

INCORPORATING CONSTRAINED FLEXIBILITY IN TARIFF REDUCTIONS: A DYNAMIC FORMULA

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EXECUTIVE SUMMARY

Background: why difficulties on market access

Market access has been a controversial issue from the very beginning of the reform process in agriculture and continues to be the one holding back the negotiations not only in agriculture but in other sectors as well. More than any other area in the negotiations on agriculture, differences on what is to be achieved on market access are deep among WTO members. On one side of the spectrum are those countries that aim at an ambitious outcome resulting in effective market access which, inter alia, would require substantial tariff cuts, especially of tariff peaks. On the other side of the spectrum are those countries that aim for a more modest outcome such that it would afford them a degree of flexibility to shield certain sensitive products (essentially those with high tariffs) from substantial cuts.

Beyond these distinctly offensive and defensive approaches to reform on market access there are the interests of a large number of developing countries that argue for special treatment in the form of Special Products, which should be largely exempted from the general disciplines on the grounds of food/livelihood security and rural development considerations. In addition, there are other preference-receiving developing countries that argue that they would be adversely affected by tariff reductions in the preference-giving developed countries and that their concerns should also be taken into account in the approach to be adopted on tariff reductions.

Clearly, the above objectives are not all consistent with each other; however all of them stem basically from the Doha Declaration and what it is understood to imply in operational terms. The Doha Declaration calls for “substantial improvements in market access”, however, to the extent that country-specific concerns are to be taken into account (whether in the form of sensitive products, Special Products and access to preferential markets) that limits the degree to which this overriding objective could be achieved. Hence, a compromise on market access is embedded in what was agreed in the Doha Declaration and an acceptable solution would have to respond to all the divergent interests of the WTO membership.

Why attempts to find an acceptable formula have failed so far

All attempts to come up with a tariff reduction formula that could bridge the gap between ambition and flexibility and accommodate the additional concerns identified above have failed. Besides the apparent contradictions in the Doha mandate on the objectives of the reform process, there are several other reasons for lack of progress in this area, including:

- inherent biases in the design of different formulae towards one side of the spectrum (i.e. favouring either too much flexibility, such as the UR-type formula, or too much ambition, such as the Swiss-type formula);
- focussing too much on the formula to be used and not on the basic properties and principles that would characterise the final outcome;
- inability of the various formulae proposed to differentiate between rather diverse initial tariff profiles of WTO members (Table 1) and thus yielding highly inequitable outcomes (Tables 2 to 5);
- lack of a mechanism to ensure that the flexibility offered to accommodate sensitive products/Special Products would not be abused; and

¹ Presentation to the FAO informal expert consultation on cutting-tariff formulae, Geneva 12-13 July 2004. The views expressed in this paper are those of the author and do not necessarily reflect official policy of the Food and Agriculture Organization.

- uncertainty as regards the extent to which Special and Differential Treatment (SDT) for developing countries would be ensured, including in particular the principle of proportionality in the outcome.

Incorporating “constrained flexibility” into tariff reductions: a Dynamic Formula

The fundamental approach in striking a balance between ambition and flexibility on market access is to incorporate in the overall tariff cut formula self-adjusting mechanisms so that the flexibility offered is kept within bounds and thus it leaves room for effective market access. This is basically what has been characterised by the SSCoA Chairman as “constrained flexibility” in his statement to the TNC on 30 June 2004. This approach entails basically trade-offs between the number of sensitive products/Special Products and the treatment of the tariffs of such products.

The way this constrained flexibility could work in practice is demonstrated in this paper by taking a starting point the last proposal that was on the negotiating table, the blended formula, with its three categories of tariff lines envisaged². However, the similarity with the blended formula ends there. A number of self-adjusting mechanisms are introduced which take into account the initial tariff profiles of individual WTO members and the need to contain flexibility within predictable bounds. The approach achieves the desired “constrained flexibility” and certainty in the outcome. It addresses issues relating to sensitive products (predominantly a developed country concern), generally identified with peak tariffs, and Special Products (a developing country concern), for which additional provisions on SDT basis would apply.

Dealing with sensitive products: a self-adjusting category. Key in this is defining a “ceiling” tariff equal to the average initial tariff of all tariff lines considered as sensitive. This “ceiling” level would work as an upper limit of tariffs and provides the mechanism of self-regulation. While the designation of sensitive products remains self-declaratory, there is a built-in incentive to minimize their number in the sense that the more tariff lines are included in this category, the less the average and, hence, the less the “ceiling” final tariff (Figures 1a and 1b).

Self-adjusting Swiss formula category. Given an overall average tariff reduction commitment (an across-the-board number for developed and developing countries, to be negotiated) the implication of a self-adjusting sensitive products category is that the Swiss category becomes a residual. Its coefficient is such that the resulting tariff cuts for tariff lines under the Swiss, together with those under the other two categories, yield an overall tariff reduction for all agricultural products which is equal to the negotiated overall tariff reduction commitment. Again, there is a trade-off between the number of tariff lines placed under the sensitive products category and the role of the Swiss in cutting tariffs (Figures 2a and 2b). The wider the sensitive products category, the tougher the Swiss has to be (smaller value of the Swiss coefficient) in order for an overall agreed reduction commitment to be achieved.

Self-adjusting additional obligations for non-compliance. This comprises an additional obligation for those members not in full compliance with their “ceiling” levels as defined above. That “ceiling” level is flexible in the sense that it can be exceeded provided that a member undertakes an extra obligation in the form of an additional TRQ. Again, the related mechanism is self-adjusting whereby the additional obligation is prorated according to the degree of non-compliance (Figure 3 and Table 6) so that there is an incentive to reduce high tariffs. Thus, the additional obligation does not become a permanent feature but disappears automatically as soon as a member is in compliance with its tariff “ceiling”.

The very important implication of the trade-offs involved in the designation and treatment of sensitive products is that the choices on these issues would have to be made by the countries themselves. This would certainly result in very important debates and decision making processes in capitals, where the trade-offs have to be considered. They have to make the hard choices on why certain products are sensitive and what are the implications for other products if these are to be disproportionately shielded from the general cuts applicable to other products.

² However, the approach suggested is easily adaptable to whatever other general formulations on tariff reductions may be proposed.

Additional self-adjusting provision for Special Products. The choice of SPs is left entirely to each individual developing country, i.e. a self-designation principle, however, this is not open-ended but subject to a self-adjusting mechanism, i.e. a trade-off between the numbers of SPs selected and the protection from tariff cuts each one of them is afforded. This is accomplished by the notion of Special Products Points (SPPs) which represents a total number of percentage points allotted to a developing country in order to limit reductions in the tariffs of those products designated as SPs (Table 7). A country can self-designate a small number of SPs and shield their tariffs considerably or a larger number of SPs and shield their tariffs only modestly.

As in the case of sensitive products, one important implication is that the self-adjusting mechanism for Special Products would motivate national debates on SPs where the objectives of such a provision in support of food/livelihood security and rural development would have to be carefully considered and trade-offs between different options evaluated. The extent to which an individual developing country would need to resort to the SP provision would also depend on its tariff profile and the extent to which the options offered to it for reduced tariff cuts within the sensitive products category are adequate or not to meet national objectives.

Overall, the introduction of constrained flexibility into a tariff reduction formula, in the form of self-adjusting mechanisms, responds well to the concerns raised with the blended formula in the Derbez text but in a way that it would also meet the concerns of members seeking flexibility on market access and are prepared to undertake additional obligations for such flexibility (Tables 8 and 9). The Dynamic Formula takes into account the differences in the initial tariff profiles of different members and the relative effort each makes to reduce high tariffs. The notion of self-declaration of sensitive products as well as Special Products is central in the approach of constrained flexibility adopted; however, there are built-in mechanisms to limit the use of these provisions. Beyond Special Products, other SDT provisions for developing countries are easily incorporated into the DF so that the general formulation (with differentiated parameters) would be applicable to all countries. In particular, the proportionality principle, whereby the final average tariff reduction by developing countries would be an agreed proportion of that of developed, is totally ensured by the proposed approach.

The Dynamic Formula incorporates constrained flexibility in tariff reductions by using the architecture of the blended formula, the last proposal on market access that was on the negotiating table. However, this was for demonstration only. The proposed self-adjusting mechanisms are generic enough to be adapted to other possible formulations without much difficulty.

