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The World Trade Organization: The Non-Agricultural Market Access (NAMA) Negotiations

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Ian F. Fergusson
Specialist in International Trade and Finance
Foreign Affairs, Defense, and Trade Division

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Summary

Talks on Non-Agricultural Market Access (NAMA) in the World Trade Organization's (WTO) Doha Round refer to the cutting of tariff and non-tariff barriers (NTB) on industrial and primary products, basically all trade in goods which are not foodstuffs. The Doha Round was suspended for an indefinite period of time in July 2006 due to differences in the agriculture negotiations. While the agriculture negotiations have received greater scrutiny in the Doha round, trade of industrial and primary products, the subject of the NAMA negotiations, continue to make up the bulk of world trade. Average tariffs in developed countries have declined from 40% at the end of World War II to 6% today through successive rounds of General Agreement on Tariffs and Trade (GATT)/WTO trade negotiations. Developed countries seek the reduction of continuing high tariffs in the developing world, particularly from such countries as Brazil, India, and China. Developing countries seek special and differential treatment and tie their cuts in industrial tariffs to reductions in agricultural tariffs and subsidies.

Several econometric studies have modeled the possible effect of industrial tariff liberalization on the global economy. The studies vary based on the assumptions and data used. All but one found a greater net welfare benefit from liberalization of manufacturing tariffs than from agriculture. The studies indicate that developing countries in the aggregate would gain the most from manufacturing liberalization, at least in relative terms, and that the single largest gainer in terms of net welfare benefit would be China.

Negotiations on NAMA have proceeded slowly and have now been suspended after the agriculture talks collapsed in July 2006. The main stumbling block has been the negotiation of the tariff reduction formula. Members agreed to a Swiss-formula non-linear tariff reduction formula approach at the December 2005 Hong Kong Ministerial, one in which higher tariffs are decreased more than lower tariffs. However, disagreements persist about the size or amounts of the tariff cuts. The talks also seek to reduce the incidence of non-tariff barriers, which include import licensing, quotas and other quantitative import restrictions, conformity assessment procedures, and technical barriers to trade. Both the United States and the EU favor using sectoral tariff elimination as an alternative modality for NAMA negotiations, but negotiations have stalled on which products to cover and the extent of participation (i.e. whether developing countries would be able to exempt themselves from commitments). Developing countries have sought "less than full reciprocity in reduction commitments," as called for in the Doha Ministerial declaration. Developing countries generally seek special and differential treatment through longer implementation periods, less than formula cuts for some items, and outright exclusions from some reductions. While some countries believe that they need this special treatment to provide extra time for their industrial and manufacturing sectors to develop, some economists argue that more immediate trade liberalization with few or no exemptions would better serve developing countries. This report will be updated as events warrant.

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Previous to the Doha Round, industrial tariff negotiations were the mainstay of General Agreements on Tariffs and Trade (GATT) negotiations. These rounds led to the reduction of developed country average tariffs from 40% at the end of World War II to 6% today. However, average tariff figures mask higher tariffs for many labor intensive or value-added goods that are especially of interest to the developing world. Moreover, average tariff levels in developing countries remain high, with average industrial tariffs averaging about 13%.

For the United States and other developed countries, prospective gains from the NAMA talks in this round would be from the reduction of high tariffs in the developing world, particularly from such countries as Brazil, India, and China. Developing countries were exempted from making concessions in market access in previous rounds, thus sustaining the heavy tariff structure in those countries. Developing countries are leery of opening up their markets to competition, often making the argument that protectionist policies have been employed in the development of many successful economies, from the European and North American economies in the 19th century to the rise of the East Asian tigers in the 20th century. However, as negotiating positions have made clear, developed countries are demanding more access for their industrial products as a price for opening up their agricultural sectors, where many developing countries have a comparative advantage. Conversely, developing countries have held industrial tariff negotiations hostage to

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[1] World Trade Organization, *International Trade Statistics 2005*, p. 3.

[2] Bureau of Economic Analysis, "International Trade in Goods and Services, 2005 Annual Revision," June 9, 2006. [http://www.bea.gov/bea/newsrelarchive/2006/trad1306.pdf]

movement on agriculture. This dynamic has been one of the factors contributing to the current suspension of the negotiations.

