WORKING PAPER - 5

Industrial Tariffs and South Asia

Interpreting for Development

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Centad and the author are grateful to S. Narayanan, B L Das, Mustafizur Rahman, Darlan Fonseca, Biplove Choudhary and an anonymous referee for providing useful comments on a shorter version of this paper and to Palakh Jain for providing valuable research assistance. Views and errors if any are solely author's responsibility. This paper draws from author's paper 'Choosing the Appropriate Tariff Reduction Formula in NAMA', XLI (16), Economic and Political Weekly and 'Agriculture and NAMA Negotiations: Searching for the Landing Zone', Working Paper 4, Centre for Trade and Development (Centad) (2006).

Key words: NAMA, South Asia, Swiss formula, WTO

Design and Printing by
New Concept Information Systems Pvt. Ltd.
Plot No. 5, Institutional Area, Sarita Vihar
New Delhi- 110 076

Foreword

The WTO negotiations on industrial tariffs, commonly referred to as Non Agriculture Market Access (NAMA) in the World Trade Organisation (WTO) seem to be acquiring a dangerous direction. Developed countries have been applying unreasonable pressure on developing countries to undertake very steep reductions in their industrial tariffs. On the face of it, this is a clear attempt to deny developing counties of an important economic and developmental tool of industrial tariffs forever. It is important to recall that the present developed world allowed its industry and manufacturing to blossom behind high tariff walls for decades.

The developments in Geneva seem to indicate that the pressure of developed countries is perhaps working. A consensus seems to be emerging for a 'Swiss formula with two coefficients' that would lead to drastic cuts with higher tariffs being subject to deeper cuts. Steep and drastic cuts in industrial tariffs would erode the existing policy space in developing countries and may subject many nascent industries to international volatility. Apart from adverse economic consequences, this may also have undesirable social consequences. The irony is that although the developed world expects developing countries to undertake drastic cuts, it is not at all forthcoming in dealing with the issue of tariff peaks and tariff escalation. Under the influence and pressure of huge domestic lobbies many developed countries maintain extremely high tariffs especially on products of export interest to developing countries. This is clearly special and differential treatment working in reverse!

Given this context this paper moots a bold approach on the core issue of tariff reduction in NAMA. It very ably builds a case for a tariff reduction formula, different from the 'Swiss formula with two coefficients' using the declaration adopted at the Hong Kong ministerial conference in December 2005. The formula proposed in this paper argues that the only way principles like less than full reciprocity (LTFR) and elimination of tariff peaks and tariff escalation could be honoured is by having the average tariff rate of a country as one of the coefficients in the formula. The paper has used the industrial tariff profile of India and Pakistan to show the efficacy of such a tariff reduction formula. It is important to recall that the principle of LTFR is an integral part of the Doha Work Programme, July 2004 Framework Agreement and the Hong Kong Ministerial Declaration. The paper suggests that negotiators of developing countries could very well use the declaration adopted at Hong Kong to argue for a formula that takes into account the average tariff rate of a country or other factors such as dependence on tariffs for revenue, in addition to meaningful flexibilities.

Centad urges that the negotiators of developing countries including India and Pakistan to argue for such an interpretation in their own as well as in the interest of other developing countries. In the meanwhile, Centad is committed to do further research on this issue.

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Abbreviations

ABI	Argentina, Brazil and India
BTR	Bound Tariff Rate
DDA	Doha Development Agenda
EC	European Commission
EU	European Union
GATT	General Agreement on Tariffs and Trade
HK	Hong Kong
HS	Harmonised System
LDCs	Least Developed Countries
LTFR	Less Than Full Reciprocity
NAMA	Non Agriculture Market Access
NGMA	Negotiating Group on Market Access
T&C	Textiles and Clothing
US	United States
WTO	World Trade Organisation

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Executive Summary

Industrial tariffs have played a significant role in the industrial and economic development of many countries. The present developed countries allowed their industries to develop behind high tariff walls. Hence, it is imperative that developing countries of today should also have the option of using industrial tariffs as a judicious policy tool to develop their industrial base. Further, high tariffs in developed countries especially on products of export interest to developing countries deny market access opportunities to developing countries.

Hence, negotiations on industrial tariffs should address two crucial issues for developing countries. First, the negotiations should not lead to any drastic reduction in the industrial tariffs of these countries. If there is a drastic reduction, it will impose harsh adjustment costs on developing countries and may have an adverse impact. Secondly, the negotiations should result in high tariffs in developed countries, especially on products of export interest to developing countries, to reduce or eliminate drastically.

This was also the objective of the Doha round of negotiations held in Doha in 2001. The negotiations on industrial tariffs or Non-Agriculture Market Access (NAMA) have witnessed a see-saw effect. Several deadlines have been missed. The latest deadline, which was agreed at the Hong Kong ministerial conference, whereby modalities were to be established by 30 April 2006 has also been missed. However, what is worrying is not a delay in finalizing the modalities or the 30 April deadline being missed but the trend and direction of negotiations especially on the issue of tariff reduction in NAMA. The negotiations, on how to cut the industrial tariffs has become very one-dimensional with developing countries like India and Brazil abdicating their original stand. They are slowly but surely getting rapt in the negotiating trap of developed countries.

It is important to understand how this is happening. Developing countries like India and Brazil have always been against the pure 'Swiss formula' that developed countries have been advocating, to cut industrial tariffs primarily because the Swiss formula cuts tariffs steeply with higher tariffs being cut even more sharply. Such stringent tariff reductions will attack the available policy space of developing countries. To counter such a formula, India and Brazil along with Argentina, in 2005, proposed a modified version of the Swiss formula that takes into account the average tariff rate of a country while cutting a particular tariff rate. This formula came to be popularly known as the ABI formula. Although it met with stiff resistance from developed countries, India and Brazil were successful in getting it on the negotiating table in the Hong Kong (HK) ministerial conference of the WTO. HK witnessed the adoption of a 'Swiss formula with coefficients' for cutting industrial tariffs. The word 'coefficients' in plural meant that the ABI formula is alive.

A 'Swiss formula with coefficients' implies two things. First, there could be a simple Swiss formula that has two coefficients; one for developed and the other for developing countries. For instance, a simple Swiss formula with the single coefficient in the formula being five for developed countries and 15 for developing countries. This is a simple Swiss formula, as it has only one coefficient at a time when applied to a particular tariff line. Secondly, there could be another Swiss formula, which has one, two, three or n number of coefficients with all of them a part of the formula. For example, there

may be a Swiss formula, which says that apart from the single coefficient, say five, the country's average tariff rate, say X, will also be a part of the formula. In this case we have a formula that comprises of two coefficients at a time when it is being applied to cut a particular tariff rate.

Now, what needs to be decided in Geneva is which of these two interpretations should be adopted. India, Argentina, Brazil and the Caribbean countries will certainly like the second interpretation to be adopted. In other words, they will prefer to have a Swiss formula where factors that reflect the tariff structures of individual countries such as the average tariff rate or the effect of reduction of tariffs on revenue are taken into account while reducing industrial tariffs.

However, the post Hong Kong trends clearly demonstrate that Brazil and perhaps India, are negotiating for the first interpretation of 'Swiss formula with coefficients' and not pushing for the ABI approach that they had proposed in 2005. Post Hong Kong, the position of India is not very clear on the issue of tariff reduction in NAMA. It is uncertain whether India plans to go ahead with the first interpretation or still wants to stick to the ABI proposal. Since Brazil and India have till now been negotiating, as a group on this issue, there are reasons to believe that India may also go the Brazil way. If the Swiss formula with two coefficients is accepted and assuming that the coefficient of developing country is 30, then, India will have to make stringent tariff reductions. For instance, with '30' as the coefficient, the bound tariff rate of fish and fish products in India will come down from the present 100.7 percent to 23 percent, which is a reduction of as high as 77 percent. This new bound tariff rate would be even lower than the present applied rate of 30 percent on fish and fish products in India and hence, complete erosion of policy space.

This paper argues that the ABI formula is the only way to go ahead, as it will alone fulfill the mandate of Less Than Full Reciprocity (LTFR) in reduction commitments and lead to elimination of tariff escalation and tariff peak in developed countries. This paper has used the tariff profile of India and Pakistan to build a case for the adoption of the ABI formula as the tariff reduction formula in NAMA.

