

## Formulas for Industrial Tariff Reduction and Policy Implications

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### INTRODUCTION

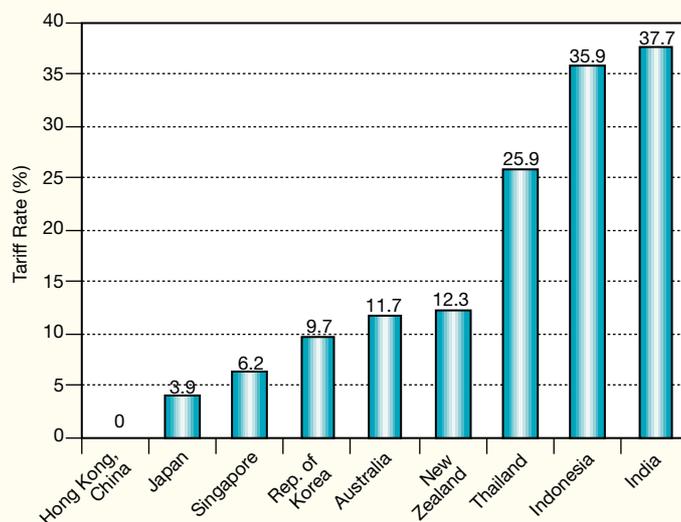
A key element of the Doha Development Agenda (DDA) negotiations under the WTO is the liberalization of trade in industrial products, so-called non-agricultural market access (NAMA). The mandate on the NAMA negotiations is contained in Paragraph 16 of the Doha Ministerial Declaration which *aim(s), by modalities to be agreed, to reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, in particular on products on export interest to developing countries* (WTO, 2001).

Even though industrial tariffs have been significantly reduced after successive rounds of multilateral trade negotiations, some developed countries still impose relatively high tariffs on their sensitive products. The situation in developing countries in the Asia-Pacific region is also mixed, with simple average bound tariff rates on industrial goods ranging from zero for Hong Kong, China to 37.7 per cent for India (WTO, 2002). In general, however, tariff rates of most developing countries in the region are still relatively high (APEC, 2005a), as shown in Figure 1. This reflects the idea that tariff is the main instrument of trade policy for many developing countries, given the fact that it is no longer possible to use quantitative measures.

The OECD estimated in 2003 that further multilateral trade liberalization with respect to tariffs would provide global annual welfare gains from \$117 billion to \$173.5 billion across scenarios analyzed, showing that market access is important for all regions, particularly developing countries. KIEP (2003) also showed that DDA negotiations would have a higher positive effect on economic growth in countries with relatively high initial tariff rates.

NAMA negotiations are a key element of the whole process of the DDA negotiations. Indeed, if WTO members are unable to agree to full modalities on NAMA as well as on agriculture by the Sixth Session of the Ministerial Conference at Hong Kong, China in December 2005, it will be difficult to conclude the Doha round in 2006.

Figure 1 – Simple Average Bound Tariff Rates on Industrial Goods in Selected Countries



Note: Calculations are only based on bound tariff lines of industrial goods (HS 25-97).

Source: WTO Trade Policy Review for each country.

### NAMA NEGOTIATIONS: RECENT TALKS

NAMA negotiations have focused on what is often referred to as the “tripod,” i.e., (1) a tariff-reduction formula, (2) sectoral initiatives and (3) flexibilities for developing countries. Some developed countries are arguing that negotiations on sectoral initiatives as well as tariff-reduction formula should be pursued in parallel, while some other developing countries insist that the formula issue must be resolved first.

Given the importance of the tariff-reduction formula, many WTO members, including China, the European Union, India, Japan, the Republic of Korea, and the United States of America, submitted proposals with their own formulas. Based on these proposals, Pierre-Louis Girard, the then Chairman of the Negotiating Group on NAMA, proposed his own formula, the so-called Girard formula (WTO, 2003a). However, the Group did not reach agreement on modalities by the target date, May 31, 2003. In the draft Cancun Ministerial Text, WTO members agreed to continue their work on a non-linear formula applied on a line-by-line basis

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which shall take fully into account the special needs and interests of developing and least-developed country participants, including through less than full reciprocity in reduction commitments (WTO, 2003b), but it was not adopted because the Cancun Ministerial Conference ended in deadlock. In the July Package, however, the above sentence was fully adopted and the WTO members agreed to use a non-linear formula (WTO, 2004a).

In June 2005, trade ministers at the Asia-Pacific Economic Cooperation (APEC) forum announced their endorsement of the Swiss Formula, which would cut higher tariffs more than lower ones (APEC, 2005b). However, some developing countries indicated that they would not agree to any tariff-reduction formula in NAMA without an agreement on an agricultural formula first. Failing to narrow the differences on the formula, trade ministers from about 30 WTO members were unable to reach a deal on a NAMA formula at a mini-ministerial on July 2005 in Dalian, China. Again, WTO members in Geneva tried to reach agreement on modalities by the end of July 2005, but they were still unable to narrow their differences.