Table 1. Tariff Averages in Selected Countries

Country	Manufacturing	Agriculture
Quad Countries[a]	4.0	10.7
United States	4.6	9.5
European Union	4.2	19.0
Japan	3.7	10.3
Canada	3.6	3.8
Large Middle Income[b]	13.1	26.6
Lower-Income[c] Countries	13.2	16.6

Source: World Bank, *Global Economic Prospects*, 2004.

Note: Applied most favored nation, ad valorem tariff averages.

a. United States, European Union, Japan, Canada
b. Brazil, China, India, Korea, Russia, South Africa, Mexico, Turkey
c. Bangladesh, Indonesia, Guatemala, Kenya, Malawi, Togo, Uganda, Zimbabwe.

Legislation to implement any agreement that results from the Doha Round negotiations would need to be passed by Congress. If considering such legislation, Congress may examine the extent to which a potential agreement opens foreign markets to U.S. exporters through the reduction of both tariff and non-tariff barriers. Congress may also examine a potential agreement by its impact on the health of the U.S. manufacturing sector, and its impact on manufacturing employment.

Evolution of the NAMA Negotiations

The current round of trade negotiations were launched at the 4th Ministerial of the WTO, held at Doha, Qatar in November 2001. The course of the negotiations were set in the Doha Ministerial Declaration, which provided the negotiating objectives of the round in general terms. The objectives for the non-agriculture market access negotiations were described in Paragraph 16, which read:

> We agree to negotiations which shall aim, by modalities to be agreed, to reduce or, as appropriate, eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, in particular on products of export interest to developing countries. Product coverage shall be comprehensive and without *a priori* exclusions. The negotiations shall take fully into account the special needs and interests of developing and least-developed country participants, including through less than

full reciprocity in reduction commitments... To this end, the modalities to be agreed will include appropriate studies and capacity-building measures to assist least-developed countries to participate effectively in the negotiations.

The NAMA paragraph was short on specifics and left the modalities for the talks to negotiations. The general nature of the document reflected the reluctance of many members to sign up for the round and the language has been characterized as the least common denominator of what could be agreed upon at the time. However, the declaration gives certain clues about what path the negotiations would take. First, the declaration showed a clear intent to address concerns of the developing countries by a commitment to reduce tariff peaks and escalations, to concentrate on products of export interest to developing countries, and to provide special and differential treatment (SDT), including "through less than full reciprocity in reduction commitments" which became a mantra for developing countries. However, the language on reducing tariff peaks, high tariffs, and escalation also suggests the desire for a degree of tariff harmonization. This, in turn, would suggest the use of a non-linear reduction formula (see "Tariff Reductions" below). Paragraph 16 allowed members to take away from the Ministerial what they wanted, and to return to specifics later. This initial ambiguity has haunted the negotiations to this day.

Negotiations proceeded at a slow pace in 2002 and 2003. Several deadlines for agreement on negotiating modalities (i.e., methodologies by which negotiations are conducted) were missed in the agriculture and industrial market access talks. Without agreement, negotiators looked toward the September 2003 Cancún Ministerial to resolve the modalities. In the weeks before Cancún, negotiating documents to achieve this resolution were criticized by all sides, and expectations of the Ministerial were reduced to achieving an agreement on the framework for the modalities to be used in future negotiations.

During this period, the United States favored an aggressive tariff-cutting negotiating strategy. In December 2002, the United States proposed the complete elimination of tariffs by 2015. This proposal would have eliminated "nuisance" tariffs (tariffs below 5%) and certain industrial sector tariffs by 2010, and would have removed remaining tariffs in 5 equal increments by 2015.[3] This proposal applied to all countries and did not contain SDT language. Throughout the negotiations, the United States generally has sought to limit the scope of special and differential treatment, maintaining that it is in the developing countries' own interest to lower tariffs, not least to promote trade among developing countries.

The initial European Union (EU) tariff reduction proposal relied on a "compression formula," one in which all tariffs are compressed in four bands with the highest band being 15%.[4] A joint submission by the United States, Canada, and the EU before the Cancún Ministerial first proposed the use of a Swiss-style

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[3] Market Access for Non-Agriculture Products, Communication from the United States, (TN/MA/W/18), December 2, 2002.