1. Introduction

Industrial tariffs have historically been recognised as important policy tools for countries to foster industrialisation and to follow a host of development friendly domestic policies. There is ample economic literature to show that developed countries of today and many other developing countries used industrial tariffs to protect and promote their infant industries and develop their industrial bases. For instance, the United States (US), for the most part of the period from 1820 to 1945, maintained an average industrial tariff rate of 40 percent and never less than 25 percent except for brief periods. Similarly, the East Asian success story also reveals that protection in the form of higher tariffs has enabled these countries to develop their industries and economies. Given this historical importance and role that industrial tariffs have performed in the growth of industrial sectors in developed world, developing countries of today should make full use of industrial tariffs as an important policy tool.

Notwithstanding, this importance of industrial tariffs, it is frequently argued by the advocates of free trade that customs duties and other tariff rates often act as impediments to free flow of goods across borders and hence should be substantially reduced. Article XXVIII *bis* of the General Agreement on Tariffs and Trade (GATT) 1994 reflects this principle of international trade. However, Article XXVIII *bis* also states that negotiations directed towards substantial reduction of the general level of tariffs and other charges will be done on a mutually advantageous basis. Further paragraph 3 of Article XXVIII *bis* of GATT 1994 states that while conducting negotiations on bringing down the tariff rates it is important to take due cognisance of the needs of individual countries which includes fiscal, developmental, strategic and other needs. Thus, there is a legal requirement that any negotiation process or final agreement on tariff reduction should be consistent with the principles laid down in Article XXVIII *bis* of GATT. In other words, tariff reduction should not be in a manner that takes away the sovereign right of countries to use tariffs as a policy tool to foster industrialisation or other developmental policies that it may deem fit. If tariffs are to be reduced, they should be reduced gradually and in line with the growing capabilities of countries that are undergoing liberalisation.[1]

In the name of liberalising international trade counties have been engaged with each other, right from 1947 – the formation of GATT – to date to reduce industrial tariffs. Successive rounds of negotiations upto the formation of the World Trade Organisation (WTO) led to substantial reduction in industrial tariffs worldwide. After the formation of the WTO in 1995, yet another attempt to reduce industrial tariffs was flagged at the Doha Ministerial conference in 2001 as a part of the Doha work programme.

However, the present attempt to reduce industrial tariffs as part of the Doha work programme is qualitatively different from the earlier rounds of industrial tariff reduction in terms of its impact on the industry and economy of developing countries. Let us try to understand this briefly. Tariffs have always been one of the tools available to countries to protect their domestic industry apart from direct import control measures like quantitative restrictions (QR). However, post WTO, tariffs have become the

[1] For more on this see Ha-Joon Chang, 'Why Developing Countries Need Tariffs', Oxfam International and South Centre (2005).

only tool available to protect domestic industry as the QR regime has been dismantled for most of the countries including India and the balance of payment measures under Article XVIII B of GATT have been put under severe disciplines.[2] Hence, the biggest apprehension that developing countries like India have is that any hasty and indiscriminate tariff liberalisation will not only take away the only available protection and impose harsh adjustment costs but also devoid the opportunity to use industrial tariffs to develop industrial base.

These harsh adjustment costs could be in the form of balance of payment problems, de-industrialisation and hence unemployment. The Sub Saharan Africa experience where the rapid reduction in industrial tariffs during 1980s led to de-industrialisation and unemployment lends weight to these concerns. Moreover, significant market opening could also lead to lower tax revenue and hamper interests of many developing countries as these countries rely on import tariff for revenue generation.

However, negotiations on industrial tariffs are not just about developing countries and LDCs adopting defensive postures but also about the rife double standards and protectionist stance of developed countries. On the one hand developed countries apply enormous pressure on developing world to reduce tariffs but on the other they themselves maintain high tariffs especially on products of export interest to developing countries such as textiles, clothing, leather, footwear etc. The potential gains that could accrue to developing countries and LDCs if developed countries reduce their high tariff rates on products of export interest to these countries is mammoth. The textile, clothing, leather and footwear sector in many developing countries are labour intensive. If assured export markets are available for these products it will not only boost employment but also make a dent on poverty. Keeping the above-mentioned points in mind negotiations on NAMA should allow:

1. Developing countries to retain the policy space to use industrial tariffs as effective tools to pursue relevant developmental goals.
2. Developed countries to eliminate or reduce tariff peaks and tariff escalation to give better market access to developed countries.

For retention of policy space it is important for developing counties such as India to retain enough 'water' (difference between bound and applied) in the tariff lines. If there is enough or adequate 'water', then developing countries have the flexibility to increase their applied tariff rates if the situation so demands. For instance, India has a bound tariff rate of 34.3 percent and an applied tariff rate of 27.7 percent. The existing 'water' gives India the flexibility to increase its tariff rate from 27.7 percent to 34.3 percent if the situation so demands. This flexibility is extremely important to pursue various developmental goals that a sovereign country may choose to pursue. Hence, a tariff reduction formula should be such that does not take away the 'water' in the tariff lines, at least not completely. The discussion in this paper would focus on this core issue. It would attempt to argue for an industrial tariff reduction formula that allows South Asian countries to have enough 'water' in their tariff structure.

The South Asian region comprising of three developing countries and two LDCs is an important illustration of the potential downsides of an unbalanced NAMA outcome.[3] All of these countries except Sri Lanka to some extent, maintain high industrial tariff rates. The tariff profiles of these countries are characterised by low binding coverage and high international peaks (See Table 1). Countries such as India have about 60.1 percent of tariff lines that are more than 15 percent (International Peaks). Hence, the whole of South Asia has a high industrial tariff profile.

[2] Bhagirath Lal Das, 'Market Access for Non-Agricultural Products' in 'The New Work Programme of the WTO', Third World Network (2002).

[3] South Asia in this context refers to Bangladesh, India, Nepal, Pakistan and Sri Lanka.

Given such a high tariff profile and from the experience of Sub Saharan Africa it is amply clear that any significant or drastic opening up of these markets may not augur well for the South Asian countries. At the same time these countries face a lot of barriers in markets of developed countries in terms of tariff peaks and tariff escalation. Tariff peaks or high tariffs continue to be maintained in sectors of export interest to developing countries. Further, tariff escalation as a tariff measure in developed countries encourages imports of raw materials and discourages the imports of value added goods and thereby of processing industry in developing countries. It does not allow developing countries and LDCs to graduate from exporting raw materials to processed and finished goods. The average US tariff for all imports is 1.6 percent, but this rises to 4 percent for imports from India and to 14-15 percent for imports from LDCs such as Bangladesh and Nepal. EC imposes tariffs of less than 4 percent on Indian yarns, but this tariff rate escalates to 12 percent if the yarn is woven into garments.

TABLE 1
Industrial Tariff Profile of South Asian Countries

Import Market	Binding Coverage[4]	Simple Average	International Peaks[5]	National Peaks[6]
Bangladesh	3.1	42.9	2.7	0.2
India	69.8	34.3	60.1	0.1
Pakistan	36.9	35.3	33.2	0.0
Sri Lanka	28.3	19.2	13.1	0.5

Source: World Trade Organisation Secretariat, WTO Member's Tariff Profiles, TN/MA/S/4/Rev.1/Corr.1, 15 November 2002

2. NAMA Negotiations

The elements of Article XXVIII *bis* of GATT 1994 were reflected in the Doha Development Agenda[7] (DDA). Paragraph 16 of the DDA states that negotiations on NAMA will in future target to reduce or eliminate all kinds of tariff barriers in particular on products of export interest to developing countries. It also states that negotiations shall take cognisance of the development needs of developing and least developed countries. It also recognises the special and differential treatment for developing countries by asking them to make less than full reciprocity commitments. In other words, developing and least developed countries should not be asked to undertake the same reduction commitments that developed countries undertake.[8]

After the adoption of the DDA, negotiations on non-agricultural products were launched in January 2002 by creating a negotiating group on market access (NGMA). The ongoing negotiations on non-agricultural products were to be completed by 1 January 2005. However, this deadline has been missed and the negotiations are ongoing with no firm end dates in sight.

The participants in the negotiation process were first expected to agree on how to conduct the tariff cutting exercise. In other words the participants first have to agree on 'modalities'. The current state of play is that all the member countries are still struggling to establish modalities for

[4] Binding Coverage implies the extent of tariff lines that have bound tariff rates.

[5] International Peaks shows the percentage of tariff lines in a country that have a bound tariff rate of more than 15 percent.

[6] National Peaks shows the percentage of tariff lines in a country that have bound tariff rates at least three times higher than the country's simple average.

