

TRADE LIBERALIZATION IN MANUFACTURES: WHAT IS LEFT AFTER THE DOHA ROUND?

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I. INTRODUCTION

The assigned title for this paper turns out to be optimistic. When this conference was conceived, many believed that the Doha Round would be further down the road to completion than is the case today. We have yet to establish the key "modalities" that will determine the results of the Doha negotiations in trade in manufactures, commonly referred to as the Non-Agriculture Market Access (NAMA) negotiations. Nevertheless, we know a good deal about the parameters that will shape the results. The debate so far around those parameters offers insights into the underlying economic and political economy implications of various negotiating options.

The paper is divided into four more parts. The next section will present a brief account of the history of trade liberalization on manufactures over the six decades since the General Agreement on Tariffs and Trade (GATT) came into force, and discuss some of the issues that have arisen over the years. It will consider in particular how various aspect of the underlying ethos and principles of GATT/World Trade Organization (WTO) negotiations, along with high variance in the development levels and priorities of the institution's membership, have influenced outcomes.

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The third section will provide an introductory analysis of the basic negotiating methods that have been used in GATT and WTO tariff negotiations, including request–offer, formula approaches and sectoral arrangements. We will analyze each of these in terms of the use to which they have been put and their differing economic and policy implications.

The fourth section will discuss the progress of the Doha negotiations in NAMA. It will focus in particular on the key issues that have emerged, including the adoption of a formula approach, the design of the formula and the differing degrees to which the formula will apply to various developing country categories that have been created. The fifth and final section will conclude.

II. A BRIEF HISTORY OF TARIFF NEGOTIATION ISSUES IN GATT/WTO

Trade liberalization is a basic objective of the GATT/WTO, along with rule–making, dispute settlement and the provision of transparency. The trade liberalization objective is reflected in the preambles to the GATT and the WTO Agreement, along with various provisions for negotiating, re–negotiating and consolidating or binding committed levels of market access.

From 1947 to 1994, eight rounds of multilateral negotiations took place, in which the reduction of trade barriers played an important role.¹ From the Kennedy Round (1964–67) onwards the negotiating rounds also addressed non–tariff measures and rules–related issues, but before that they had been exclusively focused on tariff reductions. Moreover, up until the Uruguay Round (1986–95), the tariff negotiations had only been concerned with manufactured products – agriculture protection was not successfully addressed until that time.² Following the creation of the

¹ For a comprehensive account of the history of market access negotiations in the GATT/WTO, see the *World Trade Report 2007*, pp. 201–260.

² Proposals were made to address the special situation of agricultural products as early as the Dillon Round (1960–1961). The issue was also raised in the Kennedy and Tokyo Rounds, but these discussions did not bear fruit. See TN/MA/S/13.

WTO in 1995, the Doha Round was launched in 2001, and as noted above, these negotiations continue.

Prior to the first GATT tariff negotiations, the results of which were incorporated in the original GATT, developed country tariffs on industrial products averaged some 20 percent to 30 percent.³ Today, the trade-weighted average tariff in industrial countries is around 4 percent on all products, and somewhat less in the case of industrial products alone. Table 1 shows how industrial tariffs came down in developed countries during the GATT years. The fact that GATT presided over this steady and impressive decline in industrial tariffs through successive negotiating rounds, over five decades, is no doubt the institution's most significant claim to credit as a vehicle for trade liberalization.

Table 1. GATT/WTO – 60 Years of Tariff Reductions (MFN tariff reduction of industrial countries for industrial products (excl. petroleum))

Implementation Period	Round Covered	Weighted tariff reduction	Weights based on MFN imports (year)
1948	Geneva (1947)	-26	1939
1959	Annecy (1949)	-3	1947
1952	Torquay (1959-51)	-4	1949
1956-58	Geneva (1955-56)	-3	1954
1962-64	Dillon Round (1961-62)	-4	1960
1968-72	Kennedy Round (1964-67)	-38	1964
1980-87	Tokyo Round (1973-79)	-33	1977 (or 1976)
1995-99	Uruguay Round (1986-94)	-38	1988 (or 1989)

Source: WTO World Trade Report 2007, Table 5, p. 207

Note: Tariff reductions for the first five rounds refer to the United States only. The calculation of average rates of reductions are weighted by MFN import values.

³ Non-tariff barriers (NTBs) to trade were ubiquitous in the early GATT years, and these were brought down over time. The incidence of NTBs remains an issue today, including on the Doha negotiations, but this is not an issue taken up in the present paper.

At least up until the prospective results from the Doha Round (Section IV), this record of trade liberalization was attenuated by the fact that progress was uneven across products. GATT/WTO negotiations typically focus on nominal tariffs, and so in the absence of the kind of non-linear formula approach to tariff reductions explained in Section III below, no mechanism exists to match reductions in nominal rates with reductions in the spread, or variance, of the tariff structure. Tariff peaks and tariff escalation along product chains have remained a feature of industrial country tariff structures. This has had the effect of encouraging trade in primary products relative to trade in the same products in more elaborated form. The phenomenon has most impacted developing country exports to developed countries and arguably contributed to slower progress in product diversification and industrialization in developing countries. Doubtless other factors of domestic provenance have also slowed the development process, but the issue has remained prominent in the GATT/WTO context. On the other hand, several developing countries have tried to imitate the approach and it is, therefore, frequent to find tariff escalation in the applied duties of these Members.

As far as developing countries are concerned, progress in liberalizing trade within the framework of the GATT/WTO has been far less prominent, except for developing countries that have acceded in recent years, where more far-reaching tariff commitments have been made. Many developing countries have liberalized their tariff regimes considerably in the last two or three decades, but they have preferred to do so unilaterally or within the framework of regional trade agreements. The reasons for this are discussed further below. In considering developing country participation in GATT/WTO tariff negotiations, the distinction between bound and applied tariffs is important. Unlike in regional trade agreements, where this distinction is moot except possibly in relation to the phasing in of commitments over time, negotiations under the GATT/WTO focus on bound rates – where legal maxima are established – and bound rates are often much higher than

applied rates in the case of developing countries.⁴ This obviously has implications for the degree of real market access that trading partners acquire in one another's markets as a result of a multilateral tariff negotiation.

Developing countries played a relatively small role in GATT negotiations in the early years, and really only engaged significantly in making market access commitments during the Uruguay Round. This limited engagement was the result of a number of factors that we will consider below, but worth mentioning here is a provision in the GATT – Article XXVI:5(c) – which allowed for the succession as opposed to accession of former colonies and dependencies of developed country GATT contracting parties. Under this procedure, the former colonial power could certify that the nation in question had been observing the GATT under its previous status, and this then translated into normal GATT membership. Most of the eligible parties took up the option, with the result that they were not obliged to negotiate tariff commitments in the way that accession countries are obliged to do. In fact, 23 Contracting Parties to the GATT did not have a Schedule of Concessions.⁵ This clearly lessened the scope of developing country market access commitments from the outset.

In the Uruguay Round, many developing countries increased the range of their bindings significantly. In manufactured good, it was estimated that the binding coverage rose from some 21 percent of tariff lines to 73 percent (WTO, 2007).⁶ While binding coverage increased, however, there was very little done in the Uruguay Round by way of binding commitments that affected applied tariff rates. As will be seen later, this

⁴ We are talking here of manufactured products. The same is true for agricultural products in the case of both developing and developed countries.

⁵ See GATT document TAR/W/85 of 16 October 1992.

⁶ The calculation was based on a sample of 21 developing countries. See footnote 117. The situation in agriculture was different, since it was an obligation for all GATT contracting parties to bind the entirety of their agricultural tariffs. This was part of the package required for countries to become founding members of the WTO in 1995.

became an important issue in the NAMA negotiations, where industrial countries have been pressing for tariff commitments from developing countries that would reduce applied rates.

Two points are worth making about the value of bindings. First, bindings carry value both in the immediate sense that they set an upper limit on the amount by which an applied rate can be raised and they also establish a baseline from which future reductions will be made. Obviously, the gap between a bound and applied rate will determine how much the binding is worth. But from the point of view of a trading partner, it seems reasonable to argue that where the gap is not too large, a non-biting bound rate is better than an unbound rate.

Second, it has sometimes been argued that while developed countries have access to instruments such as safeguards, and countervailing and anti-dumping measures which can be used to modify tariffs where no gap exists between bound and applied rates, these are not so readily available for developing countries. The reason is that the provisions and procedures associated with the use of these contingency measures can be excessively complex and administratively demanding for some developing countries. It is an empirical question whether developing countries have made widespread use of the so-called binding overhang as a surrogate instrument of contingency trade policy. Two counter-arguments against this line of reasoning to justify binding overhangs are that there is no multilateral accountability involved and that, at least in some cases, developing countries are using standard contingency trade policy and also insisting on maintaining the gap between bound and applied rates.

At the heart of the difficulties over closing the NAMA negotiations is the question of the appropriate level of market access commitments for developing countries, both as a group and in terms of what have evolved into sub-groups of developing countries in the negotiations (Section IV). This debate is unfolding against the background of several issues that have been part of the panorama from the outset. They can be divided

into three categories – non-reciprocity, special and differential treatment, and the relationship between the most-favoured-nation (MFN) principle and reciprocity. These issues are closely related in the way they effect the current situation in the negotiations, but they are separable.

The definition of non-reciprocity first found its way formally in the GATT when Part IV – Trade and Development – was added to the General Agreement in 1964. Article XXXVI:8 states that developed countries do not expect developing countries to assume obligations inconsistent with their trade, financial and development needs.⁷ Stated thus, the concept lacks specificity, but the essential notion of differentiated obligations is clear enough. In its earliest form, non-reciprocity was primarily about developing countries not being required to match the trade liberalization obligations assumed by developed countries and hence the argument by some that the term "less than full reciprocity" was a better description of the concept.

At the same time, developing countries had been making the case for some time that the products which were of most interest to them as exporters – mostly labour-intensive manufactures and primary agricultural products – were subject to above-average restrictions in developed country markets. This is the tariff variance, or escalation issue mentioned above, where escalating tariffs along product chains inhibit the increase of value-added on a product in the exporting country. The position was supported by the Harberler Report in 1957, which had been commissioned by the GATT membership.⁸ Developed countries were willing to respond to this problem, but only to a degree. Their solution was not to reduce or remove MFN tariffs on the products in question but rather, they introduced a series of autonomous non-reciprocal

⁷ It may be noted that Article XXVIII *bis* of the GATT had already stipulated that tariff negotiations were to be carried out on a "reciprocal and mutually advantageous basis".

⁸ It may be noted that the Harberler Report also argued that developing countries could benefit from further trade liberalization on their part.

preference schemes under the rubric of the Generalized System of Preferences (GSP). These preferences were selective by country and product, depending for their content and design upon unilateral decisions by the granting countries. They were covered in the earlier years by a waiver, made necessary by the fact that they were inconsistent with the MFN rule. These non-reciprocal preferences were destined to become a source of contention later on, when the prospect of further MFN liberalization under negotiating rounds was perceived as a threat to non-reciprocal preference margins. This issue was raised during the Uruguay Round and has become prominent in the Doha negotiations.

Attempts to clarify and broaden the concept of non-reciprocity to cover both what developing countries were expected to bring to the table, as well as what they expected from their trading partners, essentially fused these two strands of differentiated treatment into a broader concept of special and differential treatment (S&D), the second of our issue categories mentioned above. This occurred in the Tokyo Round (1973–79) under the Decision on Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries, also referred to as the Enabling Clause. Among the provisions of the Enabling Clause was a permanent exception from the MFN principle for the GSP (along with language about non-discrimination within GSP schemes), legal cover for S&D with respect to non-tariff measure agreements negotiated in the Tokyo Round, a relaxation of provisions regulating regional trade agreements among developing countries, and the establishment of a separate category of least-developed countries.