[4] Market Access for Non-Agriculture Products, Communication from the European Communities, (TN/MA/W/11), October 31, 2002.

harmonization (i.e. non-linear) formula for tariff reduction. This joint paper did contain SDT language for developing countries in the form of credits awarded for unilateral liberalization activity.[5]

In the end, industrial market access was not even discussed at the Cancún Ministerial, which broke up over agriculture and the so-called "Singapore issues." Yet, a draft text from the Ministerial, known as the Derbez text, became the basis for the July 2004 Framework Agreement, which, in turn, formed the basis for subsequent negotiations. The July Framework Agreement reaffirmed the use of an unspecified non-linear formula applied line-by-line that provides flexibilities for developing countries. The text also supported the concept of sectoral tariff elimination as a complementary modality for tariff reduction on goods of particular export interest to developing countries, but it advanced no concrete proposal.

In negotiating the July Framework, developing countries resisted the wholesale inclusion of the Derbez text. They insisted on a paragraph, included as the first paragraph of the text, indicating that "additional negotiations are required to reach agreement on the specifics of some of these elements," the elements being the formula, treatment of unbound tariffs, flexibilities for developing countries, participation in sectoral tariff modalities, and preferential tariff beneficiaries. As in the Doha Ministerial, ambiguity allowed for an immediate agreement, but sowed the seeds of future disagreement.

As in other sectors, subsequent negotiations on NAMA have been conducted on the basis of the July Framework Agreement. Although it was hoped that modalities could be achieved in time for the 6th Ministerial at Hong Kong, this proved optimistic, and progress was limited to incremental steps. For example, while the July Framework called for a non-linear, harmonizing tariff reduction formula, the Hong Kong Ministerial finally settled on the Swiss formula for tariff reduction, but did not settle on coefficients for that formula.[6] At the Ministerial, WTO members agreed on a new deadline of April 30, 2006, to achieve final negotiating modalities and to establish draft schedules based on these modalities by July 31, 2006. These deadlines were not met, and after a contentious negotiating session on agriculture on July 23, 2006, Director-General Pascal Lamy suspended the Doha Round indefinitely.

Possible Effects of a NAMA Agreement

Several studies seek to estimate the potential gains emanating from the reduction of tariffs on industrial products resulting from a successful outcome of the Doha negotiations. These studies typically attempt to quantify the net welfare benefit from various liberalization scenarios. They use models of the world economy known

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[5] "Non-Agricultural Market Access: Modalities," Joint Communications from the United States, the European Union, and Canada, (TN/MA/W/44), September 1, 2003.

[6] For a detailed treatment of the current status of the negotiations, see "Major Negotiating Issues" below.

as computable general equilibrium (CGE) models, which provide computer simulations of the world economy through equations that simulate the relationship between economic variables. The models use the versions of the Global Trade Action Project (GTAP) database, which compiles trade flows, and estimate the economic impact of such flows on tariff revenues, production, prices, and welfare.[7]

Assumptions made in modeling the world economy, as well as the version of the GTAP data used, affect the results of the studies. For example, it has been noted that models that use the most recent data (GTAP version 6, using 2001 data) have found smaller welfare gains to the world economy from trade liberalization. Previous versions of the data did not reflect ongoing trade liberalization such as China's entry into the WTO, the implementation of preferential trading arrangements, or the phase-in of previous liberalization commitments.[8] The results also depend on whether a given model uses static or dynamic assumptions such as constant or increasing returns to scale, or whether the model accounts for unemployment or technology transfer. The focus of these reports are often on the effects of agricultural liberalization or on the potential gains (or losses) of developing countries. However, this section restricts itself to those studies that model industrial or primary product tariff reductions. **Table 2** provides a summary of the model outcomes described below.

One well-known attempt to gauge the impact of the multilateral trade liberalization is the **Michigan Model**, a multi-country, multi-sector, general equilibrium model that is used to analyze various trade policy changes and scenarios.[9] In this study, conducted at the beginning of the round, the model measures the welfare effects of a 33% reduction in tariffs and subsidies on agriculture, the same reduction on tariffs in manufactures, and service sector liberalization. According to this model, a 33% reduction in manufacturing tariffs would result in a net welfare benefit of $163.4 billion to the world economy. The United States would achieve a net $23.6 billion welfare gain, although Japan ($45.2 billion) and the EU (39.2 billion) would receive greater gains. Overall, the developed countries would achieve $113.4 billion in net welfare gains and the developing countries led by China ($10.9 billion) would receive the other $50 billion in worldwide net benefit. The model's outcome suggests, the United States could gain primarily from services liberalization ($135 billion), would receive some net welfare benefit from manufacturing tariff liberalization ($23.6 billion), but could suffer a net welfare loss of $7.23 billion from the agricultural liberalization assumed in the model.[10] The model suffers from the use of older data from 1995, but is bolstered by more dynamic assumptions such as increasing returns to scale and monopolistic competition.