[7] World Trade Organisation Ministerial Declaration, WT/MIN (01)/DEC/1, adopted 14 November 2001, para 16.

[8] Prabhash Ranjan (2005), Tariff Negotiations in NAMA and South Asia: July Agreement and Beyond, Working Paper 3, Centre for Trade and Development.

future negotiations, though, in July 2004 all the member countries had agreed to a framework for establishing modalities in market access for non-agricultural products.[9] The July agreement was an important development as it was the first agreement amongst the member countries of the WTO after the collapse of the Cancun ministerial. Also, since it lays down the framework for establishing future modalities it needs to be comprehended well as it determines the future course of action. After the July agreement in 2004, a lot of water has flown. Intensive negotiations resulted in some sort of agreement on NAMA emerging during the VIth ministerial conference of the WTO at Hong Kong (HK). The HK ministerial conference saw the emergence of the following important issues:[10]

1. A 'Swiss formula with coefficients' will be adopted for undertaking tariff reduction.
2. Reiteration of flexibilities to developing countries
3. Participation in the sectorals will be voluntary
4. A non-linear mark up will be used to bind the unbound tariff lines.

3. Scope of the Paper

This paper does not look at all the issues pertaining to NAMA negotiations. Instead, it analyses one of the most contentious issue in NAMA negotiations i.e. the tariff reduction modality. It makes an attempt to examine the HK declaration on the core issue of tariff reduction for industrial goods. It also looks at how the proposed architecture of the tariff reduction formula will affect the tariff profiles of South Asian countries. Building on the potential impact of the different tariff reduction formula on South Asian countries, this paper would argue for a tariff reduction formula which can produce a relatively balanced NAMA outcome. This argument also stems from the fact that for South Asian countries to maintain 'water' in their tariff structure, it is important to clinch an appropriate tariff reduction formula. In case of an agreement on a formula, only India and Pakistan within South Asia will have to undertake tariff reduction[11]. Bangladesh and Nepal do not need to cut tariffs because of their LDC status and Sri Lanka is also exempted since its binding coverage is less than 35 percent. The paper would also develop an interpretation of the possible architecture of a tariff reduction formula supportive of the interests of developing countries in general and South Asia in particular.

4. General Comment on NAMA Outcome of HK

It is important to look at the history of the NAMA negotiations in order to understand the context of the present agreement on NAMA. Developing countries had vociferously opposed the NAMA portion of the Draft Cancun ministerial text. The reason behind this opposition was that the draft text of Cancun talked of having a non-linear formula for tariff reduction, limited flexibilities and an unviable clause for the treatment of the unbound tariff lines. At Cancun, developing counties succeeded in blocking the draft text.

[9] Decision Adopted by the General Council, WT/L/59, adopted 1 August 2004, Annex B
[10] Draft Ministerial Declaration, WT/MIN (05)/W/3/Rev.2, 18 December 2005
[11] The impact of the tariff rates of India and Pakistan in this paper is shown at HS 6 digit and at HS 8 digit level respectively. For Pakistan the analysis is at HS 8 digit level for lack of data at the HS 6 level. However, this will not affect the overall argument.

Developing countries expected that this draft text on NAMA would not come up again in the future negotiations. However, to their surprise, they saw the same text coming up in the negotiations at the General Council in July 2004. The first draft of the July framework agreement that came up on 17 July 2004 had the exactly same NAMA text that developing countries had rejected at Cancun. Developing countries opposed this again and mainly due to the efforts of the African countries an additional paragraph was added to this controversial text. This was the first paragraph in Annex B of the July framework agreement, which said that whatever is given below is not final. This paragraph gave a window to developing countries to negotiate for a linear formula for tariff reduction amongst other development friendly positions. However, developing countries did not use this window at all. In the build up the Hong Kong ministerial, they negotiated as if this additional paragraph did not exist. In other words, there was a tacit acceptance of the text that they themselves had opposed and rejected. It can then be said that at Hong Kong the biggest casualty was the cementing of Annex B of the July framework minus the first paragraph which should have been at the centre of negotiations. So, that which was inconclusive and negotiable has now become an inseparable part of the multilateral negotiations.

5. Swiss Formula with Coefficients

One of the few things that were agreed by countries in NAMA was the adoption of a 'Swiss formula with coefficients' for cutting industrial tariffs (Paragraph 14 of the Hong Kong Declaration) (See Box 1). However, a 'Swiss formula with coefficients' has created a lot of confusion. Many have interpreted this as the acceptance of the highly iniquitous 'Swiss formula' that cuts industrial tariff rates steeply and in fact cuts higher tariff rates even more steeply. However, this is not true and part of the reason for this kind of interpretation doing rounds is that the literature on industrial tariffs in the WTO has often demarcated between a 'Swiss formula and a 'Swiss type or a modified Swiss formula'. Therefore, each time we see the words 'Swiss formula' it makes us think that the bad and ugly 'Swiss formula' is back again and has now embedded in the multilateral trade negotiations.

At the conceptual level it is important to understand the distinction between a 'Swiss formula' and a 'modified Swiss formula', which is also a Swiss formula. Swiss formula is written as:

$T1 = \frac{B \times T}{B + T}$, where T1 is the final tariff rate, T is the initial tariff rate and B is a coefficient.

BOX 1

Paragraph 14 of the Hong Kong Ministerial Declaration

Adopt a Swiss Formula with coefficients at levels which shall *inter alia*:

- Reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs and tariff escalation, in particular on products of export interest to developing countries.
- Take fully into account the special needs and interests of developing countries, including through less than full reciprocity in reduction commitments.

We instruct the Negotiating Group to finalize its structure and details as soon as possible.

A 'modified Swiss formula' could be written as:

$T1 = \frac{(B \times X) \times T}{(B \times X) + T}$, Where T1 is the final tariff rate, T is the initial tariff rate, B and X are coefficients. The difference between the 'modified Swiss formula' and the 'Swiss formula' is the presence of the additional coefficient X. It is important to

understand that this coefficient is only an additional feature in the 'Swiss formula' mentioned above and has an impact on the existing coefficient B. So $(B \times X)$ is only a new coefficient that we have in the normally understood 'Swiss formula'. This new coefficient will be either greater than B or smaller than it depending on the value of X. So, if $B \times X = Y$, then the so called 'modified Swiss formula' will become a 'Swiss formula' and can be represented as:

$T1 = \frac{Y \times T}{Y + T}$, where Y is a coefficient and T1 and T are the final and initial tariff rates. So, we find that this so called 'modified Swiss formula' is also essentially a 'Swiss formula'. The only difference is that the so-called 'modified Swiss formula' has one more factor (X in the example above) or coefficient embedded in the formula.

5.1 Possible Interpretations of Paragraph 14

After this conceptual understanding, it is important to understand how the countries will negotiate towards establishing modalities for a tariff reduction formula. The adoption of a 'Swiss formula with coefficients' implies two things. Firstly, that a Swiss formula will be adopted and secondly, that it will have more than one coefficient. Reading both these provisions together implies that a Swiss formula, which has only one coefficient for both developed and developing countries, will not be adopted. The word 'coefficients' in paragraph 14 means two things:

1. A Swiss formula, with two different coefficients, one each for developed and developing countries. Such a formula could be represented as:

$T1 = \frac{B \times T}{B + T}$, where T1 is the final tariff rate, T is the initial tariff rate and B is a coefficient which has different values for developed and developing countries. B = m for developed countries, and B = n for developing countries.

This formula is a Simple Swiss formula and is similar to one that has been proposed by countries like the US or even Pakistan. The difference in the proposal of US and Pakistan is the value of the coefficient for developed and developing countries.

2. A Swiss formula, with 2, 3, or n number of coefficients with these coefficients being embedded in the formula unlike the formula given above, which has more than one coefficient and hence is a 'Swiss formula with coefficients' but has only one coefficient embedded in the formula.

This kind of formula could be represented in many ways. Below are the two most important ways in which such a formula could be represented:

$T1 = \frac{(B \times X) \times T}{(B \times X) + T}$, X is the average tariff rate of a country. This has been discussed above. This type of formula has been proposed by Argentina, Brazil and India.

Another manner in which this formula could be represented is as follows:

$T1 = \frac{\{(B + C) \times X\} \times T}{\{(B + C) \times X\} + T}$, where T1 is the final tariff rate, T is the initial tariff rate, B is a coefficient, X is the average tariff of a country and C is the credit to be accorded to a developing country.