The third related issue referred to above concerns the relationship between MFN and the principle of reciprocity. The traditional approach to multilateral negotiations has always been heavily conditioned by a reciprocity requirement. This probably reflected a terms-of-trade concern in the early days, when negotiations were between a few large countries capable of affecting world prices through their own trade policy actions. A large country that liberalized unilaterally might risk

raising the world price of an import by increasing domestic demand following the removal of trade barriers. Such effects could be neutralized if countries moved together in liberalizing their trade regimes, hence the attraction of reciprocity. Reciprocity, no doubt, also had domestic political economy attractions since it would make trade liberalization resisted by importers seem appealing to export interests who anticipated matching liberalization in foreign markets. Perhaps there was also a sense of fairness associated with the idea that adjustment pain is what emerges from trade liberalization and that it should be shared. The latter impulse is at the root of the much criticized and ultimately irrational attachment to a mercantilist view of the world, where imports are a necessary evil and exports unconditionally virtuous.

Whatever the motivation for espousing reciprocity, it has clearly been central to the GATT/WTO way of doing business. Regional agreements tend to suffer less from concerns about reciprocity because they envisage free trade, so there is no question of calibrating degrees of exchanged liberalization – a process which is largely beyond precise measurement, and reliant in great measure on perception. But where reciprocity is germane to negotiated deals, so too is the relative size of countries. Small countries with limited trade shares encounter difficulty striking reciprocal bargains in the GATT/WTO style of negotiations. Large countries worry about other large country free-riders if they agree to a “reciprocal” bargain with a small country which then has to be extended to all trading partners on a MFN basis.

This is one line of argument put forward to explain limited engagement by developing countries in GATT/WTO negotiations, and the fact that tariff peaks and escalation have tended to be more prevalent on products of interest to developing countries. The opposing line of argument is that developing countries face higher tariffs in their major markets precisely because they have not engaged in multilateral negotiations more actively and lowered their tariffs accordingly. The latter view does not take full account of the linkage between a devotion to reciprocity and

the MFN principle, even though this is not to say that the degree of developing country engagement in multilateral trade liberalization has necessarily been optimal.

Given the historically ambitious objective of reducing or eliminating high tariffs, tariff peaks and escalation (turning most positive tariff rates into nuisance taxes in the developed countries), while at the same time allowing for the possibility of cutting into applied tariffs in developing countries – it is no surprise that this ambition has been challenged by the baggage of past negotiations and negotiating approaches. In a world where the historical bargain has been something of a stand-off leading to lesser liberalization exchanges between developed and developing countries, and where non-reciprocal preference receivers fear the loss of their preference margins, the intended reach of the NAMA negotiations looks impressive. How much of it survives the completion of the Doha Round will be a function of the hold of history as well as the determination of today's generation of negotiators.

III. THE ART AND SCIENCE OF TARIFF NEGOTIATIONS

One of the first and most important issues that has to be agreed in a multilateral tariff negotiation is the methodology or "modality" that will be used to negotiate. And since tariff negotiations inevitably involve sectors which are sensitive for some of the participants, but are of export interest to others, the modalities have to balance competing interests. Such special consideration for sensitive sectors is referred to as the "flexibilities" of the negotiation. Although the S&D provisions that seek to accommodate developing country interests are one of the most visible forms of such flexibilities, historically they have not been the only ones. Most of the emphasis here is not upon S&D *per se*, but rather flexibilities in a broader sense.

A) Tariff Reduction Methodologies (Modalities)

The three main tariff reduction methodologies that have been used in the past include product-by-product, formula and sectoral approaches.⁹ The choice amongst them depends on the objectives sought by the negotiators – which are sometimes set by the mandate launching the negotiations – but may also be constrained by political, practical and even historical considerations. The number of participants in a negotiation may also play an important role. These methodologies typically are not employed in the pure form in which they are presented here. Rather, they have often been used with variations or in combination, and with the flexibilities described below.

1) Product-by-Product Negotiations (Request-Offer)

The selective product-by-product modality is the oldest of the tariff negotiating methodologies and was the basis on which the initial GATT schedules were negotiated.¹⁰ Its pre-eminent role is reflected in the GATT itself, where Paragraph 2(a) of Article XXVIII *bis* (Tariff Negotiations) notes that tariff negotiations "*may be carried out on a selective product-by-product basis or by the application of such multilateral procedures as may be accepted by the contracting parties concerned.*"¹¹ This negotiating methodology requires that participants request tariff concessions in products where they are likely to be the "principal supplier" to the country from which the concession is being requested. The process is mostly bilateral in nature. This does not

⁹ For an interesting discussion of the way in which these tariff reduction techniques were perceived in the 1970s, see the GATT Secretariat background note in GATT document COM.IND/W/76 of 17 May 1972.

¹⁰ A. Hoda (2001) notes that the first three rounds of negotiations were guided by the provisions of the planned International Trade Organization, which called for negotiations to be guided on a selective product-by-product basis. See A. Hoda, *op. cit.*, p.26–27.

¹¹ Article XXVIII *bis* of the GATT was introduced during the Review Session of 1954–55. The amendments were formally adopted through the Protocol Amending the Preamble and Parts II and III of the General Agreement of 10 March 1955, which entered into force on 7 October 1957.

prevent other participants from making a request for a concession, but the country being asked has the right to refuse by invoking the "principal supplier rule." This has often occurred in the past when the main supplier of the product was not participating in the negotiations or was not a Contracting Party to the GATT.¹² The results of these bilateral negotiations are consolidated in a single legal instrument at the end of the negotiations (i.e. the Schedule of Concessions) and, in line with the MFN principle, extended to all the GATT Contracting Parties.

From an offensive point of view, the main advantage of this negotiating methodology is that it allows participants to focus on their main export interests, so the results are tailor-made to the interests of their export-oriented constituencies. On the other hand, it allows the participants to avoid making reductions in sensitive areas or, whenever concessions are granted, to seek "sufficient" compensation in exchange. The United States noted in its Uruguay Round proposal on industrial products that the *"request-offer" procedure provides maximum flexibility to all contracting parties. Each can choose whether or not to participate in the negotiations, or how extensively it wishes to participate.*"¹³ In addition, one may argue that this technique gives participants a sense of "ownership" of the results, as the methodology allows them to control at every point in time how much they are gaining and how much they are paying. The downside is that it tends to focus on "big ticket" products, thereby missing liberalization gains that could be achieved on products of lesser importance, even in cases where they are not sensitive. Perhaps more importantly, the search for a reciprocal bargain in the context of results that will be multilateralized dampens the enthusiasm of large countries to negotiate with small ones.

In terms of complexity, the application of the product-by-product methodology is better suited for situations where a small number of

¹² For an example of the rules applying to a product-by-product negotiation, see Annex A of the Second Report of Committee I, adopted on 19 November 1959, GATT BISD S08/114.

¹³ GATT document MTN.GNG/NG1/W/5 of 7 July 1987.

participants or products are involved. In today's world, the difficulty in applying this modality tends to escalate because of the increased number of players and the higher number of products contained in a modern schedule of concessions. The request-offer approach would mean negotiating some 4500 non-agricultural HS Subheadings amongst 125 WTO Members (counting the EC-27 as one, as well Switzerland and Liechtenstein as one) which would result in a total of 562,500 potential requests from the principal suppliers - assuming, that is, that all parties engaged in the negotiations. This number would be more than 12 times higher than the frequently quoted 45,000 tariff concessions that were negotiated by the 23 original Contracting Parties to the GATT in 1947, and more than 31 times the tariff concessions negotiated during the Annecy (5,000), Torquay (8,700), and Dillon (4,400) Rounds put together.¹⁴

Hoda (2001) notes that there were two main considerations for abandoning this technique: i) its dependence on the principal supplier rule led to very small reductions, because it tended to leave out products when the main supplier of a product was not participating in the negotiations or was not a Contracting Party to the GATT and ii) with the increased number of Contracting Parties to the GATT it had become "cumbersome and unwieldy."¹⁵ One can imagine that these negotiations are not suitable for situations where there were several significant suppliers with substantial interest in the product, but only one of them was a participant in the negotiations, a situation which could generate free-riding concerns. Finally, developing countries felt they had little bargaining power, because their participation in world trade was minimal.

¹⁴ See WTO Secretariat (1996), Press Brief concerning the Fiftieth Anniversary of the Multilateral Trading System. The estimate of 45,000 tariff lines could not be confirmed and some consider that it was overestimated. See *WTO World Trade Report 2007*, p. 204.

¹⁵ A. Hoda (2001), *op. cit.*, p.30-31.

2) The Formula Approach

The "formula" methodology provides for tariff reductions that are derived from the application of mathematical formula on the participants' tariffs. Formula negotiations involve a two-step process: i) the selection of an appropriate formula and ii) the definition of its parameters. Both elements will determine, to a larger or lesser extent, the contribution to be made by the participants.

A large number of mathematical expressions exist that could be used to negotiate tariff reductions and the advantages and limitations of the approach are intrinsically linked to the type of formula used. A background note prepared by the WTO Secretariat for the NAMA negotiations classified them into "tariff dependent" and "tariff independent" formulae, depending on whether or not the reduction level is dictated by the initial tariff rate that is being negotiated.¹⁶ A slightly different way of classifying them is on the basis of whether or not the formula is applied on a "line-by-line" basis.¹⁷ We will begin by looking at the formulae which are not applied on a line-by-line basis (e.g. the simple average reduction, the reduction of the average, and the target average), followed by the ones which are (e.g. linear formulae and non-linear formulae such as the Swiss formula). Then we shall consider the possibility of combinations.

a) Formulae which are not applied on a line-by-line basis

These formulae normally set "benchmarks" or "targets" rather than prescribing definitive results at the tariff line level. They are normally favoured in situations where participants want to retain the possibility of applying different reductions among sectors or tariff lines, which is not

¹⁶ The latest version of this document is TN/MA/S/3/Rev.2 of 11 April 2003.

¹⁷ This distinction was used by the WTO Secretariat in its summary of the initial proposals in NAMA. See document TN/MA/6/Rev.1

possible under a comprehensive line-by-line approach. The three main variations of this methodology are:

(i) The "simple average reduction:" This is a commitment to reduce existing tariffs by a certain average percentage. In other words, the percentage reduction is calculated line-by-line before calculating the average of all reductions. The condition is fulfilled when the average of the reductions meets the agreed figure. This technique is usually referred to as the "Uruguay Round formula" because it was used to reduce duties on agricultural products during that Round.

(ii) The "reduction in the average:" This is a commitment to reduce the average of the tariffs, be it in weighted or simple terms, by a certain percentage. In other words, it involves the calculation of an initial and a final average and then the reduction of one vis-à-vis the other. One admittedly imperfect example can be taken from the Uruguay Round. It might be recalled that Members failed to agree on the tariff reduction technique to apply with respect to non-agricultural products. Without formally agreeing on a specific modality, the Ministers agreed at the Mid-term Review meeting that took place in Montreal in 1988 that negotiations should aim at attaining lower and more uniform rates, with a target amount for overall reductions that should be at least as ambitious as that achieved by the formula participants in the Tokyo round.¹⁸ This overall reduction was widely understood to mean that participants should reduce their averages by at least one-third (i.e. 33 percent).

(iii) The "target average:" This variation consists of a commitment to reduce the existing average of all tariffs, or the tariff average in a given sector, to a new average level.