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[7] For more information, see the GTAP website at Purdue University, [https://www.gtap.agecon.purdue.edu/about/center.asp].

[8] Frank Ackerman, "The Shrinking Gains from Trade: A Critical Assessment of Doha Round Projections," October 2005.

[9] Drusilla K. Brown, Alan V. Deardorff, and Robert M. Stern, "Computational Analysis of Multilateral Trade Liberalization in the Uruguay Round and Doha Development Round," University of Michigan Discussion Paper #489.

[10] Ibid., p. 13.

Table 2. Net Welfare Benefits from Manufacturing
Liberalization: Results from Selected Studies

Study	Assumption	Net Welfare Benefit ($billion)
Michigan Model (2001)	33% Tariff Reduction	$163.4
World Bank (2005)	full liberalization	$105
	50% developed/33% developing tariff reduction	$21.6
Carnegie (2006)	50% developed/33% developing tariff reduction	$53.1
	36% developed/24% developing tariff reduction	$38.6
UNCTAD (2005)	Full liberalization	$200.8
	Swiss formula coefficients, 3.4% developed/ 12.5% developing	$134.7
	Swiss formula coefficients, 6.8% developed/ 25% developing	$107.6
OECD (2006)	full liberalization	$23.4

The **World Bank** and several other organizations have modeled the effect of trade liberalization using more recent GTAP-6 data from 2001. The World Bank study found that full liberalization of all merchandise trade (including agriculture) could lead to a $287 billion increase in real income by 2015. Full liberalization in industrial manufactures alone would lead to a $105 billion increase in real income, divided between a $38 billion increase from textiles and apparel liberalization, and a $67 billion increase from liberalization for other manufacturers. Developed countries could receive the largest share of benefit from full liberalization in dollar terms ($57 billion v. $10 billion for developing countries), but developing countries may achieve greater benefits in proportion to the size of their economies. The World Bank study found that developing countries would receive a preponderance of the benefits resulting from textile and apparel liberalization ($22 billion v. $16 billion in the developed world).

The World Bank study also modeled possible Doha Round outcomes. In computing a 50% reduction by developed country tariffs and a 33% reduction by developing countries for all merchandise trade (agriculture and industrial), the study found that welfare gains from such liberalization could total $96.1 billion. Of this

amount, industrial tariff liberalization could provide $21.6 billion of extra net welfare benefit with $7.1 billion accruing to developing countries.[11]

A **Carnegie Endowment for International Peace** study[12] uses an applied general equilibrium model with some novel features that attempt to account for the presence of unemployment in developing countries (most studies assume full employment), and to chart the dynamic effects of technology transfer, which increases along with trade. The model poses two different scenarios for possible manufacturing outcomes of the Doha Round: an ambitious scenario of a 50% reduction in developed country tariffs and a 33% reduction in developing country tariffs and a more modest scenario for manufacturing with a 36% reduction in developed country and a 24% reduction in developing country tariffs. The authors of the model warn the extent of liberalization may be overstated due to the model's use of applied, rather than bound tariffs.

The study found global real income gains from manufacturing were $53.1 billion for the ambitious scenario and $38.1 billion for the modest scenario. The liberalization of manufacturing tariffs represented over 90.6% of the gains from the Doha round liberalization in the ambitious scenario and over 87% for the more modest formula. In the ambitious scenario, the gains were apportioned between $30.2 billion (56.8%) for developing countries and $23 billion (43.2%) accruing to developed countries. The more modest scenario yielded $21 billion to developing countries and $16.4 billion to developed countries. In either scenario, the largest recipient of welfare gains is China at $14.8 billion and $10.6 billion, respectively. These figures represent nearly half of all gains shown for the developing world, and slightly more than 1/4 of the gains overall. The study suggests that some regions, such as Sub-Saharan Africa would be net losers in manufactured goods liberalization. In terms of net gains or losses of world export market share for developing country manufacturing exports under the modest scenario, China would be the largest gainer with an approximate 0.33% increase in its share of world exports. Some countries including Brazil, Mexico, South Africa, and the rest of Sub-Saharan Africa would lose industrial market share under the modest scenario. For the United States, the model suggests that real income gains resulting from manufacturing liberalization would be nearly $6.5 billion for the ambitious Doha scenario and $4.5 billion in gains for a more modest outcome.