One may argue that the formula that has been proposed by the Caribbean group of countries is not a Swiss formula within the mandate of the Hong Kong Declaration. This is not true. $\{(B+C)\} \times X\} \times T$ will also yield a single coefficient. Assuming that such a coefficient is, K and replacing $\{(B+C)\} \times X\} \times T$ by K in the above formula we get:

$T1 = \frac{K \times T}{K + T}$, which is a Swiss formula.

The question that arises is which of these two interpretations shall be adopted. Before, we come to the issue of which of these two interpretations should be adopted, it is important to see the impact

that each of these formulas will have on the present bound tariff rates of India and Pakistan.

Impact of the Possible Tariff Reduction Formulas on Tariff lines of India and Pakistan

5.2 Swiss Formula with Two Coefficients

The first possible tariff reduction formula could be the Swiss formula with two coefficients.

$$T1 = \frac{B \times T}{B + T}$$, where B = 5, 10, 15, 20, 30, 35

After the HK ministerial conference, several simulations have been done to see the impact of different coefficients on the existing tariff rates of many developing countries. However, in all these simulations, the first option of having two coefficients; one for developed and the other for developing have been used. Some of these coefficients are: 10 & 15, 8 & 20 etc. The first coefficient here represents the coefficient for developed country and the other coefficient for developing country. The argument behind having low coefficients such as 15 or 20 for developing countries is to have deeper cuts in the existing tariffs. EU and US have been arguing that the use of these coefficients will result in bringing the existing bound tariffs in countries such as India below the existing applied tariff rates and hence achieve real market access. However, on the other hand, countries like India have argued that they have already given real market access by autonomously lowering their tariff rates.

Let us now look at some simulations for India and Pakistan for different coefficients. From Table 2, it is clear that lesser the value of the coefficient steeper is the reduction. For instance, if a coefficient of '15' is used, then the bound tariff rate of 100 percent will come down to 13 percent, which is approximately a reduction of 87 percent. This is a very steep reduction and will bring down the new bound tariff rate much below the present applied tariff rate. Similarly, in case of Pakistan, the same

TABLE 2 A

Impact of the Pure Swiss Formula on the Bound Tariff Rates of 5107 Tariff Lines of India (HS 6 Digit Level) (Percentage)

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)					
		B=5	B=10	B=15	B=20	B=30	B=35
0	53	0	0	0	0	0	0
3	7	1.88	2.31	2.50	2.61	2.73	2.76
5	76	2.50	3.33	3.75	4.00	4.29	4.38
10	25	3.33	5.00	6.00	6.67	7.50	7.78
15	147	3.75	6.00	7.50	8.57	10.00	10.50
20	150	4.00	6.67	8.57	10.00	12.00	12.73
25	954	4.17	7.14	9.38	11.11	13.64	14.58
30	73	4.29	7.78	10.00	12.00	15.00	16.15
35	3512	4.38	7.78	10.50	12.73	16.15	17.50
40	76	4.44	8.00	10.91	13.33	17.14	18.67
45	6	4.50	8.18	11.25	13.85	18.00	19.69
50	4	4.55	8.33	11.54	14.29	18.75	20.59
55	1	4.58	8.46	11.79	14.67	19.41	21.39
60	7	4.62	8.57	12.00	15.00	20.00	22.11

(Contd.....)

(Table Contd.....)

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)					
70	15	4.67	8.75	12.35	15.56	21.00	23.33
75	2	4.69	8.82	12.50	15.79	21.43	23.86
80	4	4.71	8.89	12.63	16.00	21.82	24.35
100	38	4.76	9.09	13.04	16.67	23.08	25.93
105	15	4.77	9.13	13.13	16.80	23.33	26.25
115	1	4.79	9.20	13.27	17.04	23.79	26.83
170	2	4.86	9.44	13.78	17.89	25.50	29.02
210	8	4.88	9.55	14.00	18.26	26.25	30.00
	Total = 5107						

Source: Author's Calculations from UNCTAD figures

TABLE 2B

Impact of the Pure Swiss Formula on the Bound Tariff Rates of 1048 Tariff Lines of Pakistan (HS 8 Digit Level) (Percentage)

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)					
		B=5	B=10	B=15	B=20	B=30	B=35
20	21	4.00	6.67	8.57	10.00	12.00	12.73
30	67	4.29	7.50	10.00	12.00	15.00	16.15
40	122	4.44	8.00	10.91	13.33	17.14	18.67
50	838	4.55	8.33	11.54	14.29	18.75	20.59
	Total = 1048						

Source: Author's Calculations from WTO figures

coefficient will bring down the bound tariff rate of 50 percent to about 11.5 percent, which is a reduction of about as high as 77 percent.

5.3 ABI Formula

The tariff reduction formula proposed by Argentina, Brazil and India is called the ABI formula. This formula talks of having the average tariff rate of a country as one of the coefficient in the formula. The presence of the average tariff rate of a country as the coefficient will ensure that country's present tariff profile is taken into account while undertaking tariff reduction.

$T1 = \frac{(B \times X) \times T}{(B \times X) + T}$, where X is the average tariff rate of a country. X = 34.3 percent for India (does not include specific duties) and 35.3 percent for Pakistan (does not include specific duties).

The application of the ABI formula on the tariff lines of India and Pakistan demonstrates that this formula does not lead to a very steep reduction. However, the reduction in this case can also be steep if the value of B is less than 1. As, the value of B increases the reduction is less steep. For instance, in the case of India, the bound tariff rate of 100 percent will come down to 25.54 percent (when B = 1), as against the

TABLE 3A

Impact of the ABI Formula on the Bound Tariff Rates of 5107 Tariff Lines of Indian Industrial Products at HS 6 Digit Level (Percentage), the Average Tariff Rate = 34.3 Percent (Percentage)

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B = 0.5	B = 1	B = 1.5	B = 1.75	B = 2
0	53	0	0	0	0	0
3	7	2.55	2.76	2.83	2.86	2.87
5	76	3.87	4.36	4.56	4.62	4.66
10	25	6.32	7.74	8.37	8.57	8.73
15	147	8.00	10.44	11.61	12.00	12.31
20	150	9.23	12.63	14.40	15.00	15.49
25	954	10.17	14.46	16.82	17.65	18.32
30	73	11.51	17.32	20.83	22.11	23.18
35	3512	11.51	17.32	20.83	22.11	23.18
40	7	12.00	18.47	22.50	24.00	25.17
45	6	12.42	19.46	24.00	25.72	27.17
50	4	12.77	20.34	25.36	27.28	28.92
55	1	13.07	21.13	26.58	28.70	30.53
60	7	13.34	21.82	27.70	30.01	32.01
70	15	13.78	23.02	29.65	32.31	34.65
75	2	13.96	23.54	30.52	33.34	35.83
80	4	14.12	24.01	31.31	34.29	36.93
100	38	14.64	25.54	33.97	37.51	40.69
105	15	14.74	25.85	34.53	38.19	41.49
115	1	14.92	26.42	35.55	39.44	42.97
170	2	15.58	28.54	39.50	44.36	48.88
210	8	15.86	29.48	41.33	46.68	51.71
	Total = 5107					

Source: Author's Calculations from WTO figures

tariff rate of 13 percent, when the coefficient of 'B' is 15.

5.4 Caribbean Formula

This formula was proposed by the Caribbean countries. The rationale for this formula is that countries use tariffs for numerous purposes such as generating revenue and therefore these factors should also be taken into account while cutting tariff rates. If such factors are taken into account then the tariff cutting exercise will be fair and the competing needs of different countries can be accommodated.

$$T1 = \frac{\{(B + C) \times X\} \times T}{\{(B + C) \times X\} + T}$$, where T1 is the final tariff rate, T is the initial tariff rate, B = 1[12] (a coefficient), X is the average tariff of a country (34.3 percent for India and 35.3 percent for Pakistan) and C = 1, 2, 3, 4 (credit to be accorded to a developing country).

[12] The value of B could be anything. However, for the sake of simplicity, it has been assumed that the value of 'B' here is 1.