¹⁸ MTN.TNC/7(MIN), p. 4

What matters in this approach is the level of the new average itself and not necessarily the reductions involved to get there. Unlike the first two options, a target average leads to a certain degree of harmonization among the participants applying it, because their new average tariffs will end up being the same. For example, the 1952 GATT Plan envisaged that participants should reduce their tariffs on raw materials to 5 percent, semi-manufactures to 15 percent and finished manufactures to 30 percent. Similarly, during the Uruguay Round, the EC proposed that developing countries would reduce duties above a certain level to an agreed level (e.g. 35 percent).¹⁹

The three above-mentioned variations of the methodology are very similar in nature as they allow participants to shelter their most sensitive sectors in a relatively simple manner. They can achieve agreed reductions by making small reductions, or even no reductions, in some sensitive areas in exchange for greater reductions on other products. From a defensive point of view, the main advantage of this approach lies in the flexibility of choosing the area and scope of the cuts. From an offensive point of view, this methodology has two main drawbacks: i) it could very easily wipe out any commercially meaningful result if the products of export interest are sensitive in a given market and ii) there is no control with respect to the concessions that will be granted.

One often neglected side-effect of the application of this technique is that although it probably leads to undesirable results for those exporting the sensitive products, it actually benefits those exporting the non-sensitive ones as they end up benefiting from higher cuts than would have been possible otherwise. On the issue of tariff peaks, high tariffs and tariff escalation, the application of these formulae is likely to preserve, or in some circumstances even accentuate, their presence.

¹⁹ See GATT document MTN.GNG/NG1/W/10/Rev.3 for a summary of the positions in this respect.

b) Formulae applied on a line-by-line basis

A formula is applied on a "line-by-line" basis when a cut is applied on each tariff line. In general, from an offensive point of view, the main benefits of these formulae are increased simplicity, transparency and predictability in respect of the new tariffs resulting from the application of a formula – in fact, all new tariff levels will be known from the moment the formula is agreed. This simplified approach allows negotiators to focus primarily on the exceptions and sensitivities, rather than on the general reduction that would be applicable to the majority of tariff lines. In turn, this spreads the benefits of liberalization across more product areas. Of course, from a defensive point of view, this would be seen as a major limitation, since it severely constrains the room for manoeuvre and makes it difficult to shelter sensitive products or sectors. The two main variations of this methodology are:

(i) A linear formula: This approach, sometimes refer to as a "flat cut", consist in a commitment to reduce all tariffs, or the tariffs in a certain sector, by an agreed percentage.²⁰ Following the complications faced by the GATT Contracting Parties with the product-by-product approach during the Torquay Round, France proposed in 1953 to reduce duties by 30 percent "in a more or less automatic manner, in order to avoid extensive negotiations between participating countries."²¹ This proposal was partially taken on board by the so-called "GATT Plan" of 1953, but it was never implemented.²² During the Dillon Round (1960–61), the European Community–6 (EC) made a proposal to cut all duties by 20 percent, with certain exceptions, but it was only

²⁰ The linear formula is often expressed as $T_1 = C \times T_0$, where T_0 is the existing tariff level, C is the percentage reduction to be negotiated, and T_1 is the new duty level that would result from the reduction.

²¹ See document L/103, GATT BISD 02S.

²² GATT BISD, 2S/67–92. For a summary of the details see Hoda (2001), *op. cit.*, p. 28.

matched by the United Kingdom (UK); the other Contracting Parties engaged again in product-by-product negotiations. It was not until the Kennedy Round (1964–67) – more than a decade after the initial French proposal – that the Contracting Parties agreed for the first time on a linear reduction of 50 percent as a working hypothesis for preparing their schedules.²³ However, it would appear that the negotiations eventually evolved into a bilateral and multilateral product-by-product negotiation that included discussions on particular sectors.²⁴

One benefit of the linear cut is that it brought about reductions in several products that the participants would probably never have reduced in the context of product-by-product negotiations. This approach has, however, one fundamental weakness: it fails to address the issue of high tariffs, peaks and tariff escalation. From the defensive point of view, it does not allow much room for manoeuvre and, for this reason, is likely to trigger requests for flexibilities.

(ii) A non-linear formula: This set of formulae normally refers to mathematical constructions that seek to reduce the "high" duties by a bigger percentage than the "low" duties.²⁵ This is a very attractive property when tackling high tariffs, tariff peaks and escalation. These formulae are sometimes also

²³ GATT BISD 13S/109.

²⁴ See Report by the President of the Board of Trade to the Parliament of the United Kingdom, *The Kennedy Round of Trade Negotiations 1964–67*, London, 1967.

²⁵ Technically speaking, the contrary would also qualify as a non-linear formula (i.e. reducing the low duties by a higher percentage than the high duties), one example of which is the so-called "elimination of low duties" where duties below a certain level (e.g. 5 percent) are reduced by 100 percent. However, since this is not what is normally referred to by the term in the context of the tariff negotiations, we have chosen to ignore the possibility for the sake of simplicity.

referred to as "harmonization formulae."²⁶ Unlike the linear formula, the non-linear variety can only be applied on ad valorem duties or, in the case of non-ad valorem duties, if ad valorem equivalents (AVEs) are calculated. Although this adds another layer of complexity to the negotiations, the depth of the cuts that could result are worth the extra effort from an offensive point of view.

Probably the best known example of this type of formula is the Swiss formula that was originally proposed by Switzerland during the Tokyo Round.²⁷ This formula has some mathematical properties that can easily be translated into "rules of thumb" that facilitate the task of the tariff negotiators. These include the following: i) the coefficient chosen for the formula sets an upper limit to the new tariffs, so a coefficient $A = 20$ means that no new tariff resulting from the formula will be above 20 percent, ii) all tariffs with a duty level above the coefficient level will be reduced by more than 50 percent and iii) all tariffs with a duty level below the coefficient level will be reduced by less than 50 percent.

There is no requirement to apply the Swiss formula with a single coefficient to all participants. For example, during the Tokyo Round (1973/79), the "Swiss Formula" with a coefficient of 14 was used as a hypothesis to prepare the schedules of Czechoslovakia, Japan, Switzerland and the United States of America (USA), while Australia, Austria, the

²⁶ Two different concepts are normally referred to by the term "harmonization". While some use it to describe the reduction of the difference between duty levels in a Member's schedule, others use it to describe the reduction of the differences amongst a group of Members' schedules.

²⁷ The Swiss formula is often expressed as $T_1 = \frac{A \times T_0}{A + T_0}$ where T_0 is the existing tariff level, A is a

coefficient to be negotiated by the participants, and T_1 is the new duty level that would result from the application of the formula. See MTN/TAR/W/34 and Add.1. Other non-linear formulae were proposed by Canada, the EC, Japan and the USA.

EC and Hungary made their offers on the basis of a coefficient of 16 (leading to slightly lower reductions).²⁸ Another variation is the so-called "Girard" formula proposed in the early stages of the Doha Round which aimed at setting one coefficient for each Member applying the formula, based on the average tariff represented by its existing bindings.²⁹ Therefore, a decision on the use of a Swiss formula is likely to be followed by a negotiation on the number of coefficients to use as well as their corresponding level.

From an offensive point of view, the main advantages of using a Swiss formula are: i) its relative simplicity, as there is potentially only one number to negotiate, which sets the level of ambition for the participants and ii) the possibility of using different coefficients allows the level of contributions to vary among the participants. On the other hand, it is this very effectiveness that is likely to be of concern for negotiators with defensive positions. Since the formula does not allow much room for manoeuvre, it is likely to trigger requests for flexibilities.

c) A combination of formulae

Tariff negotiators have long been aware of the characteristics of the different tariff reductions modalities, so they have tried to find ways to combine those properties by applying them in steps. For example, one way to minimize reduced cuts under the application of a target average

²⁸ A. Hoda (2001), op. cit., p. 32.

²⁹ It has that name because it was originally proposed by Amb. Pierre Luis Girard who was the first Chairman of the Negotiating Group on Non-Agricultural Products. It can be expressed

as $t_1 = \frac{B \times t_a \times t_0}{B \times t_a + t_0}$, which is essentially a modified version of the Swiss formula where

$A = B \times T_a$; B would be a coefficient negotiated to set the level of ambition and T_a is the tariff average of the Participant in question. See TN/MA/W/35/Rev.1 of 19 August 2003.

or an average cut is to include a "minimum cut" requirement (technically a line-by-line formula), which would ensure that a minimum reduction is made on every line. This was precisely the approach taken with respect to agricultural products in the Uruguay Round, where the "Uruguay Round" formula was coupled with a minimum cut (15 percent for developed countries and 10 percent for developing countries). One could imagine several other ways of combining the properties of the different formulae, such as the application of a non-linear formula followed by an average cut.

3) Sectoral Initiatives

The sectoral approach is a methodology in which participants aim at reducing or eliminating tariffs in a specific sector or on a limited number of products. A background note by the WTO Secretariat suggests that although the GATT 1947 aimed to establish rules of general application for all goods without distinction, the Contracting Parties began looking at the particular problems of individual products and sectors as early as in 1956. The term "sectoral" was first used during the preparatory work for the Tokyo Round, and was originally meant to include negotiations on non-tariff measures.³⁰ However, nowadays the term is mostly used to describe tariff negotiations. This methodology has been used mostly in the context of plurilateral negotiations (i.e. where only a sub-set of WTO Members participate), with the results extending to all WTO Members through their inclusion in the Schedules of Concessions.

The two main variations are i) the "zero for zero" sectorals, in which countries agree to liberalize fully the trade in a given sector at the end of the chosen implementation period, and ii) the "harmonization" variant, in which participating countries agree to bring tariffs in a particular sector to an agreed level. A new possibility, which has been mentioned in the context of the NAMA negotiations, is the so-called "zero for X" sectorals,

³⁰ TN/MA/S/13, paragraphs 4-6.

where developed country participants would be required to eliminate their tariffs and developing country participants would have to reduce their duties to a certain level (X). However, some are sceptical of the approach because the developed country tariffs on these products tend to be low, while those of developing countries tend to be high.

A first attempt to negotiate a large number of sectorals took place during the Kennedy Round (1964/67), but only two of them were successfully concluded: cereals and chemicals.³¹ A negotiating group named "Sectoral Approach" was established during the Tokyo Round, but its work ended without any concrete result. However, agreement was reached by some participants under the Agreement on Trade in Civil Aircraft.³² During the Uruguay Round, several countries agreed on "zero for zero" sectorals for agricultural equipment, beer, construction equipment, distilled spirits, furniture, medical equipment, paper, steel, toys and pharmaceuticals. There was also an agreement on a sectoral "harmonization" for chemical products.³³

One of the main concerns relating to sectoral initiatives is that of "free-riding" – where significant exporters may choose not to participate in a sectoral negotiation in order to avoid reducing their own tariffs, but nevertheless enjoy the benefits of the sectoral once the results are multilateralized. One approach that has been used in the past to try to minimize this problem has been a "critical mass" requirement, where a sectoral agreement only takes place if there is a certain minimum degree of participation. One early example of this was Section 211(a) of the United States Trade Expansion Act that was in force during the Kennedy Round (1964–1967). This gave the President the authority to negotiate sectoral agreements only if the USA and the EC–6 accounted for 80 percent of world trade. Since the UK had not joined the EC by then, the threshold for critical

³¹ TN/MA/S/13, paragraphs 15.

³² TN/MA/S/13, paragraphs 18–21.

³³ TN/MA/S/13, paragraphs 22–27.

mass proved to be too high for most sectors.³⁴ Although we are not aware that there was a critical mass requirement during the Uruguay Round, the participants in these sectorals comprised approximately 70 percent to 90 percent of world exports in 1994 (except for toys which was much lower at 32.8 percent), and 63 percent to 85 percent of 1994 world imports.³⁵ A more recent example of this requirement is the 1996 Agreement on Information Technology (ITA), where the agreement itself specifically stipulated that it would only enter into force if participants accounting for 90 percent of world trade joined by 1 April 1997.³⁶

The main benefit of the sectoral methodology from the offensive point of view is that it allows Members to go to free trade on certain products and to focus on their main export interests, so the results are tailor-made to the interests of their export-oriented constituencies. Depending on the products covered and the approach taken for tariff reduction or elimination, sectoral agreements could eliminate high tariffs, peaks and escalation. Sectorals could also allow participants to tackle certain sector-specific problems (e.g. Non Trade Barriers- NTBs) through tailor-made solutions. Like the product-by-product methodology, one may even argue that it gives participants a sense of "ownership" of the results, as it allows them to control at every point in time how much they are gaining and how much they are paying.