The **United Nations Committee on Trade and Development (UNCTAD)** also models trade liberalization in industrial sectors.[13] The UNCTAD model uses a static CGE model that assumes perfect competition and constant returns to scale. The study models welfare gains under free trade and under several "Swiss" formula scenarios,

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[11] Kym Anderson, Will Martin and Dominique van der Mensbrugghe, "Doha Merchandise Trade Reform: What's At Stake for Developing Countries," World Bank Policy Research Paper, February 2006.

[12] Sandra Polaski, "Winners and Losers: The Impact of the Doha Round on Developing Countries," Carnegie Endowment for International Peace, 2006, p.70.

[13] Santiago Fernandez de Cordoba and David Vanzetti, "Now What? Searching for Solutions to the WTO Industrial Tariff Negotiations," [http://192.91.247.38/tab/events /namastudy/coping.asp?pf=1].

the formula under which negotiations are now taking place (see "Tariff Reductions" below).[14] Under the complete liberalization scenario, the net welfare benefit accruing to the entire world was estimated at $200.8 billion, with developing countries accruing $135.3 billion of that. Over 1/3 of that gain would accrue to China ($48.6 billion). The EU would receive the largest gains among developed countries at $28.5 billion, and the study predicted the United States would receive $11.2 billion in benefits.

The UNCTAD study also models Swiss formula reductions using coefficients equaling the average weighted industrial bound tariff by group (3.4% for developed countries, 12.5% for developing countries) with one scenario modeling the respective coefficients at twice that level. This model generated net welfare gains between $107.6 billion and $134.7 billion. Under the scenarios, developing countries gained $65.2 billion to $86.9 billion of this figure, nearly 2/3 of the gains. Again, China gained the most between $34.8 billion and $41.2 billion, around ½ of total world welfare gains. The model shows U.S. gains of $5.8 billion and $7.0 billion, respectively. While this study has the advantage of using an agreed-upon negotiating modality, the study does not use coefficients actually proposed during the negotiations.

A 2006 **Organization for Economic Cooperation and Development (OECD)** study found that worldwide net welfare gains from full tariff liberalization in manufactured goods could be $23.4 billion, which represented 56% of all tariff reduction gains. Seventy-three percent of this gain went to developing countries ($17 billion) with $6.3 billion accruing to the developed world. In relation to the size of their economies, developing countries gained relatively more with such gains equaling 0.33% of developing country GDP, versus 0.05% for developed countries. Notable in this survey was an outcome showing that North America would suffer the largest welfare loss from manufacturing liberalization ($6.8 billion) due to, according to the authors, an unfavorable terms-of-trade effects in the motor vehicle and related industries, resulting from lower prices in the sector.[15] The study also modeled several Swiss formula scenarios, but the models did not differentiate between agriculture and manufacturing tariffs.

Because of the differing assumptions made in these models and the different datapoints generated by them, it is difficult to generalize about their results. All but one found a greater net welfare benefit from liberalization of manufacturing tariffs than from agriculture. The studies suggest that developing countries would gain the most from manufacturing liberalization, at least in relative terms, and that the single largest gainer in terms of net welfare benefit would be China. Most of these studies indicate the United States could achieve modest net welfare gains from manufacturing liberalization.

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[14] The study also modeled other tariff cutting modalities that were not adopted by WTO negotiators; these are not considered here.

[15] Prezemyslaw Kowalski, "The Doha Development Agenda: Welfare Gains from Further Multilateral Tariff Liberalization," in *Trading Up: Economic Perspectives on Development Issues in the Multilateral Trading System*, OECD, 2006, p.32.