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INCORPORATING CONSTRAINED FLEXIBILITY IN TARIFF REDUCTIONS: A DYNAMIC FORMULA

I. INTRODUCTION

Market access has been a controversial issue from the very beginning of the reform process in agriculture and continues to be the one holding back the negotiations not only in agriculture but in other sectors as well. More than any other area in the negotiations on agriculture, differences on what is to be achieved on market access are deep among WTO members. On one side of the spectrum are those countries that aim at an ambitious outcome resulting in effective market access which, inter alia, would require substantial tariff cuts, especially of tariff peaks. On the other side of the spectrum are those countries that aim for a more modest outcome such that it would afford them a degree of flexibility to shield certain sensitive products (essentially those with high tariffs) from substantial cuts.

Beyond these distinctly offensive and defensive approaches to reform on market access there are the interests of a large number of developing countries that argue for special treatment in the form of Special Products, which should be largely exempted from the general disciplines on the grounds of food/livelihood security and rural development considerations. In addition, there are other preference-receiving developing countries that argue that they would be adversely affected by tariff reductions in the preference-giving developed countries and that their concerns should be taken into account in the approach to be adopted on tariff reductions.

Clearly, the above objectives are not all consistent with each other; however all of them stem basically from the Doha Declaration and what it is understood to imply in operational terms. The Doha Declaration calls for “substantial improvements in market access”, however, to the extent that country-specific concerns are to be taken into account (whether in the form of sensitive products, Special Products and access to preferential markets) that limits the degree to which this overriding objective could be achieved. Hence, a compromise on market access is embedded in what was agreed in the Doha Declaration and an acceptable solution would have to respond to all the divergent interests of the WTO membership.

All attempts to come up with a tariff reduction formula that could bridge the gap between ambition and flexibility and accommodate the additional concerns identified above have failed. Besides the apparent contradictions in the Doha mandate on the objectives of the reform process, there are several other reasons for lack of progress in this area, including: inherent biases in the design of different formulae towards one side of the spectrum (i.e. favouring either too much flexibility, such as the UR-type formula, or too much ambition, such as the Swiss-type formula); focussing too much on the formula to be used and not on the basic properties and principles that would characterise the final outcome; the inability of the various formulae proposed to differentiate between rather diverse initial tariff profiles of WTO members which resulted in highly inequitable outcomes; lack of a mechanism to ensure that the flexibility offered to accommodate sensitive products/Special Products would not be abused; and uncertainty as regards the extent to which the special and differential treatment of developing countries would be ensured by the application of a particular formula, including certainty in satisfying the principle of proportionality in the outcome.

The latest attempt to strike a compromise on market access, the blended formula contained in the Derbez text³, had a number of important compromise elements, however, it had the same fate as earlier formulae, basically because questions as to how it would be applied and what its final outcome would be, were left to interpretation. An infinite number of final outcomes were possible and it is understandable that members differed in their interpretations of how the formula would be used and where it would lead. The same formula can be interpreted as overly ambitious or as too flexible, depending on the assumptions made on how it may be applied in practice.

What are the generally understood expectations on market access reform during this round of negotiations? Paragraph 13 of the Doha Declaration recalled the long-term objective referred to in Article 20 of the AoA to establish a fair and market-oriented trading system through a programme of fundamental reform. Specifically, on market access, it called for “substantial improvements in market

³ [Draft Cancun Ministerial Declaration - Annex A, Second Revision \(13 September 2003\)](#)

access”. The Declaration went on to recognise the need for special and differential treatment for developing countries and also confirmed that non-trade concerns (NTCs) will be taken into account in the negotiations.

The above general language on market access has been the subject of continuous debate during the long negotiating process since Doha and while interpretations vary, there is a general understanding on the operational meaning of the broadly stated objectives in the Doha Declaration⁴. In operational terms, the concrete objectives on market access are understood to include the following:

1. substantial reduction of the average level of tariffs
2. reduction of tariff peaks (and tariff escalation)
3. accommodation of country-specific concerns on particular products; for developing countries this has been expressed in the form of Special Products (SPs) on the basis of food security and rural development considerations, while for developed countries in the form of “sensitive” products, inter alia on NTC grounds.
4. special and differential treatment (SDT) for developing country members, implying less onerous commitments compared to those of developed country members.

As already mentioned, it is clear from the above that the Doha Declaration and what is understood to imply in operational terms contain some conflicting objectives. Specifically, to the extent that country-specific concerns are to be taken into account (third objective) that limits the degree to which substantial improvement in market access could be achieved (the first and especially the second objective). A compromise between these contradictory objectives had to be found.

In section II, this paper provides a general background of the initial tariff profiles of selected developed and developing countries. This is essential in appreciating how these countries may be affected by different tariff reduction formulae. Section III of the paper describes in general terms the various approaches that have been proposed up to now and identifies the extent to which they meet the above objectives. The main contribution of the paper comes in Section IV where the concept of “constrained flexibility” is introduced by incorporating a number of self-adjusting mechanisms into the blended formula, resulting in what is described as a Dynamic Formula (DF). Section V demonstrates the application of the DF in the case of the selected countries considered and compares the results against the four objectives referred to above, and Section VI offers some concluding remarks.

II. THE STARTING POINT: INITIAL AGRICULTURAL TARIFF PROFILES

In order to illustrate how the different formulae that have been considered so far may affect different countries, seven illustrative country cases are being considered. These include three developed countries and four developing countries drawn from the main negotiating groups.

Several observations can be made from the country profiles presented in Table 1. First, the average bound tariffs of the developed countries are generally less than those of the developing countries. However, in terms of average applied tariffs, the differences between the different members are less pronounced. The main difference between developed and developing countries is on the spread of both bound and applied tariffs, with the former group of countries having a spread of tariffs which is several-fold that of the latter. The same picture emerges as regards maximum tariffs. Generally, the maximum applied tariffs for developed countries are much higher and equal (or very close) to the bound levels compared to developing countries where there is a significant gap between bound and applied (“water in tariffs”). In general, the tariff profiles of the developed countries are highly skewed with many tariff lines at zero or very low single-digit levels and another set of tariff lines bound at very high levels. This is evident from the figures of the last column in Table 1. These substantial differences in the spread of initial tariffs between developed and developing countries are of significance as regards the relative impact of different tariff cut formulae, as we will see below.

⁴ [Modalities phase: revised first draft \(18 March 2003\)](#) and [Modalities phase: chair’s overview paper \(18 December 2002\)](#).

Table 1. Agricultural tariff profiles of selected WTO Members

WTO member	Average initial bound tariff (%)	Spread of bound tariffs (STD/ave) (%)	Peak initial bound tariff (%)	Average initial applied tariff (%)	Spread of applied tariffs (STD/ave) (%)	Peak initial applied tariff (%)	Applied over bound average tariffs (%)	Peak bound over average bound (%)
US	6.4	257.8	182.7	6.4	254.7	182.7	100.0	2854.7
EU	17.4	170.1	456.9	17.4	170.1	456.9	100.0	2625.9
Japan	20.8	245.7	534.8	18.5	242.7	477.9	88.9	2571.2
Brazil	35.5	29.6	55.0	12.5	43.2	55.0	35.2	154.9
Colombia	91.9	37.4	227.0	14.8	35.1	20.0	16.1	247.0
India	115.1	45.9	300.0	42.6	63.1	210.0	37.0	260.6
Kenya	100.0	0.0	100.0	23.1	52.4	85.0	23.1	100.0

Source: Compiled from data provided by UNCTAD, based on 6 digit HS tariff lines (some 620-670 tariff lines for each member)

III. FORMULA APPROACHES SO FAR

3.1 Uruguay Round vs. Swiss formula

Two general approaches were put on the table from the very start of the negotiations: the approach used during the Uruguay Round (UR) negotiations, which became known as the “UR formula” and the Swiss formula, a mathematical formula used for industrial products during the Tokyo round. The UR formula implies an average overall reduction with a minimum cut per tariff line (e.g. during the UR negotiations, 36% average and 15% minimum for developed countries, and 24% and 10%, respectively, for developing countries). For illustrative purposes, the same parameters are assumed in the hypothetical application of the UR formula shown in Table 2.