## TARIFF-REDUCTION FORMULAS: A REVIEW

The various analysis of the economic effects of the DDA negotiations have made it clear that the modalities of the negotiation will have great influence on the magnitude of the effects on welfare and growth of the resulting agreement (KIEP, 2003). This explains why WTO members are actively engaged in the negotiations on tariff-reduction formulas. Since the NAMA negotiations started, a variety of formulas have been proposed, including proposals by Chile, Colombia, Mexico, and Norway. In this policy brief, however, we focus on the Swiss, Girard, the United States of America (USA), and Brazil-India-Argentina (BIA) formulas because they are the most prominent ones in the negotiations.

### Swiss Formula

The Swiss formula was initially proposed during the Tokyo Round of negotiations and adopted by some developed countries. The specification of the formula is as follows:

$$t_1 = \frac{A \times t_0}{A + t_0},$$

where  $t_1$  is the final tariff,  $t_0$  is the initial tariff, and  $A$  is a coefficient. The property of this formula is to make final tariff a function of both the initial tariff and a coefficient, which is negotiable. The difference between the initial and final tariff rates increases with higher initial tariffs, such that tariff cuts are greater for the higher tariffs.

### Girard Formula

As discussed above, the so-called Girard formula was proposed by and named after the former Chairman of the NAMA negotiating group. It is given as follows:

$$t_1 = \frac{B \times t_a \times t_0}{B \times t_a + t_0},$$

respectively,  $t_a$  is the average of the base rates and  $B$  is a coefficient with a unique value to be determined by the participants (WTO, 2003a).

Comparing this formula with the Swiss formula, we can recognize that coefficient  $A$  of the Swiss formula is divided into two coefficients in the Girard formula,  $B$  and  $t_a$ . Through the coefficient,  $B$ , the Girard formula decides the extent of tariff-reduction that all WTO members must follow, while the simple average of each members bound tariff rates,  $t_a$ , takes into account each WTO member's concerns and specific characteristics, thus meeting the demands of developing countries for the so-called *less than full reciprocity in reduction commitments*, mandated in the Doha Ministerial Declaration (WTO, 2001). Overall, this formula can be evaluated to reduce tariff peaks substantially, but also to allow developing countries to reduce their tariffs less than developed countries.

### Swiss Formula with Dual Coefficient

In March 2005, the USA proposed that all WTO members be subject to the Swiss formula to cut their industrial tariff rates, but with two different coefficients  $A$  for developed and developing countries. Developing countries would be granted a higher coefficient that would give them a higher ceiling on their tariffs, and would also give them a reduced rate of reduction. However, the USA has argued that *the coefficients in the formula would need to be "within sight of each other."* In addition, it has linked this more favourable treatment under the formula to developing countries' willingness to give up some of the flexibility they were granted in the July Package, such as an exemption from formula reductions for a certain percentage of their tariff lines (WTO, 2004a).

Pakistan also proposed a new compromise formula that calls for the use of a Swiss formula with different coefficients for developed and developing countries (WTO, 2005b). It proposed a coefficient of 6 for developed countries and a coefficient of 30 for developing countries. These numbers are the averages of the bound tariff lines for developed (5.48 per cent) and developing countries (29.12 per cent).

The Swiss formula with dual coefficients considers both ambition to tariff-reduction and flexibilities for developing countries. However, some developing countries may oppose a direct linkage between choice of formula and the issue of flexibility for developing countries.

### Brazil-India-Argentina (BIA) Formula

In April 2005, Brazil, India and Argentina proposed their own formula based on the Girard formula, but with two different coefficients ( $B$ ), which are negotiable, for developed and developing countries (WTO, 2005c). Their formula would allow developing countries with high average tariff rates to cut their tariffs less than WTO members with lower average

bound tariff rates. The reaction to this formula has been also mixed. Some developing countries expressed interest in using different coefficients for developed and developing countries in order to ensure less than full reciprocity. However, this formula would not be supported by those developing countries whose tariff rates were already low.

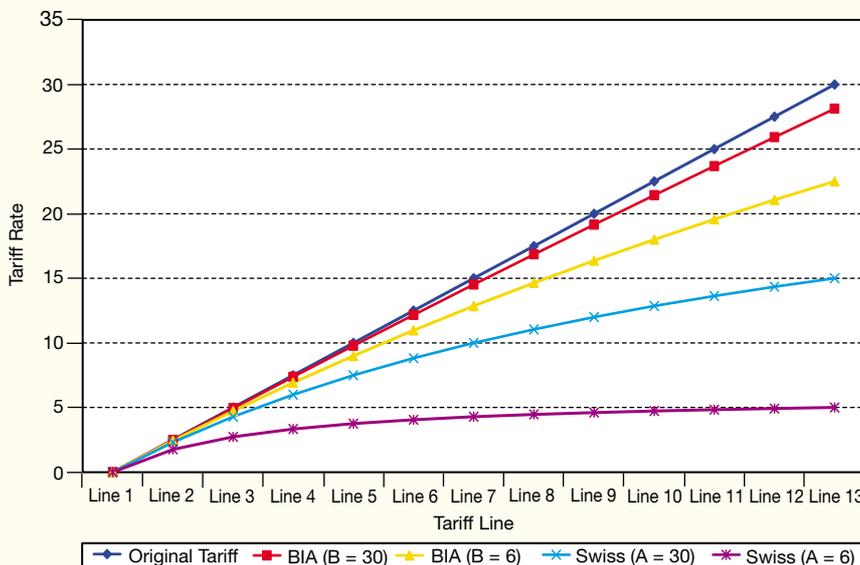
## A Simple Comparison of Tariff-reduction Effects of NAMA Formulas