TABLE 3B

Impact of the ABI Formula on the Bound Tariff Rates of 1048 Tariff Lines of Pakistani Industrial Products at HS 8 Digit Level (Percentage), the Average Tariff Rate = 35.3 Percent (Percentage)

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		B=0.5	B=1	B=1.5	B=2
20	21	9.38	6.67	14.52	15.58
30	67	11.11	16.22	19.15	21.05
40	122	12.25	18.75	22.79	25.53
50	838	13.09	20.69	25.72	29.27
	Total = 1048				

Source: Author's Calculations from WTO figures

TABLE 4A

Impact of the Caribbean Formula on the Bound Tariff Rates of 5107 Tariff Lines of Indian Industrial Products at HS 6 Digit Level (Percentage), the Average Tariff Rate = 34.3 Percent, B = 1 (Percentage)

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		C =1	C =2	C =3	C =4
0	53	0	0	0	0
3	7	2.87	2.92	2.94	2.95
5	76	4.66	4.77	4.82	4.86
10	25	8.73	9.11	9.32	9.45
15	147	12.31	13.09	13.52	13.79
20	150	15.49	16.75	17.46	17.91
25	954	18.32	20.11	21.15	21.82
30	73	20.87	23.23	24.62	25.53
35	3512	23.18	26.12	27.89	29.07
40	7	25.27	28.80	30.97	32.43
45	6	27.17	31.31	33.89	35.65
50	4	28.92	33.65	36.65	38.71
55	1	30.53	35.84	39.26	41.64
60	7	32.01	37.90	41.74	44.45
70	15	34.65	41.66	46.35	49.71
75	2	35.83	43.38	48.49	52.18
80	4	36.93	45.01	50.53	54.55
100	38	40.69	50.71	57.84	63.17
105	15	41.49	51.97	59.48	65.13
115	1	42.97	54.31	62.56	68.84
170	2	48.88	64.10	75.92	85.37
210	8	51.71	69.06	82.98	94.40
	Total = 5107				

Source: Author's Calculations from UNCTAD figures

TABLE 4B

Impact of the Caribbean Formula on the Bound Tariff Rates of 1048 Tariff Lines of Pakistani Industrial Products at HS 8 Digit Level (Percentage), the Average Tariff Rate = 35.3 Percent, B = 1 (Percentage)

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		C = 1	C = 2	C = 3	C = 4
20	21	15.58	16.82	17.52	17.96
30	67	21.05	23.38	24.74	25.64
40	122	25.53	29.03	31.17	32.61
50	838	29.27	33.96	36.92	38.96
	Total = 1048				

Source: Author's Calculations from WTO figures

The credit to be accorded will depend on factors such as tariff revenue and other role that tariffs are playing within a country. The greater the role more will be the credit that will be accorded to a particular country. In the simulations for India and Pakistan the impact of the Caribbean formula has been demonstrated by assigning different credits. One can see that as the value of credit assigned increases the tariff rate reduction becomes less steep.

Which Interpretation to Accept?

From the impact of the three possible formulas on the tariff rates of India and Pakistan one can safely argue that the Caribbean formula and the ABI formula are much less stringent as compared to the 'Swiss formula with two coefficients'. Therefore, from the perspective of developing countries including those of South Asia, 'Swiss formula with coefficients' should be interpreted as a Swiss formula that has more than one coefficient embedded in the formula.

Let's see how best the HK declaration on reducing the industrial tariffs can be interpreted to accommodate the above findings. In other words, how best can paragraph 14 be interpreted to build the case for having the ABI or the Caribbean formula as against the 'Swiss formula with two coefficients'.

Paragraph 14, apart from stating that a 'Swiss formula with coefficients' will be adopted, also states that the coefficients be adopted at levels which 'shall'

1. take fully into account the special needs of developing countries including through LTFR in reduction commitments.
2. reduce tariff peaks and tariff escalation

In other words, the declaration makes it binding and mandatory (as implied by the word 'shall') to have such coefficients in the formula that will eliminate tariff peaks and tariff escalation and also honour less than full reciprocity (LTFR). A set of coefficients that do not fulfil these two requirements cannot become a part of the tariff reduction formula. In this entire equation, the interpretation of 'LTFR' holds the key to the determination of the coefficients in the Swiss formula.

5.5 Less Than Full Reciprocity (LTFR)

The interpretation of LTFR has always been a moot issue. Different countries have attempted different interpretations to suit their interest. However, the most common and acceptable interpretation is that developing countries should undertake less stringent obligations than what developed countries will undertake.

This can be understood with the help of the following example. Imagine that the initial tariff rate of a tariff line 'A' is 10 percent in a developed country 'M' and the initial tariff rate of the same tariff line in a developing country 'N' is 50 percent. Now if 'M' agrees to reduce the tariff rate by 70 percent, then 'N' should reduce its tariff rate by any value that is less than 70 percent and not by 70 percent or more. So, in other words, honouring 'LTFR' in context of industrial tariffs implies that developing countries undertake lesser cuts than what developed countries will undertake. In this example let's assume that developing country 'N' cuts its tariff rate by 65 percent (See Table 5). The final tariff rate for this country will be 14.

TABLE 5
Demonstration of LTFR (Percentage)

Country	Initial Tariff	Reduction in Initial Tariff	Final Tariff
M	10	70	3
N	50	65	14

Source: Author's calculation.

However, this interpretation of 'LTFR' is not complete as it is a mere technical fulfilment of 'LTFR'. The other important part is that there should be a substantial gap between percentage reduction that developed and developing countries undertake. Only a substantial gap would ensure 'LTFR' in real terms. This brings us to the question of what is a substantial gap to ensure real 'LTFR'. In this regard it can be proposed that for real 'LTFR' in industrial tariffs developing countries cannot be expected to undertake commitments, which would be more than 2/3rds of commitments made by developed countries. The reason why a difference of 2/3rd is being used to operationalise real 'LTFR' in industrial tariffs is that the same gap has been proposed in agriculture. Hence, for real 'LTFR' a developing country should cut its tariff rate by at least 2/3rd of what a developed country is doing, or less. In this example, if a developed country cuts its tariff rate by 70 percent, then a developing country should not cut its tariff rate by more than 46 percent (2/3rd of 70). It can cut by less than 46 percent.

However, the principle of real 'LTFR' also has its limitations, especially in cases where the tariff rates of developed countries are already very low. For instance, if the tariff rate in a developed country comes down from 4 percent to zero percent, there will be a reduction of 100 percent. This reduction in the tariff rate, however, will change the price only notionally from 104 units to 100 units (Assuming 100 units is the base price). On the other hand, if a developing country has to cut its initial tariff of 30 percent by 2/3rd of 100, which is 66 percent, then the final tariff rate will be 10 percent and the price of the imported product will come down from 130 units to 110 units, which is a steep reduction in the price. In this case, although there is real 'LTFR', the developing country stands to lose out, as the product of the developed country will get cheaper in the market of the developing country whereas there will not be any significant change in the price of the product of the domestic country.

5.6 Implementing Paragraph 14

What follows from the above discussion is that the coefficients in the Swiss formula should be such that 'LTFR' in reduction commitments is really honoured. On the basis of this we will endeavour to find out the coefficients by taking the example of tariff rates of textile and clothing in the US and India. However, in order to honour LTFR (i.e. developing country cutting its tariff rates at lesser rate than a developed country), one needs to first find out the rate at which developed countries should cut their tariff rate.

Paragraph 14 is a useful tool to find out the rate at which developed country should cut its tariff rate. It states that coefficients in the Swiss formula 'shall' eliminate or reduce tariff peaks and tariff escalation. The bound tariff rate (BTR) of textile and clothing in the US is 8.6 percent, which is almost three times the average tariff rate in the US of 3.2 percent for all non-agricultural products. This is a clear case of tariff peaks. Hence, a tariff rate as high as 8.6 percent

should come down to at least 3 percent, which means a reduction of 65 percent. For a reduction of 65 percent the coefficient in the first type of formula for the US will be 5 (See Table 6A).

Now, as per the interpretation of 'LTFR', India should certainly not cut its tariff rate by more than 2/3rd of 65 percent, which is 43 percent. India's BTR for textile and clothing is 26.3 percent.[13] After a reduction of 43 percent, this will come down to 14.2 percent. The coefficient for such a reduction will be 30 (See Table 6B).

In this case the coefficients in the Swiss formula will be 5 for developed country and 30 for developing country. These values of coefficients are completely different from what developed countries have been proposing. For instance, the EU proposed that the value of the coefficient for both developed and developing countries should be the same. Same coefficient for developed and developing country implies violation of 'LTFR'. Similarly, US proposed that both the coefficients in the Swiss formula should be 'within the sight of each other'. In other words, the coefficients should not be too far away from each other. One of the fundamental reasons behind US advocating that the coefficients should be 'within the sight of each other' is to make sure that bound tariff rates of countries like India come below the applied tariff rates. This attempt is not acceptable to India, as it would like to retain 'policy space' by having 'water' (difference between bound and applied tariff rate) in the tariff line.