Table 2. Hypothetical application of the UR formula

WTO member	Average initial bound tariff (%)	Peak initial bound tariff (%)	Average tariff reduction (%)	Cut of peak tariff (%)
US	6.4	182.7	36.0	15.0
EU	17.4	456.9	36.0	15.0
Japan	20.8	534.8	36.0	15.0
Brazil	35.5	55.0	24.0	10.0
Colombia	91.9	227.0	24.0	10.0
India	115.1	300.0	24.0	10.0
Kenya	100.0	100.0	24.0	10.0

How does the UR formula score in terms of achieving the four objectives mentioned above?

1. Yes
2. Marginally - can actually increase relative tariff peaks (spread between low and high tariffs)
3. Yes
4. Yes

The major opposition to the UR formula came from those members that expected effective market access, which essentially would come about by a reduction in tariff peaks.

The opponents of the UR formula had a preference for a Swiss-type formula aiming at an harmonization of tariffs between members by cutting higher tariffs more than lower tariffs⁵. Table 3 illustrates an application of the Swiss formula.

Table 3. Hypothetical application of the Swiss formula

WTO member	Average initial bound tariff (%)	Peak initial bound tariff (%)	Average tariff reduction (%)	Cut of peak tariff (%)
US	6.4	182.7	17.8	88.0
EU	17.4	456.9	37.1	94.8
Japan	20.8	534.8	34.6	95.5
Brazil	35.5	55.0	40.5	52.4
Colombia	91.9	227.0	63.2	81.9
India	115.1	300.0	66.6	85.7
Kenya	100.0	100.0	66.7	66.7

Note:
In this illustrative application the coefficient “A” of the Swiss formula was assumed to be 25 for developed countries and 50 for developing.

How does the Swiss formula score in terms of achieving the four objectives mentioned above?

1. Yes, but highly uneven both within developed and between developed and developing
2. Yes, dramatically for both developed and developing
3. Not at all
4. No; in fact the opposite, with average cuts for developing much greater than for developed

The Swiss fails in two key objectives of the reform, namely in accommodating country concerns with sensitive and special products and also in ensuring SDT for developing countries. Essentially, the Swiss accomplishes what the UR formula did not and vice versa. For this reason, these two approaches to market access were seen as two extremes of all possible outcomes and it was evident from the beginning of the negotiations that a compromise between the two had to be found.

3.2 Harbinson's "banded" formula

A compromise between the UR and the Swiss formulae was first sought in the Harbinson draft modalities in the form of the “banded” approach⁶. According to this approach, the whole range of tariff lines was divided in three bands: a high band (comprising the top tariff lines), a medium band and a low band. The UR formula was to be applied within each band (i.e. an overall average reduction was stipulated and a minimum cut per tariff line). A Swiss-type approach was proposed between bands (i.e. substantially higher average and minimum cuts for the top band relative to the middle and the bottom band). Table 4 illustrates the application of Harbinson's formula.

⁵ Mathematically, the Swiss formula is expressed as follows:

$$T_{\text{final}} = T_{\text{initial}} * A / (T_{\text{initial}} + A)$$

where the value of the coefficient “A” determines the upper limit of the final tariffs, i.e. no final tariff line would be greater than “A”.

⁶ [Modalities phase: revised first draft \(18 March 2003\)](#)

Table 4. Hypothetical application of the Harbinson formula

WTO member	Average initial bound tariff (%)	Peak initial bound tariff (%)	Average tariff reduction (%)	Cut of peak tariff (%)
US	6.4	182.7	41.3	45.0
EU	17.4	456.9	44.7	45.0
Japan	20.8	534.8	44.2	45.0
Brazil	35.5	55.0	29.6	20.0
Colombia	91.9	227.0	35.8	30.0
India	115.1	300.0	36.1	30.0
Kenya	100.0	100.0	35.0	25.0

Harbinson formula				
Developed countries: 3 band reduction formula				
tariff > 90	average reduction of 60% with a minimum 45%			
15 < tariff ≤ 90	average reduction of 50% with a minimum 35%			
tariff ≤ 15	average reduction of 40% with a minimum 25%			
Developing countries: 4 band reduction formula				
tariff > 120	average reduction of 40% with a minimum 30%			
60 < tariff ≤ 120	average reduction of 35% with a minimum 25%			
20 < tariff ≤ 60	average reduction of 30% with a minimum 20%			
tariff ≤ 20	average reduction of 25% with a minimum 15%			

How does the Harbinson formula score vis-à-vis the above objectives?

1. Yes
2. Yes
3. No (possibly Yes for developing countries with the envisaged SP provision)
4. Yes

Clearly, the Harbinson formula is tougher than the pure UR but not as ambitious as the pure Swiss, especially as regards tariff peaks. However, it was rejected by both sides of the spectrum, i.e. those that favoured the UR and wanted to see only modest cuts and those that favoured the Swiss and wished to see an ambitious outcome on market access. In relative terms, however, it was members of the former group that were most unhappy with the Harbinson formula as they considered that it did not satisfy the third objective, i.e. country-specific sensitivities on particular products, and a very strong and broadly-based alliance was formed (some 70+ developed and developing countries) against the Harbinson formula. This formula was the major dividing issue when the Harbinson draft modalities text was considered in March 2003, the deadline set at Doha to reach agreement on such a text. An alternative had to be found for the process to move forward.

3.3 *The blended formula*

The blended formula was the next attempt to strike a compromise (see Annex I on the specification of the blended formula as contained in the draft Cancun Ministerial Text). The blended formula tried to combine ambition, by explicitly specifying that a portion of tariff lines would be subject to a straightforward application of the pure Swiss formula, and flexibility, by stipulating that a portion of tariff lines would be subject to the straightforward application of the pure UR formula. The remaining portion of tariff lines would have been reduced to zero (or between 0-5% for developing countries). Additional provisions were stipulated in the form of increased TRQs to ensure effective additional market access for sensitive products. The designation of the individual tariff lines in each of the three

categories was assumed to be essentially “self-declaratory” i.e. the choice of individual WTO members.

In the first instance, one would have concluded that the blended formula was a genuine attempt to find a compromise. It was meant to combine ambition and flexibility, two key characteristics considered essential in a compromise solution. Yet, its fate was not better than that of the previous approaches. Why did it fail?

There are a large number of key parameters that would have to be fixed in order to operationalize the blended formula at the individual country level. These include:

- the proportions of tariff lines under the three categories
- which specific tariff lines would fall under each category
- the average and the minimum cut under the UR category
- the coefficient of the Swiss formula.

There is an infinite number of combinations of these parameters making the application of the blended formula highly unpredictable. Table 5 illustrates clearly that the outcome varies considerably depending on what values are chosen for the various parameters. Because of this wide range of possible outcomes of the blended formula, it is difficult to gauge it in relation to the four objectives considered above. In general terms, however, one could say the following:

1. Yes, but highly uneven both within developed and between developed and developing
2. No; to some extent if the UR category is very narrow
3. Yes, if the UR category is wide enough
4. No; because of their initial tariff profile, developing countries would be generally subjected to higher average cuts of bound tariffs.

It is evident that on all four criteria there is no clear answer as to the outcome of the blended formula. Everything depends on the parameters assumed. While the proponents of the blended formula hoped that ambiguity could foster a compromise, with much to be negotiated at a later stage, the skeptics felt that the uncertainty in the blended formula would prejudice such a negotiated outcome against their interests.

Those members that had concerns over sensitive products banked on the explicit recognition of flexibility in the blended formula and generally went along with it hoping that they would be able to negotiate a category for sensitive products that would be broad enough and flexible enough to accommodate their concerns. The skeptics, on the other hand, assumed that there was too much flexibility in the blended formula, which would be exploited by those members that resisted reform, thus yielding an outcome much less ambitious than their expectations. The major skeptics of the blended formula were members of the G-20 which characterized it as “fundamentally flawed”, on the grounds that it failed to deliver substantial improvements in market access, especially for products protected by tariff peaks, and second because it would have resulted in substantially greater tariff cuts for developing countries than for developed countries.

Specifically, according to the G-20 communiqué of April 2004, in the case of developed countries, application of the blended formula would have:

- offered an ‘opt out mechanism’ because of the self-declaratory nature of tariff lines subject to UR;
- made the role of Swiss ‘merely symbolic’; and
- implied uncertainty on the role of TRQs to increase market access.