In order to compare the formulas proposed, assume a country has 13 tariff lines with tariff rates ranging from zero to 30 per cent and a 2.5 per cent rate gap between each tariff line, such that the simple average tariff rate of the country is 15 per cent. The original tariff rates fall along the dark blue line in Figure 2. The red and yellow lines in Figure 2 show the effect on original tariff rates when the Girard formula, with a coefficient of 6 for developed countries and a coefficient of 30 for developing countries, is applied. The light blue and purple lines show the effect on original tariff rates when the Swiss formula with dual coefficients ( $A = 6$  for developed countries;  $A = 30$  for developing countries) is applied, as in the Pakistan proposal. Figure 2 reveals that the Swiss formula is a more ambitious approach than the Girard formula to reduce tariff rates.

## AMBITION VERSUS FLEXIBILITY

An agreement on a NAMA formula would require guidance from WTO members on the link between *ambition* of the formula and the *flexibilities* developing countries are to receive under Paragraph 8 of the July Package. That paragraph indicated that developing countries would be able to apply less than formula cuts for a certain percentage of their tariff lines, or to keep a certain percentage of their tariff lines unbound.

**Figure 2 – Simulation of Tariff Reduction using the Girard and Swiss formulas with dual coefficients**



The *ambition* of the Doha mandate is to reduce or, if appropriate, eliminate high tariffs, tariff peaks and tariff escalation in a comprehensive manner, with no sector or product excluded. In this regard, the Swiss formula has the advantage of encouraging greater harmonization both within and across WTO members' tariff schedules, as well as making it possible to achieve meaningful tariff reductions. The Girard formula would not deliver the level of ambition a number of WTO members seek because it would not do enough to lower tariff peaks. Evaluating the current status of the NAMA negotiations, it is hard to bridge the gap between the Swiss formula and the BIA formula, which is similar to the Girard formula.

Currently, it appears that support for a simple Swiss formula has grown measurably. Nevertheless, much of this support depends on the level of the coefficients and the extent to which the shape of the formula is linked to *flexibilities*.

*Ambition* in tariff reduction would suggest the adoption of a Swiss-type formula, after which WTO members could address the need for *flexibilities* through negotiations of dual coefficients and other measures. At this time, it seems most likely that WTO members will adopt a Swiss formula, coupled with additional *flexibilities* for developing countries.

## Using Sectoral Initiatives as an Alternative to Improve Market Access?

The so-called sectoral initiatives seek to completely eliminate tariff rates in specific sectors. Participation in these initiatives would be voluntary. Some developing countries are against these initiatives because they are worried about potential adverse effects on their infant industries. An example of this type of initiative is the Information Technology Agreement (ITA), concluded in 1997 to eliminate tariffs on almost all IT products, with 29 participating countries. As some developing countries realized that trade in IT was important to economic growth, however, participation to the ITA gradually increased to 63 countries, and their mutual trade now covers more than 95 per cent of world trade in IT products.

Proposals have been submitted on various sectors, including gems and jewellery, footwear, chemicals, environmental goods, electrical and non-electronic products and raw materials. If it is possible for a critical mass of WTO members to find a specific sector in which to eliminate tariffs, sectoral initiatives may play a certain role in improving market access.

## CONCLUSION

Negotiations on the NAMA formula are currently at an impasse as WTO members wait for a breakthrough on agricultural market access. At this stage, unless something very substantial happens to the agriculture negotiations, it seems unlikely that WTO members will reach agreement on the shape of a formula in the NAMA talks. As long as the impasse over the formula continues, it will be impossible to engage in the essential negotiations over the actual numbers to be plugged into the formula.

The Hong-Kong Ministerial Conference is fast approaching and much work remains to be done. What WTO members need at this stage is political will supported by business interests.

Since manufactured goods have become the most important traded products in developing countries, especially in the Asia-Pacific region, enhancing market access in this region will boost trade and economic growth. Developing countries have maintained high tariffs on each other's products, thus constraining the potential for trade in this region. Policymakers and negotiators in this region must recognize that the general thrust of developing countries' trade and investment policies must be greater liberalization, including the further opening of their economy to international trade and foreign investment. This will exert additional competitive pressure on domestic producers to improve productivity, and contribute to a more efficient allocation of their resources.

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