Besides, this proposal will also not stand the scrutiny of the HK declaration, as paragraph 14 clearly states that the coefficients should be at levels, which will ensure 'LTFR'. However, if the coefficients are 'within the sight of each other', then 'LTFR' will be violated and hence there will be a violation of paragraph 14. From the above example, it is clear that for honouring real 'LTFR' the two coefficients have to be at least 6 times apart from each other.

Even if we assume the mere technical fulfilment of the 'LTFR principle' and cut the BTR of textile and clothing in India by 50 percent, the coefficient for reduction will be 26, which is still 5 times more than the coefficient for developed country (See Table 7A and 7B). This drives home the point that even for mere technical fulfilment of 'LTFR' the US proposal of having both the coefficients 'within the sight of each other' cannot be accepted.

TABLE 6A

Demonstration of the Levels at which the Coefficients should be to Honour Real 'LTFR', Developed Country (Percentage)

Initial Tariff Rate	Reduction	Final Tariff Rate	Coefficient
8.6	65	3	5

TABLE 6B

Demonstration of the Levels at which the Coefficients should be to Honour Real 'LTFR', Developing Country (Percentage)

Initial Tariff Rate	Reduction	Final Tariff Rate	Coefficient
26.3	43	14.2	30

Source: Author's calculations

TABLE 7A

Demonstration of the Levels at which the Coefficients should be to Honour Technical 'LTFR', Developed Country (Percentage)

Initial Tariff Rate (Tm)	Reduction in Tm	Final Tariff Rate	Coefficient for Developed Country
8.6	65	3	5

TABLE 7B

Demonstration of the Levels at which the Coefficients should be to Honour Technical 'LTFR', Developing Country (Percentage)

Initial Tariff Rate (Tn)	Reduction in Tn	Final Tariff Rate	Coefficient for Developing Country
26.3	50	13.1	26

Source: Author's calculations

[13] World Trade Report 2004. The BTR for Textile and Clothing (T&C) in India is derived from the ad valorem bound rate of all the tariff lines in T&C and does not take into account the 271 tariff lines in T&C that have specific duties.

So, the advantage of paragraph 14 is that it puts an end to both the US and the EC proposals of reducing tariff rates.

The other advantage of paragraph 14 is that it helps developing countries to make a case for a formula where the coefficients are far away from each other so as to honour 'LTFR'.

5.7 Two Approaches

The levels of coefficients once again bring us to the two interpretations of the Swiss formula, as was discussed above. The issue is which of the two variants is to be used for structuring the coefficients.

Option 1

The first option is to go for the formula with two coefficients, one for developed and the other for developing countries. In such a case the coefficient could be 5 for developed country and 30 for developing country.[14]

So, the formula will be $T1 = \frac{B \times T}{B + T}$, where B = 5 for the developed country and 30 for the developing country (See Table 6).

Limitation of Option 1

However, this formula approach has two limitations. The first limitation is that even with a coefficient value of 30, there is a steep reduction in the tariff rate for a country like India. For instance, if we use 30 as the coefficient to cut the tariff rate of 35 percent, which is the BTR of majority of tariff lines in India, then the final tariff rate will become 16 percent. This is drastic reduction and will eat up the 'water' in the existing tariff lines and take away the policy space. One of the major demands of India has been that it wants a tariff reduction formula that does not completely take away the existing 'water' in the tariff lines.

The second limitation arises when the value of B is low, say, 2 or even less, in the above formula. If the value of B is lower, the rate of reduction of the tariff rate will be even steeper. In such a case the developed country's tariff rate will come down steeply and may cause a steep reduction in the tariff rate of developing countries as well. For instance, if the value of B is 2, then 8.6 percent (in the above example) will come down to 1.6 percent, which is a reduction of about 81 percent.

Now, if we apply the above-mentioned proposal of developing countries cutting its tariff rate by maximum 2/3rd of what developed countries do, then, India (in this example) will have to reduce its tariff rate by 54 percent (2/3rd of 81). This reduction will result in the new tariff rate being 12 percent, which is even less than the applied tariff rate of textile and clothing. If the final tariff rate is 12 percent, then, the coefficient (B) in the formula will be 22.

It is interesting to note that although the coefficient for the in developing country is 11 times more than the coefficient for the developed country, the tariff reduction is very steep. Technically, 2 and 22 are coefficients at levels that will honour real 'LTFR'. However, in reality they will lead to steep reduction in the tariff rates of developing countries (India in this case). Hence, this formula option has its limitation and does not help the cause of developing countries.

The limitation of this option can also be understood by taking the US proposal that it has made after the HK conference, of having two coefficients of 10 & 15. This proposal is similar to what US had proposed earlier that the two coefficients should be 'within the sight of each other'. We have already seen in the analysis above that the proposal to have the coefficients 'within the sight of each other' is in violation of paragraph 14.

[14] This comes close to the proposal made by Pakistan for having a Swiss formula ($T1 = \frac{B \times T}{B + T}$), where B = 6 for developed countries and 30 for developing countries.

BOX 2

Limitation of the Pakistani Proposal in Light of Paragraph 14 of the Hong Kong Ministerial Declaration

Pakistan, before the HK ministerial conference, had proposed a 'Swiss formula'

$T1 = \frac{B \times T}{B + T}$, where B = 6 for developed countries and 30 for developing countries for tariff reduction. This proposal of Pakistan, according to the analysis of this paper, falls in the first type of interpretation of the 'Swiss formula with coefficients'. The proposal of Pakistan is of a 'Swiss formula with two coefficients'. However, if we apply this formula to the example of Textile and Clothing of US and India (the example taken in this paper), we will find that it does not honour the principle of LTFR.

With '6' as the coefficient, the BTR of Textile and Clothing in US will come down from 8.6 percent to 3.5 percent, which is a reduction of 59 percent. With '30' as the coefficient, the BTR of Textile and Clothing in India will come down from 26.3 percent to 14 percent, a reduction of 46 percent. However, as per the definition of LTFR as discussed in this paper, India should reduce its tariff rate by not more than 39 percent (2/3rd of 59 percent).

Reduction by 39 percent will imply that the new BTR of Textile and Clothing in India should be 16 percent. If 16 percent is the new BTR, then the coefficient will be 40 and not 30.

Hence, if the coefficient for developed country is '6' in the 'Swiss formula with two coefficients', then the coefficient for developed country should be '40'. Any coefficient less than '40' will result in violation of the LTFR principle, which according to paragraph 14, has to be honoured by the tariff reduction formula.

This can be demonstrated by taking the example of the tariff rate of T&C of US and India. Applying the Swiss formula with coefficient of 10, the tariff rate of 8.6 percent will come down to 4.6 percent, which is a reduction of 46 percent.

If we apply the Swiss formula with coefficient of 15 on the tariff rate of T&C of India (26.3 percent), this tariff rate will come down to 9.5 percent, which is a reduction of about 63 percent.

Hence, it is clear that if these coefficients are used, then a country like India will cut its tariff rate of the same tariff line by much more than what US will do. On the other hand, if we apply the principle of 2/3rd, then India should not cut its tariff rate by more than 30 percent (2/3rd of 46 percent). In such a case the coefficient will be 62 and not 15. So, if we have the coefficient of 10 for developed country, then only a coefficient of 62 for developing country would fulfil the principle of LTFR. From this discussion it is clear that a 'Swiss formula with 10 and 15 as the coefficients' violates paragraph 14 of the HK Declaration and hence cannot be accepted as the tariff reduction formula.

The US proposal also states that the tariff rates should be cut from the applied levels so as to have the so called 'real trade flows'. This proposal is not only anti developmental but also illegal (I hope this term can be used!). The mandate of the current negotiations is to cut industrial tariffs from the bound levels and not applied levels.

Option 2

The other option is to have the second kind of formula where the average tariff rate of a country is one of the coefficients in the formula. In this case the formula could be

$T1 = \frac{(B \times X) \times T}{(B \times X) + T}$, where B is a coefficient, X = Average tariff rate for developing countries.