On the other hand, for developing countries, application of the blended formula would imply:

- a substantial and disproportional tariff reductions for most of them compared to those of developed countries, in view of their initial tariff profile;
- the role of the Swiss component in the blended formula was real; and
- SDT for them was not achieved.

Considering the hypothetical analysis of the blended formula in Table 5, the above claims by the G-20 were not unfounded. It would have taken extreme values for the various parameters of the blended formula for it to yield an outcome that the G-20 would consider acceptable in terms of providing meaningful market access in developed country markets and offering the understood degree of differentiation in reduction commitments between developed and developing countries.

Table 5. Hypothetical application of the blended formula

WTO member	Average initial bound tariff (%)	Peak initial bound tariff (%)	Average tariff reduction (%)						Cut of peak tariff (%)
			<i>Assumed proportion of tariff lines between UR/Swiss/duty free categories (%)</i>						
			<i>2.5/67.5/30</i>	<i>5/65/30</i>	<i>10/60/30</i>	<i>20/50/30</i>	<i>30/40/30</i>	<i>40/30/30</i>	
US	6.4	182.7	22.9	22.4	22.2	23.4	26.0	29.6	15.0
EU	17.4	456.9	43.8	43.0	40.9	38.6	37.8	38.3	15.0
Japan	20.8	534.8	40.1	38.7	36.8	35.0	35.0	36.1	15.0
			<i>Assumed proportion of tariff lines between UR/Swiss/"duty free" categories (%)</i>						
			<i>5/90/5</i>	<i>10/85/5</i>	<i>20/75/5</i>	<i>40/55/5</i>	<i>60/35/5</i>	<i>80/15/5</i>	
Brazil	35.5	55.0	40.3	38.3	36.1	32.6	29.6	26.4	10.0
Colombia	91.9	227.0	62.2	59.6	54.9	47.2	40.8	34.7	10.0
India	115.1	300.0	65.7	63.3	58.7	49.1	40.9	32.5	10.0
Kenya	100.0	100.0	66.0	63.8	59.6	51.0	42.5	33.9	10.0
<u>Notes:</u>									
<p>The choice of parameters made, in order to demonstrate the application of the blended formula, was guided to some degree by what is stated in the Framework text but were largely arbitrary otherwise. The basic assumptions made are as follows:</p> <ul style="list-style-type: none"> • In all scenarios the proportion of tariff lines under the duty free category was assumed to be the same, namely, 30% for developed countries (this comprises both those that are already zero and those to become zero), and 5% for developing. Hence, the variation between the different scenarios was between the portions of tariff lines that were assumed to fall under the UR and the Swiss formulae. • For both developed and developing countries the tariff lines assumed to fall under the duty free category were those already low, i.e. at the very bottom of the tariff range. For developed countries these tariffs are reduced to zero while for developing to 5%. • For both developed and developing countries it was assumed that the UR formula would apply to tariff lines at the top of the range of tariffs. The additional specification for a minimum and an average cut contained in the blended formula was ignored (for the sake of simplicity), and a linear cut was assumed instead equal to 36% for developed countries and 24% for developing. • Finally, for the remaining middle-range of tariff lines the Swiss formula was assumed to apply with a coefficient of 25 for developed countries and 50 for developing. 									

IV. INCORPORATING CONSTRAINED FLEXIBILITY INTO TARIFF REDUCTIONS: A DYNAMIC FORMULA (DF)

The fundamental dividing issue on market access is clearly how to accommodate commodity-specific country sensitivities within the overall objective of achieving effective market access. While the blended formula was meant as an attempt to balance these two objectives, a great degree of unpredictability was left as to how the flexibility offered would play in practice. The outcome was apparently not satisfactory neither for those demanding flexibility nor for those that would have gone along with it. The former were not sure whether they would be able to get what they needed given their particular circumstances, and the latter were afraid that, to the extent that what was offered was “open-ended”, it was likely to be abused. What was lacking in this approach was some checks and balances from both sides.

While other possible formulations of tariff reduction formulae have been suggested⁷, it is worthwhile to explore the possibilities of addressing the main deficiencies of the blended formula before exploring new approaches. Considering the usually incremental nature of progress in trade negotiations, to the extent that these deficiencies can be addressed satisfactorily, the chances of a compromise with a formula that is already on the negotiating table are greater than with another completely new formulation.

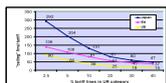
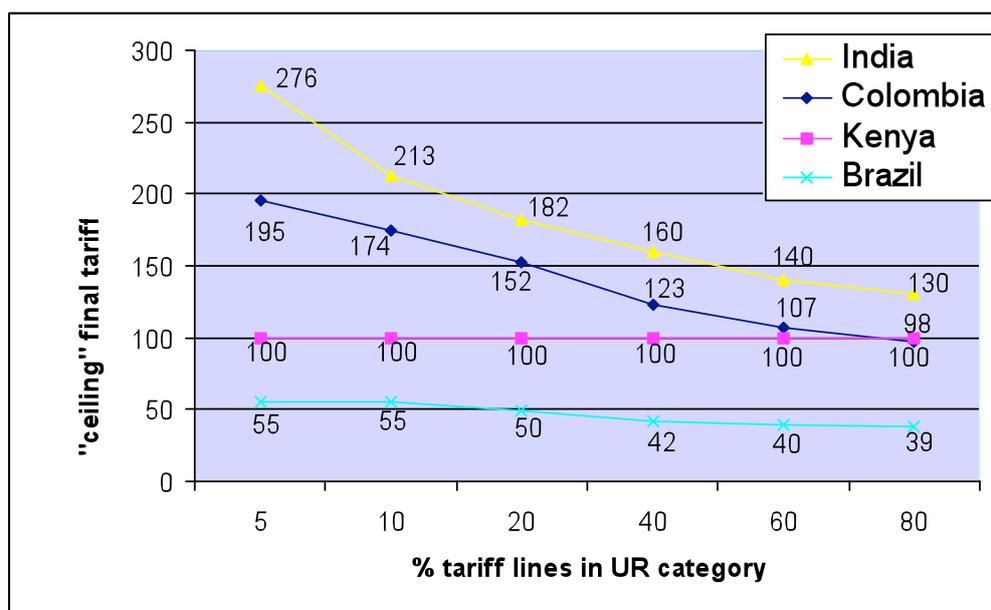
The approach suggested here retains the basic architecture of the blended formula, as proposed in the Derbez text, but incorporates the concept of “constrained flexibility” by introducing a number of self-adjusting mechanisms which take into account the initial tariff profile of individual WTO members and the need to contain flexibility within predictable bounds. The self-adjusting mechanisms introduced address both the issue of sensitive products (predominantly a developed country concern), generally identified with peak tariffs, and the issue of Special Products (a developing country concern), for which additional provisions on a Special and Differentiated Treatment basis would apply.

4.1 *Dealing with sensitive products: a self-adjusting category*

The first innovation of the Dynamic Formula is the notion of a self-declaratory but also self-adjusting sensitive products category (assumed to correspond to the Uruguay Round category in the Derbez text). Key in this is defining a “ceiling” tariff equal to average initial tariff of all tariff lines placed in this category. This “ceiling” level would work as an upper limit of tariffs and provides the mechanism of self-regulation. Thus, while the sensitive products category remains self-declaratory, there is a built-in incentive to minimize its width in the sense that the more tariff lines are included in the sensitive products category, the less the average and, hence, the less the “ceiling” final tariff.

Clearly, there is a trade-off between the number of tariff lines placed under the sensitive products category and the resulting tariff “ceiling”, as demonstrated in Figure 1a and 1b. For example, in the case of Japan in Figure 1a, the broadening of the UR category (sensitive products) from 2.5% of tariff lines to 5% would imply a reduction in the “ceiling” tariff level from 292% to 204%. A further broadening of the UR category implies considerable further reductions in the “ceiling”. The same is the case for other members. In general, the more dispersed the initial tariff profile is the greater the reduction in the “ceiling” level as the UR category is made broader. At the other extreme case of a uniform initial tariff (e.g. the case of Kenya), the “ceiling” level remains that initial uniform tariff, irrespective of the width of the UR category. In order to avoid such cases, it would also be necessary to stipulate that a minimum reduction of some level (to be negotiated) would apply to all tariff lines (see below).