From a defensive point of view, the effect of sectorals is to diminish the room for manoeuvre even more than the formulae that are applied on a line-by-line basis. They are therefore more likely to trigger requests for flexibilities in the context of the sectoral, spark negotiations on the sectoral product coverage (i.e. to exclude the sensitive products) and, if the sector is extremely sensitive, even to create an incentive not to participate in them.

³⁴ TN/MA/S/13, paragraphs 15.

³⁵ See A. Hoda (2001), *op. cit.*, p. 38-39.

³⁶ Paragraph 4 of the Annex to the Ministerial Declaration on Information Technology Products, WT/MIN(96)/16.

B) Flexibility Options in Tariff Negotiations

Leaving aside the reality that entire sensitive sectors such as agriculture and textiles have been carved largely carved out of past negotiations through one means or another, practically all tariff rounds where the product-by-product technique has not been the basis for exchange have concluded with the provision of country-specific flexibilities and/or some form of exception to a general tariff reduction technique. The stronger the technique used in tariff negotiations, then, the higher the probability that flexibilities will be needed in order to complete a negotiation successfully.

We are not aware of any systematic classification of the flexibilities that have been used in GATT/WTO tariff negotiations, but our non-exhaustive list comprises seven distinct variants. As with the tariff reduction techniques outlined above, these flexibilities are generally not applied in isolation nor necessarily in the pure form in which they are described below.

- i) Staging flexibilities: This flexibility requires the participant to apply generally-agreed tariff reductions, but over a different (generally longer) period of time than the one specified by the general rule.
- ii) A less ambitious form of the same modality: This form of flexibility implies the application of the same modality as generally agreed, but in a softer, less ambitious, form.
- iii) Lesser reductions for a certain number of products: Under this arrangement, normal tariff reductions will be applied to most products, but a participant is allowed to moderate the reductions on some products. This flexibility only makes sense in the context of a formula that is applied on a line-by-line basis.

iv) The possibility of deviating from the main modality by compensating with other products: This is not a flexibility in itself, but rather a measure that could accompany other flexibilities and, in particular, the above-mentioned lesser reduction approach and the exclusion of the products option. The idea is to allow participants to deviate from the main tariff reduction modality, while "paying" for any deviation they would like to introduce.

v) The possibility to exclude a certain number of products: This flexibility option implies that the normal tariff reductions will be applied on most products, but a participant is allowed not to make any reduction in some products. This flexibility is likely only to apply in the context of a formula applied on a line-by-line basis.

vi) The application of a different, softer modality: This flexibility option implies that some participants are allowed to use a different, more flexible modality with respect to a subset of products than that used by other participants.

vii) A full exemption from tariff reductions: In this case a participant is not required to make any tariff reductions at all, which is the situation prevailing for least-developed countries in the current negotiations.

IV. THE STATE OF PLAY IN THE DOHA ROUND

The Doha mandate was negotiated with a view of taking into account the conflicting interests of those seeking an ambitious result in terms of tariff reductions and the inevitable requests for flexibilities that always arise in this type of negotiation. Although this mandate was subsequently interpreted and complemented by the 2004 July

Framework³⁷ and the 2005 Hong Kong Ministerial Declaration (HKMD),³⁸ this balance has remained more or less stable over time. Perhaps the only way to understand where the negotiations are is by studying the interests and positions that have shaped the negotiations over the last 7 years. Our objective here is not to be exhaustive, but rather to give an idea of the manner in which the negotiators used the tools described in Section III above to seek their favoured outcome.³⁹

Before proceeding, however, mention must be made of the preference erosion issue. As noted in Section II, the Doha Round negotiations are the first time that the problem of preference erosion has been explicitly put on the table.⁴⁰ Although one or two references were made to the erosion of reciprocal preferences agreed in regional trade agreements, the focus has been upon non-reciprocal preference erosion.⁴¹ Some have argued that this issue has systemic implications, arising because one set of countries (non-reciprocal, preference-receiving countries) does not wish a second set of countries (the preference givers) to extend MFN liberalization to others because this will shrink preference margins, while a third set of countries (potential MFN suppliers to the preference-giving countries) objects to the notion that MFN liberalization should be compromised on the altar of privileged access for a sub-set of trading partners. Estimates of the threat of preference erosion (Low, Piermartini and Richtering, 2006) suggest that while threatened product lines are rather few in number and a narrow set of countries is affected, the

³⁷ Annex B of document WT/L/579.

³⁸ Paragraphs 13–23 of document WT/MIN(05)/DEC.

³⁹ A description of the main developments prior to the 2005 Hong Kong Ministerial Declaration can be found in R. Santana (2005), *Challenges to the NAMA negotiations: Finding new solutions to old problems*, INTERECONOMICS – Review of European Economic Policy, Volume 40, Number 6, Nov/Dec 2005, pp. 311–317.

⁴⁰ The issue was raised as early as the Tokyo Round, but no explicit provision was agreed to take account of the issue. See P. Low, R. Piermartini and J. Richtering (2005), *Multilateral Solutions to the Erosion of Non-Reciprocal Preferences in NAMA*, WTO, Working Paper ERSD–2005–05, p. 4.

⁴¹ This issue had been mentioned in earlier negotiations, but never explicitly taken up.

impact is non-trivial in certain cases.⁴² Early proposals on the issue envisaged a lessening of the overall quantum of liberalization, although subsequently the approach by the last draft NAMA modalities is one of slowing down the pace of liberalization on affected products.⁴³ This issue remains unresolved, however, and may yet be a source of difficulty in the negotiations.

This rest of this section sets this issue aside and discusses the eventual results of an agreement on the 2008 fourth revision of the draft modalities for NAMA,⁴⁴ including the discussions that took place earlier during the July 2008 "Mini-Ministerial."⁴⁵ Although this package has not been agreed, it is the only basis we have to test the eventual results.

A) The Mandate of the NAMA Negotiations

Paragraph 16 of the Doha Ministerial Declaration (DMD) states the following:

"We agree to negotiations which shall aim, by modalities to be agreed, to reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, in particular on products of export interest to developing countries. Product coverage shall be comprehensive and without *a priori* exclusions. The negotiations shall 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, in accordance with the relevant provisions of Article XXVIII *bis*

⁴² The WTO Secretariat made a detailed assessment of the issue in JOB(07)/80, which served as the basis on which the different Annexes of the draft NAMA modalities were developed.

⁴³ See paragraphs 28–30 of TN/MA/W/103/Rev.3.

⁴⁴ TN/MA/W/103/Rev.3 of 6 December 2008.

⁴⁵ For this, we will rely on the report by the Chairman of the Negotiating Group of Market Access (NGMA) that was issued on 12 August 2008 in JOB(08)/96.

of GATT 1994 and the provisions cited in paragraph 50 below. To this end, the modalities to be agreed will include appropriate studies and capacity-building measures to assist least-developed countries to participate effectively in the negotiations."

B) The Tariff Cutting Modalities

A common mistake with respect to NAMA is the affirmation that the Swiss formula is "the" modality that will be used to bring down tariffs on non-agricultural products. The truth is that Members have agreed to apply several different types of modalities in diverse situations and for different "categories" of Members, the complexity of which is staggering. To keep things simple, we limit ourselves to an introduction of the discussions surrounding the formula and a brief description of the other modalities that will be used for tariff reductions.

When discussions were launched at the technical level in 2002, seventeen of the twenty-five submissions by Members suggested the use of a formula as the core modality for tariff reduction.⁴⁶ Some even proposed the use of the Swiss formula. Other proposals called for sectorals and the request-offer approach. There were also proposals to use a "cocktail approach" (i.e. to use a combination of methodologies) to accommodate the different interests, which turned out to be quite visionary. In any case, it soon became apparent that the formula approach had the most support. Although the 2003 Girard text proposed a modified version of the Swiss formula where each country's coefficient would be based essentially on its individual tariff average (resulting in one coefficient per Member), he envisaged it as part of a package that would also include a number of sectorals on electronics and electrical goods, fish & fish products, footwear, leather goods, motor vehicle parts and components, stones, gems, and precious metals, and textiles and

⁴⁶ For a detailed overview of the proposals submitted during the first part of the negotiations, see TN/MA/6/Rev.1.

clothing.⁴⁷ Since Members were not ready at that stage to engage in the details, the Derbez text emanating from the inconclusive Cancun Ministerial Meeting in 2003 took a much more conservative approach and simply proposed that work continue "*on a non-linear formula applied on a line-by-line basis which shall 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.*"⁴⁸ (emphasis added). This provision was transcribed without modification into the 2004 July Framework.⁴⁹

The discussions that followed tried to devise an appropriate non-linear formula, and practically all the proposals were based on the application of a Swiss formula. The USA proposed the use of a Swiss formula with two coefficients (one for developed countries and a higher one for the developing countries), but the higher coefficient was to be used in *lieu* of flexibilities (a higher formula coefficient results in lower reductions).⁵⁰ On the other hand, Argentina, Brazil and India proposed to use a formula that was practically the same as the one introduced by Chairman Girard. Eventually this proposal was labelled as the "ABI formula."⁵¹ Pakistan tried to bridge the positions by proposing to have two separate coefficients (like the USA proposed) based on the tariff averages of developed and developing countries (similar to the ABI), and the latter preserving their access to the flexibilities.⁵² In the lead up to the 2005 Hong Kong Ministerial Meeting, two main approaches remained on the table: the ABI formula and a Swiss formula with two coefficients, with developing countries also having access to the 2004 July Framework flexibilities. The main difference between the two approaches was the

⁴⁷ TN/MA/W/35/Rev.1.

⁴⁸ Paragraph 3 of Annex B to JOB(03)/150/Rev.2.

⁴⁹ Paragraph 4 of Annex B to JOB (03)/150/Rev.2.

⁵⁰ JOB(05)/36.

⁵¹ See TN/MA/W/54 of 15 April 2005.

⁵² See TN/MA/W/60. Pakistan proposed to determine the coefficients based of the averages of the two categories of Members. On this basis, the coefficients would be 6 for developed countries and 30 for the developing countries.

number of coefficients to be used (two vs. one for each Member) and the degree of harmonization that would be achieved across the Membership. In spite of these differences, and since there was a common understanding on the type of formula to use, Paragraph 14 of the HKMD captured the progress in an ambiguous manner by saying that Members adopted "*a Swiss Formula with coefficients*" at levels that should fulfil the mandate of Paragraph 16 of the DMD. With respect to sectorals, and following passionate discussions as to whether they should be mandatory or voluntary, Paragraph 16 of the HKMD noted that "*Participation should be on a non-mandatory basis.*"

The Chairman noted in his 2006 Towards NAMA modalities text that, although there were still two Swiss formula options on the table (i.e. the simple Swiss formula with two coefficients and the ABI formula), he considered there was "*broader and stronger support for the simple Swiss formula with two coefficients and that the discussions should focus on this structure as the more likely to attract a consensus.*"⁵³ The main focus of the discussions that followed was on the level of the coefficients, but positions quickly polarized. On the one hand, developed countries wanted to have a coefficient of 10 for the developed and 15 for the developing countries. On the other hand, the NAMA-11 Group of developing countries considered there should be a minimum spread of 25 points between the coefficients in order to ensure the fulfillment of the "less than full reciprocity" part of the mandate.⁵⁴ An interesting development came with the submission of the so-called "middle ground group" that proposed to apply a coefficient of 8-9 for developed countries and of 19-23 for developing countries.⁵⁵ During this time, the proponents of sectorals began developing the details of their proposals.

⁵³ TN/MA/W/80.

⁵⁴ TN/MA/W/86.