The advantage of having the average tariff rate of a country in the Swiss formula is to ensure that there is no disproportionate tariff cut. Besides, the new tariff rate is reflective of the tariff structure of a particular country and is not independent of it. For instance, if we apply the second option to the example of BTR of textile and clothing of US and India we will get a clearer picture. If we use this option to cut the BTR of textile and clothing in US (T= 3.2), the new tariff rate (T1) will be 2.3 (X = 3.2 {Average tariff rate of US}, B = 1). This is a reduction of 73 percent. Now, if we apply the principle of 2/3rd for India, then India will cut its tariff rate by 48 percent, which will result in the final tariff rate being 13 percent. In the formula option one, with 13 as final tariff rate, the coefficient will be 26. However, this, as we have seen before, cannot be accepted, as it will lead to a very steep reduction.

Now, if we apply the formula option two to the facts at hand, the final tariff rate (T1) for India will be 15 percent. (B = 1, X = 34.3 {Average tariff rate}). This may be acceptable. It is important to note here that if the value of B increases the reduction will be less.

The proposal to use average BTR of a country as the coefficient, drew opposition from some developing countries whose average BTR is very low.[15] These countries have argued that if they use average BTR as the coefficient, then they will have to undertake reductions, which may be more than 2/3rd of the reduction of developed countries. This is a genuine difficulty. For such countries, a mark-up to the average BTR could be proposed. This

BOX 3

Mark up for Countries whose Average Bound Tariff Rate is Low

Many South East Asian countries such as Malaysia and Thailand opposed the ABI formula on the ground that this formula will only benefit countries such as India who have a high average BTR. This opposition is not without reasons. For instance, if we use the example of Textile and Clothing of say, US and Malaysia, we will find that if the average tariff rate of a country is used as one of the coefficients, then these countries will have to undertake very steep reduction and in fact more than 2/3rd of what developed countries will undertake and hence violate the principle of LTFR.

In the case of US, the use of ABI formula will bring down the BTR of Textile and Clothing from 8.6 percent to 2.3 percent (reduction of 73 percent). The use of the ABI formula in the case of Malaysia (Average BTR = 14.9 percent, BTR of Textile and Clothing = 19.5 percent) will result in BTR of Textile and Clothing coming down from 19.5 percent to 8.4 percent. This is a reduction of 56 percent and much more than the 2/3rd reduction of 73 percent which is 48 percent. Hence, Malaysia in this case is undertaking a reduction that is much more than warranted by the LTFR principle of 2/3rd of what developed countries undertake.

In such cases and for such countries, the average BTR should be increased by certain percentage points. This increase will then ensure that these countries do not undertake reduction that is more than 2/3rd of what developed countries are cutting. So, in this case if the average BTR is increased by 6 percentage points i.e. from 14.9 percent to 21 percent, then the reduction will not be more than 2/3rd of what developed countries are undertaking. Hence, in this particular example 6 percentage points is the mark up.

[15] The average BTR of non-agricultural goods in South Asian countries is very less. For instance in Malaysia the average BTR is 14.9 percent. Similarly, the average BTR in Thailand is 24.2 percent.

mark up could be at levels that will not make these countries undertake tariff reductions that are more than 2/3rd of the cuts of developed countries (See Box 3).

The above discussion reveals that both the formula options could be used, as they will honour real 'LTFR'. However from the perspective of developing countries, the second option is better, as it can overcome the limitation of the first option. Moreover, having a country's average tariff rate as one of the coefficients in the formula (suggested by Argentina, Brazil and India) or having a formula that gives credit to countries apart from incorporating the average tariff rate (suggested by the Caribbean countries) allows taking into account the existing tariff structure of an individual country in the process of cutting the tariff rates. The presence of the average tariff rate as a coefficient will make sure that the new tariff rate is in consonance with the existing tariff structure of a country.

6. Eliminating Tariff Peaks and Tariff Escalation

The other important factor that is to be used in determining the coefficients in the Swiss formula, according to paragraph 14, is to ensure that it eliminates tariff escalation and tariff peak. The elimination of tariff peak and tariff escalation implies eliminating tariff peaks and tariff escalation in developed countries like US and EU especially on products of interest to developing countries. In order to eliminate tariff peaks and tariff escalation in developed countries it is imperative to have a smaller coefficient in the Swiss formula, as lesser coefficient will imply stringent reduction.

Here again if we apply the coefficient of 10 that US is proposing in the 'Swiss formula with two coefficients', to say a tariff rate of 20 percent in the US, it will come down to 6.6 percent.[16] However, if we apply the ABI formula to this tariff rate of 20 percent (with the average tariff in the case of US being 3.2 percent) then, this tariff rate of 20 percent will come down to 2.7 percent.[17]

This clearly shows that when the ABI formula is used the peak tariff of 20 percent reduces by 86.5 percent, whereas if the coefficient of 10 in the 'Swiss formula with two coefficients' is used the peak tariff of 20 percent reduces by 67 percent. Hence, the ABI formula yields better results as far as eliminating tariff peaks and tariff escalation is concerned.

Hence, the above discussion clearly demonstrates that the mandate of paragraph 14 of the HK declaration can only be met if we follow the second formula option for reducing tariff rates.

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[16] The formula that has been used here is $T1 = \frac{B \times T}{B + T}$, where T1 (final tariff rate) = 6.6 percent, T (initial tariff rate) = 20 percent and B (coefficient) = 10.

[17] The formula that has been used here is $T1 = \frac{(B \times X) \times T}{(B \times X) + T}$, where T1 (final tariff rate) = 2.7 percent, T (initial tariff rate) = 20 percent, X (Average tariff rate) = 3.2 percent and B (Coefficient) = 1.

7. Implementing the Tariff Reduction

The implementation of the tariff reduction process is extremely important. Many have argued that even steeper and deeper cuts can be managed if the implementation period is long. In other words, if countries have more time to implement the reduction in tariffs, there will be more time to absorb the shocks of tariff reduction. On the other hand, if developing countries are asked to cut their tariffs drastically or in a short span of time, it may lead to adverse consequences such as sudden elimination of tariff revenue or surge of imports.

In this regard it is proposed that the implementation period should be long and should be back loaded. In other words, developing countries should cut less in the initial years of the implementation period and more in the later stages.

TABLE 8:
Hypothetical Application of the Implementation Period for a Developing Country Assuming Hypothetical Bound Tariff Figures in Percentage

Product	Final Bound Tariff (T2)	Initial Bound Tariff (T1)	Tariff After Phase 1 (Ta)	Tariff After Phase 2 (Tb)	Tariff After Phase 3 (Tc)	Tariff After Phase 4 (Td)	Tariff After Phase 5 (Te)
			T1 – X[18]	Ta - X	Tb - X	Tc - X	Td - Y[19]
X	14.8	100.0	87.22	74.44	61.66	48.88	14.8

Source: Author's Calculation.

The paper proposes an implementation phase of five stages with each stage of two equal years. The reduction in the tariff rates by developing countries should be spread out over all the five phases. It is proposed that 60 percent of tariff reduction should take place in the first four stages (equal instalments) and 40 percent of reduction in the last phase. For instance, assume that the initial bound tariff rate for a product is 100 percent and this comes down to 14.8 percent after applying the tariff reduction formula. So the tariff reduction that has to take place is 85.2 percentage points. Now 60 percent of 85.2 should be reduced in the first four phases i.e. first eight years (equal instalments) and 40 percent of 85.2 in the last phase i.e. after the completion of the tenth year.

[18] X = 60 percent of (T1-T2)/4, where T1 is the initial bound rate and T2 is the final bound tariff.

[19] Y = 40 percent of (T1-T2), where TI is the initial bound rate and T2 is the final bound tariff.

8. Conclusion

Given the important role that industrial tariffs play in the industrial development of a country, it is imperative that developing countries are able to make a judicious use of industrial tariffs. In order to make the judicious use of industrial tariffs it is necessary that these countries have enough policy space. This judicious use would require that countries have adequa+9ir tariff rates if the situation so demands. Hence, any tariff reduction should not eat into all the 'water' in the existing tariff structure. Moreover, tariff reduction should be a substantial process and developing countries including the countries of South Asia should be given enough time to reduce their tariffs. This will not only absorb the shock effect that may be caused by the reduction of tariffs but also provide adequate time to the countries to develop their capabilities.

This paper has attempted to develop an interpretation of the existing tariff reduction modality for the adoption of the ABI or the Caribbean formula. It has tried to show that the only manner by which paragraph 14 of the HK Declaration can be operationalised is to have the ABI or the Caribbean formula to cut industrial tariffs. A 'Swiss formula with two coefficients' will be in violation of paragraph 14 of the HK Declaration. The ABI or the Caribbean formula will also suit the interests of South Asian countries by not asking them to undertake stringent obligations.