⁷ Several approaches have been suggested, including that by Francois, J. and W. Martin, “Formula Approaches for Market Access Negotiations,” *The World Economy*, 26(1), 2003 which suggested a variant of the original Swiss formula. Another approach is detailed in [A compromise formula for tariff cuts in agriculture](#), P. Konandreas, *Food Policy*, Vol. 28, February 2003. This latter approach recognizes the differences in the tariff profiles of individual members and suggests a reduction formula that would result in a new tariff profile, which has the basic characteristics of the initial, but with a reduced average and a reduced spread in the tariff range (both of which being the parameters to be negotiated).

Figure 1a. Trade-off between size of UR category and ‘ceiling’ for selected developed countries**Figure 1b. Trade-off between size of UR category and ‘ceiling’ for selected developing countries**

4.2 Self-adjusting Swiss formula category

The second innovation comes by introducing the notion of a self-adjusting Swiss formula category. Given that a certain percentage of tariff lines would be under the duty free category and another percentage of tariff lines would be declared as sensitive products, the implication is that the Swiss category becomes a residual both in terms of the number of tariff lines under it and its coefficient. The number of tariff lines is the residual of the two other categories. The coefficient is such that the resulting tariff cuts for tariff lines under the Swiss, together with those under the other two categories, yield an overall tariff reduction for all agricultural products which is equal to the negotiated overall tariff reduction commitment (i.e. a number such as the 36% and 24% for developed and developing countries negotiated under the Uruguay Round).

Again, there is a trade-off between the number of tariff lines placed under the UR category and the role of the Swiss in cutting tariffs (one of the points raised by the G-20). As it can be seen from Figure 2a and 2b, the wider the UR category (sensitive products), the tougher the Swiss has to be (smaller value of the Swiss coefficient) in order for an overall agreed reduction commitment to be

achieved. The overall reduction commitment for all agricultural products assumed here (for illustrative purposes only) is 40% for developed countries and 27% (two thirds) for developing.

Figure 2a. Trade-off between size of UR category and Swiss Coefficient for developed countries

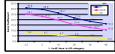
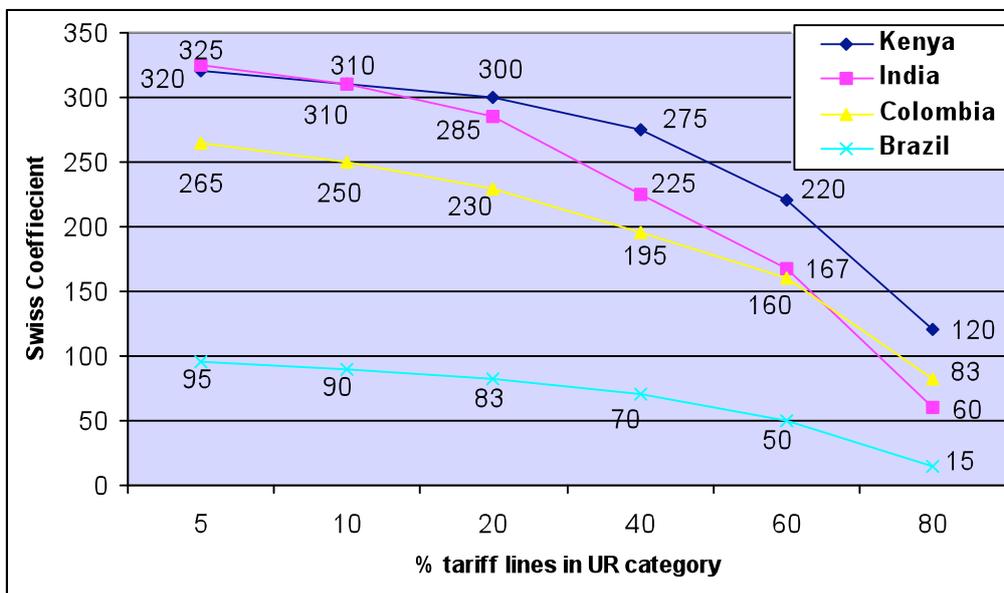


Figure 2b. Trade-off between size of UR category and Swiss Coefficient for developing countries



4.3 Self-adjusting additional obligations for non-compliance

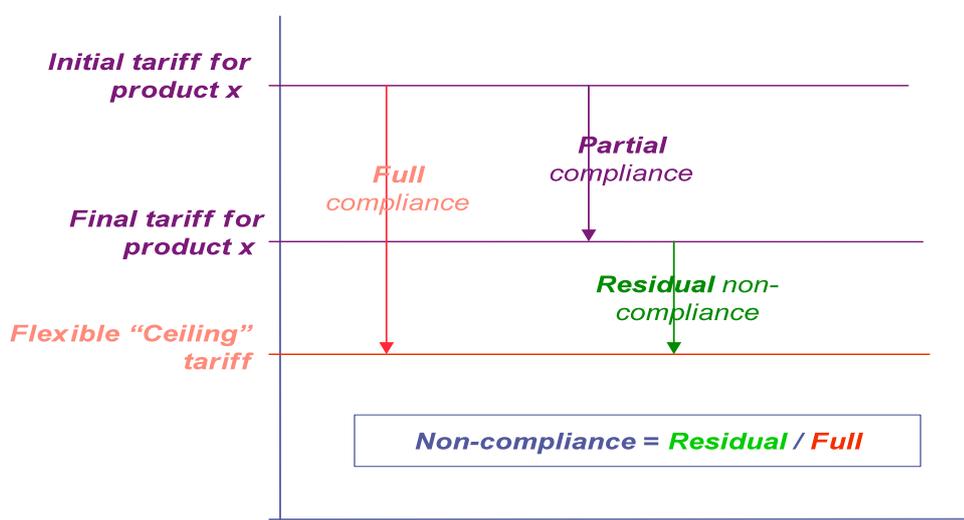
The third innovation in the formulation of the Dynamic Formula is the notion of a self-adjusting additional obligation for those members not in full compliance with their “ceiling” levels. The blended formula in the Derbez text introduced the notion of a fixed across-the-board maximum tariff level which if exceeded would have penalized members in the form of “additional market access in these or other areas through a request-offer process that could include TRQs.” No explicit differentiation was made between members as regards the maximum tariff level and the effort a member would have to make to bring a tariff below that unspecified maximum. It is clear that a fixed across-the-board maximum tariff of, say 50%, is attainable making a relatively lesser effort by member A with an initial peak tariff of, say 70%, compared to member B with an initial peak tariff of, say 250%.

The “ceiling” level defined above for tariff lines under the sensitive products category avoids this problem. That level is relative, in the sense that it is determined by member-specific tariff structures, and it can also be made flexible, in the sense that it may be exceeded at a cost. That cost would be proportional to the residual non-compliance. For illustrative purposes, assume that the maximum additional TRQ is 10% of the level of consumption (an across-the-board level applicable in cases of making no effort to comply – a number to be negotiated). Assume further that member A reduced its tariff for product “x” from 70% to 55% (however, still above A’s “ceiling” level of say 50%) and member B reduced its tariff from 250% to 150% (also well above B’s “ceiling” level of say 100%). The applicable additional TRQs for these two members (for the products in question) would then be prorated by the percentages by which each member’s “ceiling” tariff is not met⁸.

An illustration of the mechanics involved is shown in Figure 3 where non-compliance is defined as the ratio between residual non-compliance (the remaining gap between the final tariff for product x and the “ceiling” level) and the reduction necessary for full compliance. The relevant calculations for the two hypothetical cases are shown in Table 6. Partial compliance would imply an additional TRQ of 2.5% for member A and 3.3% for member B for the products in question.

The very important implication of the trade-offs involved in the designation and treatment of sensitive products is that the choices on these issues would have to be made by the countries themselves. This would certainly result in very important debates and decision making processes in capitals, where the trade-offs have to be considered. They have to make the hard choices on why certain products are sensitive and what are the implications for other products if these are to be disproportionately shielded from the general cuts applicable to other products.

Figure 3. Non-compliance ratio used in prorating the additional TRQ



⁸ Clearly, for those tariff lines for which members reduce their tariffs down to the ceiling level or below it, there would be no penalty to be paid.