⁵⁵ TN/MA/W/98.

As the discussions advanced and the positions became more entrenched, some proposals aimed at changing completely the approach. In his introductory remarks the Chairman noted that:

"There is an almost unanimous view that a simple Swiss formula with two coefficients should be adopted. Recent proposals to supplement or replace the Swiss formula with a linear cut or average cut in order to facilitate convergence on the formula were greeted with considerable concern by most Members – developed and developing – who view the Swiss formula as the principal achievement of the NAMA mandate. Where additional flexibility is judged necessary by Ministers to address specific concerns, the clear majority of Members would prefer them to use the flexibilities already provided in the mandate – that is, to balance the level of ambition in the formula with the exemptions and/or trade volume constraints in paragraph 7 (Flexibilities for Developing Members Subject to the Formula)."⁵⁶

In his 2007 first draft modalities, the Chairman tried to bridge the positions by pushing both sides and proposing two ranges of coefficients. These numbers were nearly identical to the middle-ground group proposal (i.e. [8–9]⁵⁷ for developed countries and [19–23] for developing countries). Strong reactions followed the release of this draft, in particular with respect to the range of coefficients proposed and the flexibilities. The NAMA-11 Group of developing countries noted they could not accept anything near those coefficient levels because they did not deliver on the less than full reciprocity (LTFR) mandate, and that the proposed 5 percent and 10 percent levels on tariff lines subject to the

⁵⁶ JOB(07)/126.

⁵⁷ Square brackets are used around these numbers, and others later in the text, to reflect what actually appears in proposals. The square brackets denote that the numbers or range of numbers concerned are put forward as a negotiable proposal, or are subject to confirmation.

"no cut" and "half cut" options were insufficient as flexibilities.⁵⁸ On the other hand, a group of developed countries considered the coefficients to be so high and the flexibilities so generous that practically no new market access would be delivered by the negotiations. They also argued that the loss in the level of ambition demanded that sectorals be used to deliver real market access in the negotiations.

After exploring several options for bridging the differences,⁵⁹ the discussions eventually led to the so-called "sliding scale" where a direct link was established between the coefficient in the formula and the level of flexibilities available to a Member. The idea was that the lower the coefficient, the higher the number of lines a developing country would need in the "no cut" or "half cut" options in order to take account of its sensitivities, and vice versa. This was translated by the Chairman as a Swiss formula with 4 coefficients in his 2008 third revision of the draft NAMA modalities, where developing countries would be able to choose among 5 flexibility options.⁶⁰ This proposal was retained in its entirety in the fourth revision of the modalities that circulated on 6 December 2008.⁶¹ Although the sliding scale structure appears to be stable, there is still no agreement on the numbers that could be used and significant differences remain with respect to the role that sectoral negotiations should play.

Bearing this drafting history in mind, we can now describe the 4 modalities that will be used to reduce tariffs on non-agricultural products:

⁵⁸ See JOB(07)/225.

⁵⁹ These were circulated in a room document and were eventually known as the "cafeteria options", because the Chairman claimed that he heard about them informally at the WTO Cafeteria.

⁶⁰ TN/MA/W/103/Rev.2.

⁶¹ TN/MA/W/103/Rev.3.

1) A Swiss Formula With 4 Coefficients

This line-by-line, non-linear, formula will be applied by all developed countries and by most of the emerging economies. The proposal included in Paragraph 5 of the third revision of the draft modalities established an express link with the three flexibility options that would be given to the developing countries applying the formula in Paragraph 7.⁶² The fourth revision of the modalities retained the same levels for the coefficients: 8 for the developed countries and developing countries being able to choose from a 5-option menu:

a) A coefficient of 20, plus a further choice between:

- applying half of the formula cuts on 14 percent of the non-agricultural tariff lines, as long as they do not exceed 16 percent of the Member's non-agricultural imports; or
- keeping unbound or not applying reductions on 6.5 percent of the tariff lines, as long as they do not exceed 7.5 percent of the Member's non-agricultural imports

b) A coefficient of 22, plus a further choice between:

- applying half of the formula cuts on 10 percent of the non-agricultural tariff lines, as long as they do not exceed 10 percent of the Member's non-agricultural imports; or
- keeping unbound or not applying reductions on 5 percent of the tariff lines, as long as they do not exceed 5 percent of the Member's non-agricultural imports

⁶² TN/MA/W/103/Rev.2.

c) A coefficient of 25 with no further flexibilities.

2) Sectorals

Annex 6 to the 2008 fourth revision of the NAMA modalities compiled the different sectors which had been proposed so far.⁶³ The idea is to have a Member-driven process, whereby the participants in each sectoral would define tariff reductions "over and above that which would be achieved by the formula modality." Although Members decided in the 2005 Hong Kong Ministerial Declaration that participation would be on a "non-mandatory" basis,⁶⁴ for some Members the participation in sectorals would help to balance the overall results vis-à-vis the formula and the flexibilities. Two main developments during the G-7 discussions of July 2008 were, firstly, the proposal to allow developing countries participating in final sectoral initiatives to increase their coefficient (as an incentive to participate) and, secondly, the inclusion of an annex listing those Members having "agreed to participate in negotiating the terms of at least two sectoral tariff initiatives of their choosing, with a view to making them viable."⁶⁵ The first element was criticized by some who did not see why some Members should "bear the burden" of the additional market access that would be given to some through the sectorals, because the products that would remain covered by the formula would end up having lesser reductions (due to the higher coefficient). Lacking support, the proposal was dropped in the fourth version of the modalities. As to the second element, some Members, and the United States in particular, would like to have a clear indication at the time of modalities of which Members would be participating in negotiating the terms of which sectoral negotiations. This has, however, been resisted by many developing countries (China in particular) who have stressed the non-mandatory nature of the sectoral modality. Following discussions

⁶³ TN/MA/W/103/Rev.3.

⁶⁴ WT/MIN(05)/DEC, paragraph 16.

⁶⁵ See JOB(08)/96, page 5.

that took place after the mini-ministerial, the Chairman proposed in his fourth revision of the modalities an updated version of the sectoral language, including two different options for the Annex that would list those Members having "agreed to participate on a self-identified basis, in negotiating the terms of sectoral tariff initiatives, with a view to making them viable." One annex option is more specific than the other. The Chairman noted in his introduction to the fourth modalities that further work was still required to bridge the differences on sectorals, so this is likely to be one of the main stumbling blocks for the negotiations.

3) Target Average

This type of formula, which is not applied on a line-by-line basis, will be applied by the small and vulnerable economies (SVEs) and the "Paragraph-6" Members. As explained in Section III, this modality is considerably more flexible than what is envisaged for the developing countries applying the formula.

4) Reduction in the Average

Although not expressly included in any part of the text, and with a minimal role to play, the second sentence of the fourth SVE band provides the possibility of an equivalent reduction in the average that would be based on the proposed 5 percent minimum cut on 90 percent of the lines.

As explained in more detail in the next section, the large majority of Members (approximately 80 in total)⁶⁶ will not be reducing their tariffs through the Swiss formula modality. In fact, about 45 of those will be either explicitly exempted or only "expected" to contribute. (See Annex Table 4) So, why the excitement about the adoption of the Swiss formula

⁶⁶ We have arrived to this number as follows: 32 LDCs, 13 developing countries that would be exempted from tariff cuts, 12 "Paragraph-6" countries and approximately 23 SVEs.

if only some 45 Members will be applying it?⁶⁷ One reason is commercial: non-agricultural products account for more than 94 percent of global merchandise trade (See Annex 1), and those Members that would be applying the formula account collectively for more than 90 percent of that trade.⁶⁸ The other reason is historical: it will be the first time in the history of the GATT/WTO that such a large number of Members will be applying this tariff cutting modality.

C. Envisaged Flexibilities

If there is one thing the NAMA negotiations cannot be accused of it is having a "one size fits all" approach when it comes to the flexibility options that have been contemplated for developing countries. Given the large number of participants that have been actively involved in the NAMA negotiations, this is perhaps not surprising. Two features of the current state of play are noteworthy. First, developed countries will not have recourse to any deviation from the application of the Swiss formula. Second, Members have been able to accommodate most of the concerns expressed by developing countries into six categories. It might appear that every request for differentiation has been considered favourably, but in reality the creation of separate categories was ardently resisted by many developing countries during the first part of the negotiations. Some of the requests that were rejected included, *inter alia*, the "IDA-only" condition, tariff-revenue dependency, and being a land-locked country. The underlying concern over country categorization is reflected in Paragraph 4 of the draft modalities, which states that differentiations in the modalities "*do not create a new category or sub-category of WTO Members, nor do they create a precedent for future negotiations.*"⁶⁹

⁶⁷ We have calculated this number taking into account the Members that, although would technically fulfil the SVE criteria, are listed as applying the formula in paragraphs 7(e) and (f) of TN/MA/W/103/Rev.3.

⁶⁸ Based on WTO Secretariat estimate of the shares of world trade in non-agricultural merchandise trade. See document TN/MA/S/18.

⁶⁹ TN/MA/W/103/Rev.3.

Included among the flexibilities that have been agreed to redress the defensive concerns expressed by developing countries are the following:

1) Least-Developed Countries (LDCs)

The situation has not changed much since the 2003 Girard Text where it was envisaged that LDCs would not be required to undertake reduction commitments. However, as part of their contribution to the DDA, they would be "*expected to substantially increase their level of binding commitments.*"⁷⁰ The 2008 fourth revision of the draft NAMA modalities notes in Paragraph 14 that "*Individual LDCs shall determine the extent and level of tariff binding commitments in accordance with their individual development objectives.*"⁷¹ The language suggests that this is a best-endeavour provision, rendering it analogous to the "full exemption" flexibility that was discussed in Section III.

2) Developing Countries in General (Excluding LDCs)⁷²

All of this group will benefit from longer staging periods (10 years vis-à-vis 5 years for developed countries). In addition, the following categories have been envisaged:

- a) Member fully exempted from tariff cuts: Leaving aside the special circumstances of the LDCs, requests to exempt Members from any tariff cut came relatively late in the negotiations. One of the first explicit requests was made in 2005 by the so-called "low income economies in transition,"⁷³ which are a subset of the recently acceded Members (RAMs).

⁷⁰ Paragraph 11 of TN/MA/W/35/Rev.1.

⁷¹ Paragraph 14 of TN/MA/W/103/Rev.3.

⁷² We will not refer in detail to a number of country specific provisions which have been proposed in the context of the formula, such as those for Oman, the Mercosur countries, South Africa and its SACU partners, as well as Venezuela.

⁷³ See paragraph 18 of TN/MA/W/56/Rev.

Although Members recognized the high level of contributions made during their accession negotiations, the proposal took some time to garner sufficient support as some resisted for fear of a domino effect. The exemption of these Members was included for the first time in the 2006 Towards NAMA Modalities text.⁷⁴ The 2007 first draft NAMA modalities added two Members who were considered at the time to be "very recently acceding Members" (VRAMs).⁷⁵ Members who acceded subsequently have been added as new versions of the draft NAMA modalities are issued. Other RAMs⁷⁶ that do not fit any of these categories have also received favourable consideration to their requests (e.g. Albania⁷⁷). Paragraph 20 of the 2008 third draft of the modalities listed a total of nine Members for exemption,⁷⁸ but the number was increased by two in the fourth revision.⁷⁹ Other situations have been considered beyond the RAMs category. For example, Paragraph 13(a) of the SVE modalities provides that Bolivia shall not be required to apply the modalities and that Gabon would be allowed to engage in GATT Article XXVIII negotiations in order to increase its duties to an average of 20 percent. This would add up to a total of 13 developing countries exempted from making tariff reductions in the context of the DDA.

⁷⁴ TN/MA/W/80.

⁷⁵ JOB(07)/126.

⁷⁶ The term that was initially used in NAMA was "Newly Acceded Members", but it was eventually aligned with the term "Recently Acceded Members" that was used in the Agricultural Negotiations.