However, it seems that there is a tacit acceptance by developing countries such as India and Brazil that a 'Swiss formula with two coefficients' is the way to go ahead. Many reports from Geneva indicate about this unfortunate development. One wonders what is the reason behind this. It is important to bear in mind that India and Brazil had proposed the ABI formula to counter the pure Swiss formula proposals that had been made by the EU and US. The HK Declaration offers enough flexibility for empowering and enabling countries to argue for an ABI or a Caribbean type of formula. It is up to countries like India and Brazil to continue fighting the battle for the ABI type formula. If this battle is not fought and won, it would indeed be an unfortunate outcome of the multilateral trade negotiations.

Annexures

(All the tables given below are based on Author's calculations)

ANNEXURE 1

Impact of the 'Swiss Formula with Two Coefficients' on the Bound Tariff Rates of Seven Sectors of India

The formula that has been used here is:

$$T1 = \frac{B \times T}{B + T}$$, where B = 5, 15, 20, 30, 35

TABLE 9

Electronics & Electrical Goods

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B= 5	B= 15	B=20	B=30	B=35
0	14	0	0	0	0	0
15	42	3.75	7.50	8.57	10.00	10.50
25	93	4.17	9.38	11.11	13.64	14.58
35	144	4.38	10.50	12.73	16.15	17.50

TABLE 10

Fish and Fish Products

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B= 5	B= 15	B=20	B=30	B=35
0	3	0	0	0	0	0
5	9	2.50	3.75	4.00	4.29	4.38
15	6	3.75	7.50	8.57	10.00	10.50
25	32	4.17	9.38	11.11	13.64	14.58
35	397	4.38	10.50	12.73	16.15	17.50
40	1	4.44	10.91	13.33	17.14	18.67
45	4	4.50	11.25	13.85	18.00	19.69
50	1	4.55	11.54	14.29	18.75	20.59
75	2	4.69	12.50	15.79	21.43	23.86
100	23	4.76	13.04	16.67	23.08	25.93
170	1	4.86	13.78	17.89	25.50	29.02

TABLE 11

Footwear

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B= 5	B= 15	B=20	B=30	B=35
35	29	4.38	10.50	12.73	16.15	17.50

TABLE 12
Leather Goods

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B= 5	B= 15	B=20	B=30	B=35
35	22	4.38	10.50	12.73	16.15	17.50

TABLE 13
Motor Vehicles Parts and Equipments

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B= 5	B= 15	B=20	B=30	B=35
0	1	0	0	0	0	0
35	60	4.38	10.50	12.73	16.15	17.50
105	15	4.77	13.13	16.80	23.33	26.25

TABLE 14
Stones, Gems and Precious Metals

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B= 5	B= 15	B=20	B=30	B=35
35	52	4.38	10.50	12.73	16.15	17.50

TABLE 15
Textiles and Clothing

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B= 5	B= 15	B=20	B=30	B=35
5	1	2.50	3.75	4.00	4.29	4.38
15	14	3.75	7.50	8.57	10.00	10.50
20	148	4.00	8.57	10.00	12.00	12.73
25	45	4.17	9.38	11.11	13.64	14.58
30	73	4.29	10.00	12.00	15.00	16.15
35	538	4.38	10.50	12.73	16.15	17.50

ANNEXURE 2

Impact of the ABI Formula on the Bound Tariff Rates of Seven Sectors of India

TABLE 16

Electronics and Electrical Goods Sector

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B = 0.5	B = 1	B = 1.5	B = 1.75	B = 2
0	14	0.00	0.00	0.00	0.00	0.00
15	42	8.00	10.44	11.61	12.00	12.31
25	93	10.17	14.46	16.82	17.65	18.32
35	144	11.51	17.32	20.83	22.11	23.18

TABLE 17

Fish and Fish Products

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B = 0.5	B =1	B = 1.5	B = 1.75	B = 2
0	3	0.00	0	0	0	0.00
5	9	3.87	4.36	4.56	4.62	4.66
15	6	8.00	10.44	11.61	12.00	12.31
25	32	10.17	14.46	16.82	17.65	18.32
35	397	11.51	17.32	20.83	22.11	23.18
40	1	12.00	18.47	22.50	24.00	25.27
45	4	12.42	19.46	24.00	25.72	27.17
50	1	12.77	20.34	25.36	27.28	28.92
75	2	13.96	23.54	30.52	33.34	35.83
100	23	14.64	25.54	33.97	37.51	40.69
170	1	15.58	28.54	39.50	44.36	48.88

TABLE 18

Footwear

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B = 0.5	B = 1	B =1.5	B = 1.75	B = 2
35	29	11.5	17.3	20.8	22.1	23.1

TABLE 19
Leather Goods

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B = 0.5	B = 1	B = 1.5	B = 1.75	B = 2
35	22	11.5	17.3	20.8	22.1	23.1

TABLE 20
Motor Vehicles Parts and Components

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B = 0.5	B = 1	B = 1.5	B = 1.75	B = 2
0	1	0.00	0.00	0.00	0.00	0.00
35	60	11.5	17.3	20.8	22.1	23.1
105	15	14.7	25.8	34.5	38.1	41.4

TABLE 21
Stones, Gems and Precious Metals

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B = 0.5	B = 1	B = 1.5	B = 1.75	B = 2
35	52	11.5	17.3	20.8	22.1	23.1

TABLE 22
Textiles and Clothing

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)				
		B = 0.5	B = 1	B = 1.5	B = 1.75	B = 2
5	1	3.87	4.36	4.56	4.62	4.66
15	14	8.00	10.44	11.61	12.00	12.31
20	148	9.23	12.63	14.40	15.00	15.49
25	45	10.17	14.46	16.82	17.65	18.32
30	73	10.91	16.00	18.95	20.00	20.87
35	538	11.51	17.32	20.83	22.11	23.18

ANNEXURE 3

Impact of the Caribbean Formula on the Bound Tariff Rates of Seven Sectors of India

$T1 = \frac{\{(B + C) \times X\} \times T}{\{(B + C) \times X\} + T}$, where T1 is the final tariff rate, T is the initial tariff rate, B = 1 (a coefficient), X = 34.3 percent (Average tariff rate of a country) and C = 1, 2, 3, 4 (credit to be accorded to a developing country).

TABLE 23

Electronics & Electrical Goods

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		C = 1	C = 2	C = 3	C = 4
0	14	0	0	0	0
15	42	12.31	13.09	13.52	13.79
25	93	18.32	20.11	21.15	21.82
35	144	23.18	26.12	27.89	29.07

TABLE 24

Fish and Fish Products

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		C = 1	C = 2	C = 3	C = 4
0	3	0	0	0	0
5	9	4.66	4.77	4.82	4.86
15	6	12.31	13.09	13.52	13.79
25	32	18.32	20.11	21.15	21.82
35	397	23.18	26.12	27.89	29.07
40	1	25.27	28.80	30.97	32.43
45	4	27.17	31.31	33.89	35.65
50	1	28.92	33.65	36.65	38.71
75	2	35.83	43.38	48.49	52.18
100	23	40.69	50.71	57.84	63.17
170	1	48.88	64.10	75.92	85.37

TABLE 25

Footwear

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		C = 1	C = 2	C = 3	C = 4
35	29	23.18	26.12	27.89	29.07

TABLE 26
Leather Goods

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		C = 1	C = 2	C = 3	C = 4
35	22	23.18	26.12	27.89	29.07

TABLE 27
Motor Vehicles Parts and Equipments

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		C = 1	C = 2	C = 3	C = 4
0	1	0	0	0	0
35	60	23.18	26.12	27.89	29.07
105	15	41.49	51.97	59.48	65.13

TABLE 28
Stones, Gems and Precious Stones

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		C = 1	C = 2	C = 3	C = 4
35	52	23.18	26.12	27.89	29.07

TABLE 29
Textiles and Clothing

Initial Tariff Rate (T0)	No. of Tariff Lines	Final Tariff Rate (T1)			
		C = 1	C = 2	C = 3	C = 4
5	1	4.66	4.77	4.82	4.86
15	14	12.31	13.09	13.52	13.79
20	148	15.49	16.75	17.46	17.91
25	45	18.32	20.11	21.15	21.82
30	73	20.87	23.23	24.62	25.53
35	538	23.18	26.12	27.89	29.07

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