Table 6. Illustration of the calculation of additional TRQ for non-compliance

WTO member	(1) Initial bound tariff for product x ^{1/} (%)	(2) “Ceiling” for final bound tariffs ^{2/} (%)	(3) Final bound tariff for product x ^{3/} (%)	(4) Residual non-compliance ^{4/} (%)	(5) Penalty (additional TRQ) ^{5/} (%)
Member A	70.0	50.0	55.0	25.0	2.5
Member B	250.0	100.0	150.0	33.3	3.3

^{1/} not necessarily the same product for member A and member B
^{2/} the average initial tariff of all tariff lines placed in UR category
^{3/} for each member the same tariff line as that in column (1)
^{4/} the ratio between (1)-(3) over (1)-(2)
^{5/} residual non-compliance times the maximum penalty (10% additional TRQ was assumed – an across-the-board level, to be negotiated).

4.4 Additional self-adjusting provision for Special Products

The debate on Special Products has been dominated by two issues: the first has to do with the concerns expressed by the countries concerned as regards the need for such a provision for food/livelihood security and rural development and the second has to do with the rest of the world, i.e. how to minimize potential negative effects to other countries, developing or developed, alike. Again, this is a typical case of trying to strike a balance between these two objectives and the mechanism proposed here would consist of a self-adjusting management of SPs in a way that it gives the additional flexibility that developing countries require but at the same time minimizing the possible adverse effects of such an additional flexibility.

Much of the debate on SPs concerned possible criteria to be used in their designation. It has become clear that while such criteria may be desirable, in practice it is impossible to devise indicators that would single out those products which for whatever reasons are special in the individual country context. In many cases such special status escapes a formal categorization based on strict criteria objectively applied to all countries. Therefore, the choice should be left entirely to each individual developing country to identify such products, i.e. a self-designation principle is in order⁹.

While, self-designation is most appropriate for all practical purposes, this should not be open-ended but subject to a set of disciplines to minimize potential negative effects of such a provision. Key in designing a self-adjusting mechanism is the notion of Special Product Points (SPPs). This is defined as a total number of percentage points allotted to a developing country to be used in order to avoid a reduction in the tariffs of those products designated as SPs.

How would the SPP mechanism work in practice? Assume that from the application of the general tariff cut formula (whatever that may be, i.e. whether the product was under the UR category or the Swiss category¹⁰), the tariff of product 1 in country A would be cut by 20%. If country A considers product 1 as an SP, it can make use of its SPP pool to reduce the tariff cut of that product, e.g. it can use 15 SPP points and reduce the tariff of product 1 not by 20% but by only 5%. Similarly, for another product 2 which country A considers as SP, assume that the tariff cut called for by the application of the general formula is 15%. That country can again make use of say 5 SPP points to reduce the tariff of product 2 by 10%, instead of 15%. This way, as illustrated in Table 7, the total

⁹ Self-designation is also in line with the self-declaration approach envisaged for products to be placed under the UR category, which although applicable to all countries, in practice is meant to accommodate tariff peaks, a predominantly developed country problem.

¹⁰ In fact, the approach proposed here is independent of the formula used and is applicable to whatever other tariff cut specification may be finally agreed.

SPP points available (assumed to be 200 in this Table, for illustrative purposes¹¹) can be made use of by shielding those products considered as SPs by the country concerned.

There are several important implications of this self-adjusting mechanism: first, the choice as to what is an SP is left entirely to the country concerned, i.e. the self-designation principle applies both as regards the number of products and the choice of the individual products; second, the relative importance of different SPs is also the choice of the country concerned in the sense that the total SPP points available to it can be distributed between the different SPs according to domestic considerations and processes; third, and as a consequence of the above, there is a clear trade-off between the number of products designated as SPs and the degree by which each such product would be shielded from the generally applicable tariff cuts for that country. A country can self-designate a small number of SPs and shield their tariffs considerably or a larger number of SPs and shield their tariffs only modestly.

Table 7. Illustration of the self-adjusting SP mechanism

Self-designated SPs	Tariff cut resulting from generally applicable formula (%)	SPP points used	Actual tariff reduction (%)
Product 1	20	15	5
Product 2	15	5	10
Product 3	35	15	20
...
...
Product n	50	20	30
Total	n/a	200	n/a

As in the case of sensitive products, one important implication is that the self-adjusting mechanism for Special Products would motivate national debates on SPs where the objectives of such a provision in support of food/livelihood security and rural development would have to be carefully considered and trade-offs between different options evaluated. The extent to which an individual developing country would need to resort to the SP provision would also depend on its tariff profile and the extent to which the options offered to it for reduced tariff cuts within the UR category are adequate or not to meet national objectives.

In summary, the approach proposed here responds to the concerns raised by G-20 but in a way that it would also be acceptable to those members seeking flexibility on market access. In particular, the specification takes into account the differences in the initial tariff profiles of different members and the relative effort each would have to make to reduce tariffs of sensitive products. The proposed formula allows members to define the degree of flexibility desired and is completely transparent about the additional obligations that these members would have to undertake to have that flexibility. Central in the proposed approach is the notion of self-designation of sensitive products and of that of Special Products. However, there are built-in mechanisms which regulate the use of both of these provisions. The approach proposed has also a built-in incentive to reduce tariff peaks through an additional TRQ imposed when tariffs exceed member-specific “ceiling” levels. At the same time this obligation does not become a permanent feature of the system but goes away automatically (on a product by product basis) as soon as a member is in full compliance with its ceiling” tariff level.

The other usual SDT provisions for developing countries, similar to those that applied under the Uruguay Round Agreement on Agriculture, are easily incorporated into the DF by specifying lower overall tariff reduction commitments and longer implementation periods, as has been the practice in the past.

¹¹ This is an across-the-board number to be negotiated. The number would depend also on what HS level at which SPs are defined. If SPs are defined at 8-digit HS level, the TSPC would be much larger than if SPs are defined at 6-HS level.

V. APPLICATION OF THE DYNAMIC FORMULA

A hypothetical application of the Dynamic Formula to the seven selected countries above is shown in Table 8. It should be noted at the outset that there is complete certainty in the DF as regards the average tariff reduction to be achieved (as that is one of the negotiated parameters). In the illustration shown in Table 8, it was assumed that the average reduction for all agricultural products would be 40% for developed and 27% (two thirds) for developing. The Table then shows how the tariff peaks would be affected for each member, depending on the proportion of tariff lines placed under the UR category (as in Table 5 above, the proportion of “duty free” tariff lines were assumed to be constant across all scenarios and equal to 30% for developed and 5% for developing countries).

Table 8. Hypothetical application of the Dynamic Formula

WTO member	Average initial bound tariff (%)	Peak initial bound tariff (%)	Average tariff reduction (%)	Cut of peak tariff to fully comply with “ceiling” tariff levels (%)					
				<i>Assumed proportion of tariff lines between UR/Swiss/duty free categories (%)</i>					
				2.5/67.5/30	5/65/30	10/60/30	20/50/30	30/40/30	40/30/30
US	6.4	182.7	40.0	51.0	67.1	78.7	86.4	89.8	91.8
EU	17.4	456.9	40.0	69.5	76.5	82.3	87.6	90.2	91.8
Japan	20.8	534.8	40.0	45.4	61.9	75.4	84.9	88.9	91.1
				<i>Assumed proportion of tariff lines between UR/Swiss/“duty free” categories (%)</i>					
				5/90/5	10/85/5	20/75/5	40/55/5	60/35/5	80/15/5
Brazil	35.5	55.0	27.0	10.0	10.0	10.0	23.0	27.5	29.7
Colombia	91.9	227.0	27.0	14.1	23.2	33.1	45.7	52.9	57.0
India	115.1	300.0	27.0	10.0	29.0	39.4	46.5	53.2	56.6
Kenya	100.0	100.0	27.0	10.0	10.0	10.0	10.0	10.0	10.0

Notes:

The proportions of tariff lines in the three categories are assumed the same as in Table 5. As regards the other parameters, the basic assumptions made in order to demonstrate the application of the Dynamic Formula are as follows:

- The overall tariff reduction for all agricultural products was assumed 40% for developed countries and 27% (two thirds) for developing countries. A minimum cut per tariff line of 15% for developed countries and 10% for developing was also assumed to apply.
- Depending on the proportion of tariff lines placed under the UR category (self-declaration), the cut of peak tariffs is automatically determined, as illustrated in Figures 1a and 1b. Additionally, the overall average cut for the tariff lines under the UR category was assumed to be 36% for developed countries and 24% for developing.
- Again, depending on the proportion of tariff lines placed under the UR category, and given the overall negotiated tariff reduction for all agricultural products, the coefficient of the Swiss formula applicable to the remaining tariff lines is automatically determined, as illustrated in Figures 2a and 2b.
- Finally, the cut in the tariff peak shown is the highest cut and applies to the single tariff line at the top of the tariff distribution of each member, while cuts of other peak tariffs are less. As explained in the text, to the extent that a member desires more flexibility as regards cuts on peak tariffs (i.e. smaller cuts), it would have to narrow its UR category, or alternatively commit an additional TRQ for those products for which there is partial compliance with “ceiling” levels.