⁷⁷ TN/MA/W/99.

⁷⁸ Paragraph 20 of document TN/MA/W/103/Rev.2 lists: Albania, Armenia, Former Yugoslav Republic of Macedonia, Kyrgyz Republic, Moldova, Saudi Arabia, Tonga, Viet Nam and Ukraine.

⁷⁹ The Chairman noted in his report (JOB(08)/96) that there appears to be consensus to add Mongolia to the list. Cape Verde became a Member on 23 July 2008.

b) Members with a low binding coverage (Paragraph 6 countries): The flexibility for developing countries with a low binding coverage was first envisaged by Paragraph 8 of the 2003 Girard Text.⁸⁰ At one point it competed with the "IDA-only" condition because both had similar country coverage, but Girard's approach was favoured by other developing countries who did not want to create a permanent sub-category of developing countries (i.e. the current criterion can only be used once). This flexibility allowed a group of developing countries (i.e. those with less than 35 percent binding coverage) to avoid the application of the "non-linear formula" by applying a softer modality – namely, a target average. It was envisaged that these Members would have to bind 100 percent of their tariff lines "*at an average level that does not exceed the overall average of bound tariffs for all developing countries after full implementation of current concessions (27.5 percent)*". The WTO Secretariat noted at a later stage that the level would be 28.5% if the EU enlargement to 25 member States was taken into account.⁸¹ A slightly modified version was included in Paragraph 5 of the 2003 Derbez Text with brackets around the 100 percent figure.⁸² However, the provision was subsequently copied and renumbered as "Paragraph 6" of the 2004 July Framework, and hence the tendency for negotiators to refer to this modality by its paragraph number.⁸³ The discussions that followed the HKMD declaration in 2006–2007 focused on the share of tariff lines that should be bound by these Members. The proponents insisted on binding no more than 70 percent of their lines and other Members insisted on achieving full binding coverage for all Members. The 2007 first draft NAMA modalities tried to

⁸⁰ TN/MA/W/35/Rev.1.

⁸¹ See TN/MA/W/80.

⁸² Annex B, Paragraph 5, of document JOB(03)/150/Rev.2.

⁸³ Annex B of document WT/L/579.

bridge the gap between the positions by proposing to ask these Members to bind 90 percent of their tariff lines at a level of 28.5 percent,⁸⁴ but it was considered as too ambitious by the proponents who maintained it should be no more than 70 percent of lines. A subsequent proposal was made to change the structure from a single target average to a "three-banded approach" – like the one envisaged for the SVEs.⁸⁵ Under this approach, the target average would be linked to the current binding coverage of the Members in question – that is, the lower the current share of bound tariffs, the lower the share of tariff lines that would need to be bound. There was also a joint communication with the SVE Group which noted that the average should have taken into account the LDCs and should, therefore, be higher than 28.5 percent. This saga came to an end before August 2008 when the interested parties agreed to a two-band approach. This agreement, later included in the fourth version of the modalities, provided that those Members with less than 15 percent binding coverage would increase it to 75 percent while those with a binding coverage between 15–35 percent would increase it to 80 percent. Both would do so at a target average of 30 percent that would only need to be achieved within a ten-year implementation period.⁸⁶

c) Small and Vulnerable Economies (SVEs): The special circumstances affecting this category of Members were recognized for the first time in the NAMA context in the 2005 HKMD. Up until then, the Members concerned were expected to implement a "non-linear" formula, as agreed in the 2004 July Framework. After intensive consideration of a proposal by the "SVE Group,"⁸⁷ Members acknowledged these concerns in

⁸⁴ JOB(07)/126.

⁸⁵ JOB(08)/11/Rev.1.

⁸⁶ TN/MA/W/103/Rev.3. Also see JOB(08)/96 and JOB(08)/84.

⁸⁷ See JOB(05)/165 and TN/MA/W/66.

Paragraph 21 of the HKMD which instructed the Negotiating Group to "*establish ways to provide flexibilities for these Members without creating a sub-category of WTO Members.*"⁸⁸ Although Members eventually reached an agreement on the "smallness" criteria (i.e. Members having a share of less than 0.1 percent of world NAMA trade for a reference period of 1999 to 2001), an agreement on the vulnerability criteria proved elusive during the discussions and it was eventually dropped from the discussions. It is noteworthy that this criterion is different from the one used in the Agricultural Negotiations. The Chairman stated in his July 2006 Towards NAMA modalities text that there appeared to be broad support for the "trigger" to determine eligibility, but that positions remained deeply divided with respect to possible treatments.⁸⁹ The two flexibility options that were being considered at the time were: i) the application of the Swiss formula like other developing countries, but allowing them to use a larger share of tariff lines for the two flexibility options that were envisaged; and ii) the application of "Paragraph-6 type" treatment, which meant setting a target average. The proponents introduced the idea of using not one but multiple target averages in the context of a banded approach. The July 2007 first draft modalities included this approach and proposed three target averages (22/18/14), to which a 10 percent minimum cut on 95 percent of tariff lines was added.⁹⁰ The two upper bands were meant to deal with the demands of the SVE Group, while the lower one was introduced to take into account the concerns expressed by the RAMs that would also qualify within this category.⁹¹ The SVE

⁸⁸ WT/MIN(05)/DEC.

⁸⁹ TN/MA/W/80.

⁹⁰ TN/MA/W/103.

⁹¹ The latest proposal is contained in JOB(07)/173.

Group reacted strongly against the proposed target averages⁹² and made a counterproposal to include a 40 percent and 30 percent "cap" in the upper bands to limit the reduction in the average they would have to assume in meeting the target average (i.e. which meant the target average would not be met by some of them).⁹³ This proposal faced stiff opposition from other Members who did not want to measure the hierarchy of contributions in that manner. At one point in time, the minimum line-by-line cut was dropped in the upper two bands, because no Member insisted on its inclusion. The 2008 third revision of the draft NAMA modalities dropped the idea of the caps, but reintroduced ranges with figures that were higher than those in the first draft (i.e. a target average of [28–32 percent] for those with an average at or above 50 percent; and of [24–28 percent] for those with an average at or above 30 percent but below 50 percent). It also split the third band in two. In his fourth revision of the modalities, the Chairman proposed to set the averages at 30 percent and 27 percent respectively. A final feature to be noted here is that the Members falling in the fourth band were granted a form of "deviation by compensation."

d) Recently acceded members (RAMs): One point that probably should have been clarified by the Negotiating Group at the outset was the qualifying criterion for this category, i.e. how "recent" should the accession be? However, this was never really discussed until 2006 when an informal understanding was reached by the General Council. In essence, any Member who joined the WTO after the Uruguay Round is considered a RAM.⁹⁴ As to the flexibilities available to this category of

⁹² For a reaction of the SVE Group, see TN/MA/W/91.

⁹³ See JOB(07)/154 and TN/MA/W/100.

⁹⁴ A description of this understanding is contained in the "Towards NAMA modalities", document TN/MA/W/80, page 15.

Members, the 2003 Girard text proposed the following three mechanisms: i) a higher coefficient in the formula, which was linked to the type of formula envisaged (i.e. the Girard formula); ii) longer implementation periods; and iii) a "grace period" which would commence after the implementation of current accession commitments.⁹⁵ The specific details proved difficult to agree and the Derbez text left the issue open by noting that RAMs "*shall have recourse to special provisions for tariff reductions in order to take into account their extensive market access commitments undertaken as part of their accession and that staged tariff reductions are still being implemented in many cases.*"⁹⁶ The paragraph was renumbered and included as such in the 2004 July Package.⁹⁷ The 2005 HKMD section on NAMA did not clarify further any aspect concerning the RAMs. The Chairman noted in the 2006 Towards NAMA modalities⁹⁸ that there was consensus to provide longer staging to all RAMs and to allow them access to other flexibilities if they met the requirements. However, he noted there was not much support for the proposals on access to a higher coefficient, additional flexibilities and grace periods.⁹⁹ In his July 2007 first draft NAMA modalities,¹⁰⁰ the Chairman added that there was consensus to treat the SVE-RAMs within the SVE category. As to the four RAMs applying the formula,¹⁰¹ he introduced a proposal to grant them two additional years for staging, and a two year "grace" period for lines which had not been fully implemented (which was different for every RAM). However, he noted there was no support for inclusion of further flexibilities. One point which

⁹⁵ Paragraph 13 of TN/MA/W/35/Rev.1.

⁹⁶ Paragraph 10, Annex B, of document JOB(03)/150/Rev.2.

⁹⁷ Paragraph 11, Annex B, of document WT/L/579. (Unpublished)

⁹⁸ TN/MA/W/80.

⁹⁹ JOB(08)/22.

¹⁰⁰ JOB(07)/126. (Unpublished)

¹⁰¹ China, Croatia, Oman and Chinese Taipei. (Unpublished)

complicated the debate was the lack of clarity with respect of the coefficients formula and the corresponding flexibilities. Some RAMs were of the view that their proposals should be kept on the table until those key elements were defined, an issue that was expressly noted in a footnote to the draft modalities. The 2008 third draft of the NAMA modalities dropped the "grace period" option, and the range for the "longer implementation" option was changed to [3–4] additional equal reductions, but it was later set at 3 in the fourth revision of the modalities. The August 2008 report by the Chairman noted that there was convergence to delete the footnote in the RAMs section of the third revision, which kept on the table the other flexibility options, so it was dropped in the fourth revision.

e) Developing countries applying the formula (including RAMs): The 2003 Girard text¹⁰² introduced the notion of giving developing countries the possibility of choosing between being able to keep tariff lines unbound or not applying formula cuts on up to 5 percent of tariff lines provided that no more than 1 percent (1 percent of tariff lines providing they do not exceed 1 percent of the Member's imports, calculated for the reference period) could be taken in one HS Chapter. The Derbez text added an additional flexibility option, and transformed the provision in a binary selection. The first option allowed them to apply half of the formula reduction to [10 percent] of the tariff lines, provided they did not exceed [10 percent] of the total value of imports. The second option allowed them to keep tariff lines unbound, or not applying the formula, for up to [5 percent] of the tariff lines, provided they did not exceed [5 percent] of the total value of a Member's imports. A trade-off was thereby introduced between the flexibility available to the Member (in terms of the reduction of the duty) and the number

¹⁰² TN/MA/W/35/Rev.1.

of tariff lines that could be selected for that flexibility. This provision was subsequently renumbered and included as Paragraph 8 of the 2004 July Framework.¹⁰³ A third flexibility option was hinted at by Mexico who considered there were others ways of "squaring the circle" between flexibilities and the coefficients, and argued that some developing countries may wish to avail themselves of the possibility of not using either of the two options in that paragraph in exchange of a higher coefficient;¹⁰⁴ this suggestion was not considered favourably by others. The provisions in the 2004 July Framework remained stable for a long time amid calls from both sides to respect the mandate. As explained in the formula section above, this is the reason why the two options were "reaffirmed" by the Ministers through Paragraph 15 of the 2005 HKMD.¹⁰⁵ In his report to the Ministers in Hong Kong, the Chairman noted that while some Members considered the flexibilities to be "*equivalent to 4–5 additional points to the coefficient in the formula*", and therefore needed to be taken into account in that context, others considered the flexibilities to be "*a stand-alone provision*" which should not be linked in any way to the coefficient in the formula.¹⁰⁶ The ensuing discussions in 2006 centred on the numbers in the brackets and, in essence, assumed that the architecture was agreed.¹⁰⁷ Mexico proposed to add 5 points to the coefficient of any developing Member foregoing the use of the flexibilities, but again, it did not gather sufficient support for inclusion in the text. The Negotiating Group also saw a new wave of proposals to increase the numbers in the flexibilities, which were considered by some a

¹⁰³ Annex B of WT/L/579.

