing these tariffs within a narrow common range as close to zero as possible.	weighted average target tariff formula contributing to harmonisation. Zero for zero or harmonisation for chemicals, textiles and clothing and motor vehicles. Zero for zero or harmonisation for chemicals, textiles and clothing and motor vehicles. Zero for zero or harmonisation is also suggested for consumer electrical products, bicycles, rubber, glass, ceramic products, cameras, watches, toys, electrical machinery parts, and titanium. Other applications to be be negotiated.	Uniform formula for tariff reduction. Sector approach supplementing the formula approach.	weighted average tariff by 40%. National average bound tariff for each product shall be reduced by 20%. Bound tariffs above 25% or two times the national average tariff shall be reduced further according to a formula. High rates remaining will be subject to even further reductions as determined by member.

· Minimum 20% reduction.	Recognises problem. Staged formula.	. Least developed countries required to increase their binding ratio.	Final bound rates agreed at Uruguay. Base rates for unbound tariff lines shall be the year 2001. H applied rates for the year 2001. HS 96.	· Implementation period for tariff reductions should be 5 years. · For developing countries 7 years. · Members to make equal annual cuts.
Developed countries to eliminate all low tariffs Developing countries free to maintain low levels since these may be important for revenue.	Defines tariff peak as three times more than the simple average tariff. Concrete steps need to be taken by members with tariff peaks and tariff escalation.	All members shall bind . their tariffs after reduction. Developing: more flexible timing. Least developed countries: flexible arrangement	Differential approach. Developed country: applied rates in 2000. Eveloping country: imple average of applied trates in 2000 and final bound rates committed. In Uruguay. Acceding country, simple average of applied rates in 2000 and final bound rates committed in uruguay.	Longer implementation period for developing country members.
	Tariff peaks and escalations should be rectified by zero-for-zero or harmonisation approaches.	Improve binding ratio (i.e. ratio of bound tariffs against all tariff lines).	In principle bound rates based on HS 2002 version. Varions of subdivations under HS subheadings.	Staging may be 5 years with equal instalments recognising that implementation periods begin in 2005. Longer than 5 years should be allowed for developing countries that implement deeper than average cuts.
 All tariffs beneath a specific negotiated floor to be eliminated. 	the Swiss formula. • Compressing formula. •	Substantial increase in the scope of bindings.		Gradual phasing in of commitments. Developed, developing and least developed countries might follow different timetables for the implementation of their tariff commitments.
• Elimination by 2010 of all tariffs at or below 5% ad valorem.	· Use of the Swiss formula.	• Members should bind all tariff lines and should maximise the use of ad valorem rates.	• Reductions should be based on applied rates as at 1 January 2000 or Uruguay Round final bound levels, whichever are lower.	. Elimination of duties by 2015.
Elimination of nuisance duties	Tariff peaks, tariff escalation and high tariffs	Bindings	Base rates	Timing

Sources. See Boy 1

Notes

Kate Flowers was until recently an associate lecturer in the School of Economics and Marketing at the University of Canberra. Malcolm Bosworth is a visiting fellow in the Asia Pacific School of Economics and Government at the Australian National University.

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- These are just a subset of the issues raised. A WTO Secretariat review of the various proposals (WTO NGMA 2003a) noted that to date 18 key issues had been raised in the proposals, not including those relating to the environment and non-tariff barriers.
- The proposals are somewhat of a moving feast as members present new proposals and refine existing ones. They also vary significantly in their coverage of modalities for improved market access and in the level of detail given. The Doha Work Programme called for a common understanding on a possible outline of modalities by the end of March 2003 with a view to reaching an agreement on those modalities by 31 May 2003.
- However, within the WTO context the additional benefits to all countries of pursuing multilateral liberalisation through reciprocity is often 'corrupted' in practice and mistakenly interpreted to mean that 'I will only liberalise if you do.' Moreover, the number of practical cases where countries have successfully benefited from imposing trade barriers to improve their terms of trade are scarce, and thus is hardly a good basis for setting protectionist policies. Experience suggests that governments following such policies are far more likely to get it wrong than right. The same applies to countries imposing export controls in the hope of capturing terms of trade effects on exports. Although such gains are tempting, there have been very few, if any, successes despite being widely tried; they have ended up doing great damage to the industry concerned and the country's economic interests.
- A very useful measure available for assessing the likely impact of tariff changes on economic efficiency is the effective rate of assistance (Greenaway and Milner 2003). Tariff changes that reduce effective rates for more highly assisted activities are economically preferable since these will reduce the incentives for resources to be misallocated away from less assisted activities. Reductions of low tariffs, especially on inputs, leaves higher tariffs relatively unchanged but are likely to widen tariff disparities and increase already relatively high effective rates of assistance, and therefore reduce rather than increase economic efficiency.
- 5 See Hoekman (2001) for a full discussion of these issues.
- 6 The following analysis is largely based on data provided by Bacchetta and Bora (2001).
- The work program also states that, in accordance with relevant sections of the Doha Declaration, special and differential treatment for developing and least developed countries is to be an integral part of all elements of the Doha negotiations (paragraph 4).
- 8 The WTO Secretariat reviewed the key formula proposals suggested by Japan, Korea, China, the EU and the United States. This paper also concentrates on the proposals from these countries.

- The formula listed in the original proposal was ambiguous, and a subsequent corrigendum did little to clarify the situation. The formula given in this paper comes from Japan's MITI website at http://www.meti.go.jp/policy/trade_policy/wto/wto_db/html/ma.nonag_pro0211e.html.
- The simple average of the base reates variable A in the Chinese equation is commonly referred to as t_a . The WTO in its initial analysis of the Chinese proposal assumed a t_a of 30.
- 11 These results need to be interpreted carefully as this formula includes an average tariff measure.
- The Productivity Commission noted, for example, that removal of such low tariffs in Australia 'would result in a small permanent increase in overall community welfare' (Productivity Commission 2000).
- 13 WTO NGMA (2003d).
- The draft paper recommends that non-ad valorem tariffs be converted to ad valorem equivalents, that the negotiations initially adopt the harmonised system (HS) 1996 nomenclature and be finalised in HS 2002. It also proposes using a reference period between 1999 and 2001 to overcome annual fluctuations in import data (WTO NGMA 2003d).
- The general trend has been to increase over time. However, recent data for the period 1 July 2002 to 31 December 2002 indicate a significant decline in use when compared to the same period in 2001. Despite this improvement, 17 members in this period initiated 149 anti-dumping investigations against exports from 43 countries (<www.wto.org/english/news_e/pres03_e/pr339_e.htm>). Despite such recent cyclical downturns in the use of anti-dumping measures, reforms are still badly needed if market access is to be substantially improved on a predictable and sustainable basis for industrial goods.
- This name would seem to misleadingly suggest that the group is in favour of current antidumping arrangements.

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