What Table 8 shows as regards the reduction of tariff peaks is what would be expected. Because of the highly dispersed tariff profiles of developed countries, the cuts of their peak tariff (the single tariff line at the top of their tariff distribution) are much higher than those of developing countries which

generally have much more uniform tariff profiles. Even when the UR category is contained to 2.5% of the tariff lines for developed countries, the reduction in their single top tariff is significant (close to 70% for the EU). To the extent that these developed countries desire smaller cuts for their peak tariff, they would have to narrow their UR category even more, or alternatively they would have to commit an additional TRQ for those products for which they do not comply fully with their “ceiling” levels, as described above.

Table 9 shows how the dispersion of tariff is affected depending on the different scenario assumed. It is interesting to note what in the first instance appears surprising, namely the larger the share of the tariff lines covered by the Swiss formula, the smaller the percentage fall in dispersion. This may seem counter-intuitive in the sense that the Swiss formula is usually suggested as a way to squeeze the dispersion. However, in order to understand what is actually happening, it is important to take into account the "dynamic" elements at play as the range of the UR category becomes wider. As the UR becomes wider, the ceiling tariff becomes smaller and smaller (Figures 1a and 1b) and hence the tariff distribution is squeezed more and more. The Swiss does a better job with what is left (as its coefficient gets smaller and smaller, Figures 2a and 2b) but it operates on lower and lower tariffs (well below its coefficient) and its effect may be even smaller than what a simple linear cut would have achieved. In other words, the biggest effect on the reduction in dispersion does not come from the Swiss component but from the dynamic ceiling of the UR component.

Table 9. Hypothetical application of the Dynamic Formula: dispersion of tariffs

WTO member	Average initial bound tariff (%)	STD of initial applied tariff (%)	STD of initial bound tariff (%)	Reduction in dispersion of bound tariffs (reduction in STD) (%)					
				<i>Assumed proportion of tariff lines between UR/Swiss/duty free categories (%)</i>					
				<i>2.5/67.5/30</i>	<i>5/65/30</i>	<i>10/60/30</i>	<i>20/50/30</i>	<i>30/40/30</i>	<i>40/30/30</i>
US	6.4	16.3	16.5	45.7	51.4	59.3	66.3	70.5	73.9
EU	17.4	29.6	29.6	53.5	52.2	51.2	54.3	58.1	62.1
Japan	20.8	44.9	51.1	42.0	44.7	53.1	63.9	69.9	74.0
				<i>Assumed proportion of tariff lines between UR/Swiss/“duty free” categories (%)</i>					
				<i>5/90/5</i>	<i>10/85/5</i>	<i>20/75/5</i>	<i>40/55/5</i>	<i>60/35/5</i>	<i>80/15/5</i>
Brazil	35.5	5.4	10.5	31.4	27.2	18.2	16.0	16.6	6.6
Colombia	91.9	5.2	34.4	20.0	14.4	10.5	16.7	25.3	30.6
India	115.1	26.9	52.8	22.8	28.6	32.3	30.0	32.4	31.3
Kenya ^{1/}	100.0	12.1	0.0	15.6	15.5	15.6	15.8	16.3	17.9
<u>Notes:</u>									
1/ In the case of Kenya the numbers shown are actual STD and not percentage reductions, as the STD for the bound tariffs in the base period is 0.0									

The DF compares well with respect to the four objectives of the Doha mandate on market access identified above, namely substantial reduction in the average level of tariffs (this is a negotiated level and hence there is total control on the level of reduction), reduction in tariff dispersion and tariff peaks, especially for those WTO members for which this is a major problem, accommodating country specific concerns, and ensuring SDT treatment for developing countries. As regards the latter, the proportionality concept in the outcome is fully met (i.e. the average tariff reduction for developing

countries to be a set percentage of that of developed countries). In all respects, the DF avoids fully the flaws identified by the G-20 in connection with the blended formula.

More importantly, and in contrast to the blended formula, the Dynamic Formula avoids completely negotiations on a number of contentious parameters, such as the proportion of tariff lines placed under the UR category and the coefficients of the Swiss formula. The key innovation of the DF is its self-adjusting built-in mechanisms which automatically determine these parameters, depending on the initial tariff profile of each member and the choice made by each member on the proportion of the tariff lines placed under the UR category and, in the case of developing countries, the tariff lines designated as Special Products.

To recapitulate, the Dynamic Formula requires that the following parameters are negotiated (these are spelt out clearly in Annex II where amendments to the Derbez text are made):

- the proportion of duty free tariff lines for developed countries and those to be reduced to 0-5% for developing countries;
- the minimum tariff cut applicable to all tariff lines for developed and developing countries, respectively;
- the overall tariff reduction for all agricultural products for developed and developing countries, respectively;
- the average tariff reduction for tariff lines placed under the UR category for developed and developing countries, respectively;
- the maximum additional TRQ for non-compliance with “ceiling” tariffs; and
- the total Special Product Points (SPPs) which a developing country is allocated in order to limit reductions of tariffs of Special Products.

VI. CONCLUDING REMARKS

Finding an appropriate formula on market access continues to be one of the most controversial issues in the WTO negotiations on agriculture. The difficulties are understandable as both ambition and flexibility are well embedded in Article 20 of the AoA and in the Doha Declaration. All attempts to come up with a tariff reduction formula that could bridge the gap between these two objectives have failed. Part of the problem is the inherent difficulties and strong sensitivities from all sides, but also to blame is the degree of ambiguity left in what was proposed which has been misinterpreted and seen with suspicion by both sides of the spectrum. Some ambiguity was desirable (as market access is only one of the pillars of the reform process in agriculture and agriculture itself is only one of the sectors being negotiated) but it is clear that too much uncertainty in what would be achieved on market access has not been conducive to an agreement. More certainty is needed and an attempt was made in this paper to suggest an approach that implements the concept of “constrained flexibility” by implementing a number of self-adjusting mechanisms into the blended formula. The resulting Dynamic Formula comes very close to bridging the gap between ambition and flexibility and meeting the objectives on market access set at Doha.

The DF responds to the concerns raised with the blended formula in the Derbez text but in a way that it would also meet the concerns of members seeking flexibility on market access and are prepared to undertake additional obligations for such flexibility. The DF takes into account the differences in the initial tariff profiles of different members and the relative effort each makes to reduce high tariffs. While the notion of self-declaration of sensitive products and that of Special Products are key elements in the approach proposed, there are built-in mechanisms to limit the use of this flexibility. At the same time, additional obligations for flexibility offered on sensitive products do not become a permanent feature of the system but go away automatically (on a product by product basis) as soon as a member is in full compliance with its member-specific obligations. SDT provisions, including the envisaged Special Product category for developing countries, are fully incorporated into the DF so that the general formulation (with differentiated parameters) would be applicable to all countries.

The Dynamic Formula incorporates constrained flexibility in tariff reductions by using the architecture of the blended formula, the last proposal on market access that was on the negotiating

table. However, this was for demonstration only. The proposed self-adjusting mechanisms are generic enough to be adapted to other possible formulations without much difficulty.