¹⁰⁴ The original idea evolved with time, but it was originally presented in the submission by Mexico, Chile, Colombia and Uruguay, document TN/MA/W/50+Add.1 of 24 February 2005.

¹⁰⁵ WT/MIN(05)/DEC.

¹⁰⁶ See report by the Chairman, Paragraph 10 of Annex B to WT/MIN(05)/DEC.

¹⁰⁷ See comments by the Chairman in the 2006 Towards NAMA modalities, TN/MA/W/80.

"bare minimum" and to extend their scope by allowing the combination of the two options. There were also calls from the other side to reduce the numbers. In his 2007 first draft NAMA modalities,¹⁰⁸ the Chairman removed the brackets around the figures which appeared to have stabilized, and added the Mexican proposal as a third flexibility option. He also noted that several concerns had been raised with respect to "transparency" in the use of the flexibilities, in particular by "niche" exporters, who feared they would lose any eventual gains in the negotiations, because their narrow export base could be targeted through the flexibilities. There were also calls to introduce country-specific solutions by South Africa,¹⁰⁹ Venezuela¹¹⁰ and the Mercosur countries.¹¹¹ While referring to proposals to modify the structure of the flexibilities, the Chairman noted that *"where additional flexibility is judged necessary by Ministers to address specific concerns, the clear majority of Members would prefer them to use the flexibilities already provided in the mandate – that is, to balance the level of ambition in the formula with the exemptions and/or trade volume constraints."*¹¹² As mentioned in the formula section, there were very strong reactions against the 2007 first draft NAMA modalities, in particular by the NAMA-11 Group of developing countries who considered that it was necessary to "flexibilize the flexibilities" by deleting the import cap, expanding the number of tariff lines that could be included in the "no cut" and "half cut" options, and being able to combine the two options.¹¹³ These discussions continued during the first part of 2008 until the relationship between the coefficient and the flexibilities was expressly recognized through the so-called

¹⁰⁸ JOB(07)/126.

¹⁰⁹ JOB(07)/86. (Unpublished)

¹¹⁰ JOB(07)/162.

¹¹¹ JOB(07)/166.

¹¹² Paragraph 15 of JOB(07)/126.

¹¹³ See JOB(07)/177.

"sliding scale." However, the increased flexibility options translated into a renewed concern by those with an offensive interest, and the EC in particular, who wanted assurances that they would not be affected and proposed the introduction of a stronger "anti-concentration" clause.¹¹⁴ This move was not welcomed by many developing countries who considered that the provision would severely constrain the agreed flexibilities. In the July 2008 discussion among the G-7, an additional anti-concentration provision was envisaged in which "*full formula tariff reductions shall apply to a minimum of either 20 percent of national tariff lines or 9 percent of the value of imports of the Member in each HS Chapter.*"¹¹⁵ Following consultations, this language was incorporated in paragraph 7(d) of the fourth revision of the modalities.

D) The Extent of New Tariff Bindings

An increase in the coverage of bindings is generally considered a valuable outcome of tariff negotiations,¹¹⁶ but this value also depends on the gap between the new bindings and the applied tariffs (i.e. the lesser the difference, the more valuable the binding). Extended binding coverage was one of the main contributions by developing countries in the industrial goods area during the Uruguay Round. A Secretariat assessment of the results from this Round, for a sample of 21 developing countries, concluded that their average binding coverage had increased from 21 percent to 73 percent, covering 61 percent of their

¹¹⁴ In other words, they wanted to ensure that the flexibilities would not cover entire sectors. One side-effect of an anti-concentration clause is that it will redistribute the products on which the flexibilities will be used. In other words, a Member who is not able fully to protect all its tariff lines in sensitive sectors, but still has "spare flexibilities" available, will certainly end up protecting products in other sectors that may have not been envisaged for protection.

¹¹⁵ See JOB(08)/96.

¹¹⁶ P. Messerlin (2008), *Walking a Tightrope: World Trade in Manufacturing and the Benefits of Binding*, GMF. (Unpublished)

imports.¹¹⁷ It was also estimated that developed countries had increased binding coverage from 78 percent to 99 percent, covering 99 percent of their imports. Practically all Members that have acceded to the WTO since 1995 have done so with "full bindings."

Although these numbers could give the impression that achieving new bindings was not important for NAMA in the DDA, Table 2 shows that there is still quite a lot to do in this area. Although some 82 Members have bindings on at least 95 percent of their non-agricultural tariff lines, there are 44 Members with less than that, including 29 with less than 35 percent of their lines bound. Furthermore, a significant amount of imports fall in unbound tariff lines in both developed and developing countries. Approximately 13.8 percent of Japan's 2001 imports and some 38.8 percent of India's 2001 imports, for example, fell under tariff lines with no binding.¹¹⁸

Table 2. Current Binding Coverage of Non-Agricultural Products, by category of WTO Members

Share of tariff lines bound (%)	No. of Members	Developed countries	Developing countries	LDCs
100%	54*	2*	43	9
+95 < 100%	28	7	17	4
+35 < 95%	14	0	12	2
+15 < 35%	12	0	5	7
< 15%	17	0	7	10
Total	125*	9*	84	32

Source: Own calculation based on WTO – 2008 World Tariff Profiles.

* Counting the EC-27 and its Member states as one, as well as Switzerland and Liechtenstein as one

Several Members supported the objective of achieving full binding coverage for all Members, and some were ready to show flexibility in

¹¹⁷ GATT Secretariat (1994) *The Results of the Uruguay Round of Multilateral Trade Negotiations – Market Access for Goods and Services: Overview of the Results*, Geneva, p.26.

¹¹⁸ See Table 3 of TN/MA/S/14.

terms of the level of those new bindings. However, some developing countries considered that keeping unbound tariffs was necessary to preserve their policy space. Another key issue was the methodology to set new bindings. The two main proposed approaches were: i) adding a mark-up to the MFN applied level before the application of the formula or, ii) simply binding at a certain level, without any cut. The two approaches have been discussed since the first part of the negotiations and were reflected in the 2003 Girard Text. Since different categories of Members were being created, negotiators ended up with different approaches to deal with the unbound tariffs of the LDCs, developing countries with a low binding coverage (i.e. less than 35 percent of their lines bound), SVEs, and the Members applying the Swiss formula (who are the only ones for whom the "mark-up" system was kept).

The results that would be achieved with the 2008 fourth draft of the NAMA modalities would be as follows:

1) Least-Developed Countries (LDCs)

These Members will only be "expected to significantly increase their binding coverage" at levels to be defined by themselves. The situation is not likely to change much from the current average of binding coverage of 51.6 percent. As can be seen in Table 2, nine LDCs already have full bindings, so they would in principle not be expected to do anything else.

2) Developing Countries in General (Excluding LDCs)

The situation differs according to each grouping, but in aggregate terms the binding coverage will increase from 81.5 percent to approximately 96 percent. As to the different categories:

- (i) Member fully exempted: Practically all of these Members already have full bindings, so their situation will not change.

(ii) Members with low binding coverage ("Para-6" countries): The two bands, setting binding coverage targets at 75 percent and 80 percent, will result in an average of 77.1 percent from the current average of 10.8 percent.

(iii) *SVEs*: The draft modalities provide that all *SVEs* should bind all of their tariff lines, with the exception of Fiji who will have the additional flexibility of keeping 10 percent of their lines unbound. This will mean an increase up to an average of 99.6 percent from the current average of 96.7 percent.

(iv) Developing countries applying the formula (including RAMs): For those tariff lines currently unbound, a mark-up of 25 percentage points will be added to the MFN 2001 applied level before applying the Swiss formula. The final result for each of these Members will be linked to: i) whether it currently has unbound items (most of them are already fully bound); ii) whether the numbers for the flexibilities will be finally agreed, in particular the possibility of leaving items unbound; and iii) the flexibility option chosen in the context of the sliding scale. Bearing all this in mind, the share of bound tariff lines would increase to an average between 97.7 percent to 100 percent from the current level of 88.6 percent.

3) Developed Countries

Since these members do not have access to any deviation from the application of the modalities, their binding coverage would increase from 98.9 percent to 100 percent. This 1.1 percent increase is not trivial, as the trade involved is large in value terms for several Members, and in particular for Canada, Japan and the USA.¹¹⁹

¹¹⁹ See TN/MA/S/14

E) The Magnitude of the Tariff Reductions

Simulations taking account of all the relevant variations and flexibilities that have been described above are beyond the scope of this paper. However, tariff information readily available allows us to obtain a broad idea of the results that will eventually emerge after applying the different modalities envisaged in the 2008 fourth revision of the draft NAMA modalities, and the elements that were discussed by the G-7. The broad results discussed below are based on a comparison of current and new simple averages of bound tariffs.¹²⁰ More sophisticated estimates could have been made distinguishing, for example, between dutiable and non-dutiable lines, using trade-weighted averages, and looking at bound versus applied tariff reductions. However, we would have not been able to calculate comparable results for all Members (in particular for those subject to a target average), and we do not know yet what flexibilities will be selected by those Members able to avail themselves of different options under paragraph 7, nor the manner in which the outcome of the sectorals will affect the overall results. Using our simplified methodology, the extent of tariff reductions would be as follows:

1) Least-Developed Countries (LDCs):

As explained above, there will be no tariff reductions by these 32 Members, so their current average of bound duties will most probably remain at around 43 percent.

2) Developing Countries in General (Excluding LDCs)

A new simple average between 18.2–18.5 percent will replace the current level of 28.7 percent – representing a reduction on average of between 35.4 percent to 36.6 percent. It seems certain that some of the reductions underlying these simple bound reductions will translate into

¹²⁰ See Annex Table 4 for a summary of the results.

cuts in applied tariff rates for some of the developing countries applying the formula, but not for the other sub-categories:

(i) Members fully exempted: With the exception of Bolivia (that has an average bound tariff of 40 percent) and Gabon (that would end up with an average of 20 percent), the averages of all the other Members in this category are below 18 percent. Due to Gabon's increase, the average of these Members will increase to 12.6 percent from the current 12.2 percent.

(ii) Members with low binding coverage ("Para-6" countries): The calculation for this category of Members reveals an increase to 30 percent from the current 24.8 percent. It should however be noted that the comparison is not appropriate, because the averages refer to different percentages of tariff lines (i.e. the 30 percent refers to the new 77 percent of the lines while the 24.8 percent refers to the current 10.8 percent of the lines).

(iii) SVEs: The new average would come down to 25.8 percent, from the current average of 41 percent, representing a reduction on average of 37.1 percent.

(iv) Developing countries applying the formula: The new average, including the RAMs applying the formula, would end up between 11.4 percent and 12.2 percent, down from the current average of 28 percent,¹²¹ representing a 56.4 percent to 59.3 percent reduction in the average. The estimated new average could

¹²¹ We have arrived at these numbers by applying the three Swiss formula coefficients that have been discussed by the G-7, to the average of the bound rates of these Members. In other words, we have not applied the formula on a line-by-line basis nor made assumptions on the tariff lines that could be selected for the flexibilities. Although this only constitutes a rough approximation, and other benchmarks would differ considerably, the overall results appear to be close to those that would result from applying more complex line-by-line simulations.

increase slightly, depending on the outcome of the country-specific flexibilities, or reduced depending on the participation in sectoral initiatives. Since the number of tariff lines envisaged for the flexibility options is not too large, a slight change in those numbers would not dramatically affect the new average that is presented. On the other hand, the difference at the tariff line level could be quite substantial. Annex Table 3 shows the impact of the different options on the maxima and average of a selected group of developing countries.

3) Developed Countries

This is the only group of Members for which the result would be known from the outset because the Swiss-8 formula would be applied on all tariff lines with no exception. For this reason, we based our calculations on the actual line-by-line results, instead of applying the Swiss formula on the average like we did for the developing countries applying the formula. This means that the two numbers are not strictly comparable. Bearing this in mind, the new average for developed countries would be around 2.4 percent, down from the current average of 6.5 percent, which represents a 63.9 percent reduction on average. Furthermore, the Swiss-8 properties would translate into a maximum tariff in these markets of less than 8 percent.