Finally, a word related to “complexity” of proposed formulae. A proof as to whether a formula is complex or not would depend on whether it can be translated into a concise legal text generally understood and implementable. The other proof is the degree of difficulty involved in terms of the analytical skills to prepare the country schedules and the subsequent process of verification and notification. Unfortunately, such concerns are seldom being considered in the approaches being proposed for negotiation with often undesirable effects, especially for resource-constrained developing countries. The DF scores fairly well on all these counts. The legal text for implementing what is proposed is straightforward and the preparation of country schedules involves a spreadsheet of the simplest structure so that even individuals with elementary knowledge of this technology can prepare the schedules and the subsequent notification requirements.

Annex A to the draft Cancún Ministerial Text (Second Revision, 13 September 2003)**Market Access**

2. The Doha Ministerial Declaration calls for “substantial improvements in market access.” Negotiations should therefore provide increased access opportunities for all and in particular for the developing countries. To achieve this, commitments shall be based on the following parameters:

2.1 The formula applicable for tariff reduction by developed countries shall be a blended formula under which each element will contribute to substantial improvement in market access for all products. The formula shall be as follows:

- (i) [...] % of tariff lines shall be subject to a [...] % average tariff cut and a minimum of [...] %; for these import-sensitive tariff lines market access increase will result from a combination of tariff cuts and TRQs.
- (ii) [...] % of tariff lines shall be subject to a Swiss formula with a coefficient [...].
- (iii) [...] % of tariff lines shall be duty-free.

[The resulting simple average tariff reduction for all agricultural products shall be no less than [...] %.]

2.2 For the tariff lines that exceed a maximum of [...] %, developed-country participants shall either reduce them to that maximum, or ensure effective additional market access in these or other areas through a request-offer process that could include TRQs. [Within this category, participants shall have additional flexibility under conditions to be determined for a very limited number of [] products to be designated on the basis of non-trade concerns that would only be subject to the provisions of paragraph 2.1 above.]

2.3 The issue of tariff escalation will be addressed by applying a factor of [...] to the tariff reduction of the processed product in case its tariff is higher than the tariff for the product in its primary form.

2.4 In-quota tariffs shall be reduced by [...] %. Terms and conditions of any TRQ expansion/opening remain under negotiation.

2.5 The use and duration of the special agricultural safeguard (SSG) remain under negotiation.

Special and differential treatment

2.6 Having regard to their development, food security and/or livelihood security needs, developing countries shall benefit from special and differential treatment, including lower tariff reductions and longer implementation periods.

2.7 The formula applicable for tariff reductions by developing countries shall be as follows:

- (i) [...] % of tariff lines shall be subject to a [...] % average tariff cut and a minimum of [...] %; for these tariff lines market access increase will result from a combination of tariff cuts and TRQs. Within this category, developing countries shall have additional flexibility under conditions to be determined to designate Special Products (SP) which would only be subject to a linear cut of a minimum of [...] % and no new commitments regarding TRQs; however, where tariff bindings are very low (below [...] %) there shall be no requirement to reduce tariffs.

(ii) [...] % of tariff lines shall be subject to a Swiss formula with a coefficient of [...].

(iii) [...] % of tariff lines shall be bound between 0 and 5%, taking into account the importance of tariffs as a source of revenue for developing countries.

In implementing tariff reductions under paragraphs 2.7(ii) and 2.7(iii) above, developing countries should benefit from an additional implementation period of [...].

2.8 The applicability and/or extent of the provisions of paragraph 2.2 above to developing countries remain under negotiation, taking into account their development needs.

2.9 A special agricultural safeguard (SSM) shall be established for use by developing countries subject to conditions and for products to be determined.

2.10 All developed countries will seek to provide duty-free access for at least [...] % of imports from developing countries through a combination of MFN and preferential access, including particularly all tropical and other products referred to in the preamble of the Agreement on Agriculture.

2.11 Participants undertake to take account of the importance of preferential access for developing countries. The further considerations in this regard will be based on paragraph 16 of the revised First Draft of Modalities for the Further Commitments (TN/AG/W/1/Rev.1 refers).

Dynamic Formula (DF)

Changes to **Annex A of the draft Cancún Ministerial Text** (amendments shown in **bold type**).

(The text below is **identical to that of Annex A** of the draft Cancún Ministerial Text reproduced in Annex I above, **except for paragraphs 2.1, 2.2 and 2.7**. The latter have been revised to incorporate the approach suggested in this paper, with segments of the original language retained where applicable. The remaining paragraphs of the original text were left unaltered, as they were not directed affected by the approach proposed here. However, this is not to suggest that some of them may not be in need of revision).

Market Access

2. The Doha Ministerial Declaration calls for “substantial improvements in market access.” Negotiations should therefore provide increased access opportunities for all and in particular for the developing countries. To achieve this, commitments shall be based on the following parameters:

2.1 The formula applicable for tariff reduction by developed countries shall be a **dynamic formula** under which each element will contribute to substantial improvement in market access for all products. The formula shall be as follows:

- (i) **The minimum cut per tariff line shall not be less than [...]%.**
- (ii) [...] % of tariff lines shall be duty-free.
- (iii) **A self-designated number of tariff lines shall be subject to a [...] % average cut, with a “ceiling” tariff equal to the average initial tariff of all tariff lines in this category. For tariff lines not reduced below that “ceiling” level paragraph 2.2 shall apply.**
- (iv) **The remaining tariff lines shall be subject to a Swiss formula with a coefficient such that the resulting overall average tariff for all agricultural products shall be at least [...] % below the initial overall average tariff level of each member.**

2.2 For the tariff lines not reduced below the “ceiling” level defined under 2.1(iii) above, developed-country participants shall either reduce them to that “ceiling” level, or ensure effective additional market access as follows:

- (i) **The maximum additional TRQ for non-compliance shall be [...] % of the level of domestic consumption.**
- (ii) **The applicable additional TRQ shall be prorated according to the percentage by which the “ceiling” tariff is not complied with¹².**

2.3 The issue of tariff escalation will be addressed by applying a factor of [...] to the tariff reduction of the processed product in case its tariff is higher than the tariff for the product in its primary form.

2.4 In-quota tariffs shall be reduced by [...]%. Terms and conditions of any TRQ expansion/opening remain under negotiation.

2.5 The use and duration of the special agricultural safeguard (SSG) remain under negotiation.

Special and differential treatment

2.6 Having regard to their development, food security and/or livelihood security needs, developing countries shall benefit from special and differential treatment, including lower tariff reductions and longer implementation periods.

¹² Defined as (new tariff – “ceiling” tariff) divided by (initial tariff – “ceiling” tariff).

2.7 The formula applicable for tariff reductions by developing countries shall be as follows:

- (i) **The minimum cut per tariff line shall not be less than [...]%.**
- (ii) [...] % of tariff lines shall be bound between 0 and 5%, taking into account the importance of tariffs as a source of revenue for developing countries.
- (iii) **A self-designated number of tariff lines shall be subject to a [...] % average cut, with a “ceiling” tariff equal to the average initial tariff of all tariff lines in this category.**
- (iv) **The remaining tariff lines shall be subject to a Swiss formula with a coefficient such that the resulting overall average tariff for all agricultural products shall be at least [...] % below the initial overall average tariff level of each member.**
- (v) **Developing countries shall have additional flexibility to self-designate a number of Special Products (SPs) which may be protected from reduction commitments implied under (i) to (iv) above. The aggregate protection from reduction commitments for all products designated as SPs shall not exceed [...] percentage points. There shall not be new commitments regarding TRQs for SPs and, where bound tariffs are below [...] % there shall be no requirement to reduce tariffs.**

In implementing tariff reductions under paragraphs 2.7(i) to 2.7(v) above, developing countries should benefit from an additional implementation period of [...].

2.8 The applicability and/or extent of the provisions of paragraph 2.2 above to developing countries remain under negotiation, taking into account their development needs.

2.9 A special agricultural safeguard (SSM) shall be established for use by developing countries subject to conditions and for products to be determined.

2.10 All developed countries will seek to provide duty-free access for at least [...] % of imports from developing countries through a combination of MFN and preferential access, including particularly all tropical and other products referred to in the preamble of the Agreement on Agriculture.

2.11 Participants undertake to take account of the importance of preferential access for developing countries. The further considerations in this regard will be based on paragraph 16 of the revised First Draft of Modalities for the Further Commitments (TN/AG/W/1/Rev.1 refers).