F) How the Results Are Likely to be Assessed by Different Parties

Leaving aside the omnipresent link with the Agriculture Negotiations and other parts of the Doha Negotiations, it is evident that negotiators have struggled to balance the ambitious results sought by some and the strong defensive interests of others within the NAMA negotiations. This is the underlying tension surrounding the discussions about the "less than full reciprocity" part of the mandate. Although there is a broad understanding of the general thrust of this provision – that developed countries have to do "more" than developing countries and that developing countries for the

most part also have to contribute – there is considerable disagreement on how to assess the outcome. There is also the nuanced difference to consider in the question of how much "less" developing countries do with respect to developed countries. Moreover, some Members will be measuring the result against the "real market access" – meaning cuts in applied rates – that will be delivered by the package.

On the calculation issue, the Chairman noted in paragraphs 6 and 7 of his introductory remarks to the 2007 first draft modalities text that *"it is difficult for the Chairman to assess with confidence whether less than full reciprocity has been achieved, since the positions of the Members are very polarized and there has never been an agreed definition of reciprocity... In prior rounds of negotiation, efforts to agree a definition have been unsuccessful, because Members have insisted on using their own yardstick to measure reciprocity..."*¹²² The NAMA-11 Group of Developing countries disagreed by noting that LTFR *"cannot simply be left to each Member's judgement but must be measured in percentage reductions from bound rates"*¹²³ (emphasis added). This approach was implicitly endorsed by other groupings, and in particular by the SVE group who used it as the rationale for their "caps".

On the other hand, developed countries consider that comparing the efforts between developed and developing countries should also take into account several other factors, including the depth of the cuts in applied rates, the level of the resulting final rates, revenue foregone, the additional implementation period that developing countries will enjoy, the special flexibilities given to different groupings of developing countries, the carve-outs to the formula, and reductions resulting from the sectoral negotiations.¹²⁴ The NAMA-11 considers, however, that it is not appropriate to put a developed country "negotiating objective" at the same level as the

¹²² Paragraph 7 of document JOB(07)/126.

¹²³ Paragraph 6 of document JOB(07)/225.

¹²⁴ TN/MA/W/95.

LTFR mandate. They also consider that it is unacceptable to force "some" developing countries to pay for the whole Round while exempting others.

CONCLUSIONS

Despite prolonged wrangling over an increasingly complex array differentiated tariff-cutting obligations among developing countries, the NAMA negotiations still hold out the promise of a historically impressive outcome. The persistence of seemingly intractable differences among negotiators over many months, even years, is in significant measure a reflection of the level of ambition being pursued. Developed countries may well consign to history the most significant elements of high variance in their tariff structures – high tariffs, peaks and escalation. Many developing countries will squeeze water out of their WTO tariff obligations by bringing bound rates closer to applied rates and in some cases will also lower applied rates. The share of world trade for both developed and developing countries that is involved is enormous. These potential outcomes make it eminently worthwhile to press for completion of the negotiations.

But trade policy does not stand still. In losing their tariff protection, import-competing interests in the developed countries may press for more contingent protection, mainly through increased anti-dumping petitions. Such a tendency would undo part of the NAMA achievement. Against a background of higher tariff levels on average in developing countries, the NAMA negotiations have not changed the reality that unilateral and preferential actions still trump the GATT/WTO as a venue for trade-opening. Indeed, MFN is arguably becoming the "least-favoured nation" tariff, and those countries left paying MFN rates increasingly see a reason to seek out their own bilateral deals. This may reflect the reality that reciprocal bargains are more elusive for smaller countries in a setting with numerous players. This observation makes an additional argument for ensuring that the rules base of the GATT/WTO system remains effective and relevant in order to supply the public good of greater policy certainty and predictability to all members of the international trading community.

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Annex Table 1. World Trade in Goods, by product category in the DDA Negotiations (1999–2005)

	Share of World (%)						
	1999	2000	2001	2002	2003	2004	2005
World Exports							
Agric. products*	7.1%	6.1%	6.7%	6.8%	6.7%	6.2%	5.9%
Non-Ag. prod.	92.9%	93.9%	93.3%	93.2%	93.3%	93.8%	94.1%
TOTAL	100%	100%	100%	100%	100%	100%	100%
World Imports							
Agric. products*	7.3%	6.3%	6.8%	6.8%	6.8%	6.3%	5.7%
Non-Ag. prod.	92.7%	93.7%	93.2%	93.2%	93.2%	93.7%	94.3%
TOTAL	100%	100%	100%	100%	100%	100%	100%

Source: All data based on UN Comtrade database, except World totals which are WTO estimates.

Notes:

a Excludes intra-trade of the European Communities and significant re-exports.

b Figures for Hong Kong, China refer to domestic exports and/or retained imports.

c Includes rough estimates for some Members.

* As defined in Annex 1 of the Agreement on Agriculture.

Annex Table 2. Trade in Non-Agricultural Products of WTO Members, by WTO Membership and level of development (1999–2005)

EXPORTS	1999	2000	2001	2002	2003	2004	2005
Value (Bill. US\$)	3,451.3	4,131.2	3,873.7	4,022.6	4,650.0	5,674.3	6,473.8
– Developed	2,060.1	2,313.6	2,175.4	2,216.8	2,465.6	2,923.3	3,248.0
– Developing	1,263.2	1,623.2	1,511.8	1,608.5	1,938.4	2,413.7	2,851.0
– LDCs	11.3	22.2	22.5	24.9	28.0	37.1	39.2
– Non-WTO	116.8	172.3	163.9	172.4	218.0	300.1	335.6
Share of World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
– Developed	59.7%	56.0%	56.2%	55.1%	53.0%	51.5%	50.2%
– Developing	36.6%	39.3%	39.0%	40.0%	41.7%	42.5%	44.0%
– LDCs	0.3%	0.5%	0.6%	0.6%	0.6%	0.7%	0.6%
– Non-WTO	3.4%	4.2%	4.2%	4.3%	4.7%	5.3%	5.2%

IMPORTS	1999	2000	2001	2002	2003	2004	2005
Value (Bill. US\$)	3,643.8	4,378.0	4,148.4	4,280.6	4,946.1	6,078.4	6,983.0
– Developed	2,366.2	2,775.0	2,596.0	2,641.7	2,986.4	3,577.4	4,109.9
– Developing	1,192.1	1,498.1	1,431.6	1,504.2	1,795.7	2,277.5	2,640.5
– LDCs	16.8	25.4	26.2	28.4	33.8	38.3	29.5
– Non-WTO	68.8	79.5	94.6	106.3	130.2	185.2	203.2
Share of World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
– Developed	64.9%	63.4%	62.6%	61.7%	60.4%	58.9%	58.9%
– Developing	32.7%	34.2%	34.5%	35.1%	36.3%	37.5%	37.8%
– LDCs	0.5%	0.6%	0.6%	0.7%	0.7%	0.6%	0.4%
– Non-WTO	1.9%	1.8%	2.3%	2.5%	2.6%	3.0%	2.9%

Source: All data based on UN Comtrade database, except world totals which are WTO estimates.

Notes:

a Excludes intra-trade of the European Communities and significant re-exports.

b Figures for Hong Kong, China refer to domestic exports and/or retained imports.

c Includes rough estimates for some Members.

Annex Table 3. Impact of the different flexibility options in the "Sliding-Scale" on the maxima and average duties of selected developing countries

Member	Type of tariff	Duty level (%)	Swiss-20			Swiss-22			Swiss-25
			Full cut	Half-cut	No cut	Full cut	Half-cut	No cut	No cut
Argentina	Maximum	35.0	12.7	23.9	35.0	13.5	24.3	35.0	14.6
	Average	31.8	12.3	22.0	31.8	13.0	22.4	31.8	14.0
Brazil	Maximum	35.0	12.7	23.9	35.0	13.5	24.3	35.0	14.6
	Average	30.8	12.1	21.5	30.8	12.8	21.8	30.8	13.8
China	Maximum	50.0	14.3	32.1	50.0	15.3	32.6	50.0	16.7
	Average	9.1	6.3	7.7	9.1	6.4	7.8	9.1	6.7
Chile	Maximum	25.0	11.1	18.1	25.0	11.7	18.4	25.0	12.5
	Average	25.0	11.1	18.1	25.0	11.7	18.4	25.0	12.5
Egypt	Maximum	160.0	17.8	88.9	160.0	19.3	89.7	160.0	21.6
	Average	27.7	11.6	19.7	27.7	12.3	20.0	27.7	13.1
India	Maximum	372.0	19.0	195.5	372.0	20.8	196.4	372.0	23.4
	Average	36.2	12.9	24.5	36.2	13.7	24.9	36.2	14.8
Indonesia	Maximum	60.0	15.0	37.5	60.0	16.1	38.0	60.0	17.6
	Average	35.6	12.8	24.2	35.6	13.6	24.6	35.6	14.7
Korea	Maximum	444.0	19.1	231.6	444.0	21.0	232.5	444.0	23.7
	Average	10.2	6.8	8.5	10.2	7.0	8.6	10.2	7.2
Mexico	Maximum	50.0	14.3	32.1	50.0	15.3	32.6	50.0	16.7
	Average	34.9	12.7	23.8	34.9	13.5	24.2	34.9	14.6
South Africa	Maximum	50.0	14.3	32.1	50.0	15.3	32.6	50.0	16.7
	Average	15.7	8.8	12.2	15.7	9.2	12.4	15.7	9.6

Source: Own calculation based on WTO – 2008 World Tariff Profiles.

Note: The option of leaving tariff lines unbound has not been considered in this example. The AVEs used in the World Tariff Profiles differ from those notified by Members in the context of NAMA.

Annex Table 4. Summary of current concessions and eventual results of the NAMA negotiations

Category according to the draft NAMA modalities	No.	Binding coverage (%)		Simple average of bound tariffs		
		Current	Resulting from Doha/ ⁱ	Current	Resulting from Doha/ ⁱ	Reduction in the average (%)
1. Developed Countries/ⁱⁱ	9	98.9	100.0	6.5	2.4	63.9
2. Developing Countries/ⁱⁱⁱ	84	81.5	95.6 – 96.6	28.7	18.2 – 18.5	35.4 – 36.6
– Exempted from tariff reduct.	13	100.0	100.0	12.2	12.6	n.a.
– With low binding coverage	12	10.8	77.1	24.8	30.0	-21.2 ^{iv}
– SVEs	23	96.7	99.6	41.0	25.8	37.1
– Applying the formula/ ^v	36	88.6	97.7–100.0	28.0	11.4 – 12–2	56.4 – 59.3
3. LDCs	32	51.6	> 51.6	43.0	± 43.0	n.a.

Source: Own calculation based on the draft modalities described in TN/MA/W/103/Rev.3 and the July 2008 discussions as reported by the Chairman in JOB(08)/96.

Notes: The assumptions are described in detail in Sections IV.D and IV.E. The eventual results in sectoral initiatives and other flexibilities have not been taken into account.

i. Working hypothesis, which is without prejudice to rights and obligations of the WTO Members.

ii. Counting the EC-27 and its member States as one, as well as Switzerland and Liechtenstein as one. The new average was arrived by applying a Swiss formula with a coefficient of 8, at the tariff line level, to each developed country. In a second step, an average was calculated based on the new average of each Member.

iii. Including the RAMs that fall within each sub-category

iv. The new average was arrived by applying a Swiss formula with a coefficient of 20, 22 and 25 on the average of each developing Member applying the formula (i.e. it was not applied at the tariff line basis). In a second step, an average was calculated based on the new average of each Member.

v. The number is presented for completeness, but it is probably not appropriate because the averages refer to a different percentage of tariff lines.