Major NAMA Negotiating Issues

Tariff Reduction. The principal negotiating issue in the NAMA talks has been over the tariff formula. The December 2005 Hong Kong Ministerial declaration endorsed the use of a non-linear, "Swiss" style, tariff reduction formula. This result builds on previous negotiations, beginning with the Doha Ministerial Declaration, which launched the round in November 2001. That Declaration committed member nations to negotiate the reduction or elimination of tariffs, based on modalities to be agreed in the talks. Negotiating modalities discussed for the NAMA talks included cuts determined by formula, by a request-offer approach, or by agreement to harmonize or eliminate tariffs in a specific sector -- all of which had been used in previous rounds of negotiations.

The Doha Declaration called for the reduction or elimination of tariff peaks or tariff escalation. Tariff peaks refer to a country's adoption of the maximum allowable tariff in order to protect sensitive products from competition. Tariff peaks are levied by the United States for certain textile products, footwear, and watches. Tariff escalation is the practice of increasing tariffs as value is added to a commodity. As an example of tariff escalation, cotton would come in with a low tariff, fabric would face a higher tariff, and a finished shirt would face the highest tariff. Tariff escalation is often employed to protect import-competing, value-adding industries. Peak tariffs and escalations are levied particularly against the products of developing countries, thereby adding to the cost of consumer goods in developed countries.

Negotiations to achieve modalities proceeded at a slow pace, but after more than two years including the ill-fated Cancun Ministerial, the July 2004 Framework Agreement endorsed a non-linear formula applied on a line-by-line basis as a modality to conduct tariff reduction negotiations. A non-linear formula works to even out or harmonize tariff levels among participants. This type of formula would result in a greater percentage reduction of higher tariffs than lower ones, resulting in a greater equalization of tariffs at a lower level than before. Negotiations on a "line-by-line" basis means that the formula would not be applied as an average to industrial categories, but to the tariff line of each individual product. A harmonization formula would also work to reduce tariff peaks and tariff escalations, another stated goal of the Doha declaration. By contrast, an example of a linear formula would be one that reduced tariffs by a certain percentage across the board. Consequently, this formula would not change the relative tariff rates among members. A country with relatively high tariffs before undergoing the formula would still have high tariffs relative to other countries afterwards. This approach is generally favored by countries with high tariffs or certain tariff peaks that the country seeks to preserve.

After a further 18 months of largely fruitless negotiations, the December 2005 Hong Kong Ministerial formally adopted the Swiss formula as the non-linear formula by which industrial tariff cuts would be negotiated. It is known as the Swiss formula because it was the formula proposed by Switzerland, and later adopted by GATT members, to cut tariffs in the 1970s Tokyo Round. The Swiss formula is,

$$T= at/(a+t)$$

where *T*, the resulting tariff rate, is obtained by dividing the product of the coefficient (*a*) and the initial tariff rate (*t*) by the sum of the coefficient (*a*) and the initial tariff (*t*). Selection of the coefficient is key, because it determines the final tariff; a lower coefficient results in a lower tariff (T). In addition, the equation works in such a way that the coefficient also represents the country's maximum tariff after the formula has been applied.

Although the Ministerial agreed to a Swiss formula, it did not agree on the coefficients that would finalize the negotiating modalities. Before the Round was suspended in July 2006, negotiations in Geneva were being conducted around the use of two coefficients for the formula, with one value for developed countries and another, higher, value for developing countries. The EU in its cross-cutting proposal of October 2005 proposed a coefficient of 10 for developed countries and 15 for developing and least developed countries (LDCs); this ratio was subsequently endorsed by the United States.[16] Pakistan proposed that the developed countries have a coefficient of 6 and developing countries a coefficient of 30.[17] Other proposals suggested a range of figures. New Zealand has suggested that the difference between the two should be no more the five percentage points.[18] Developing countries contend that they should be afforded a higher coefficient based on language in the Doha Ministerial Declaration affording them "less than full reciprocity in reduction commitments."

An alternate developing country proposal distinct from the Swiss formula with multiple coefficients is one put forth by Argentina, Brazil, and India, known as the ABI proposal.[19] ABI also uses the Swiss formula, but it proposes the coefficient to be the tariff average of each country, thus each country would have its own coefficient. ABI would not result in tariff harmonization among countries because there would not be a common coefficient; however, it would result in harmonization across products within each country's tariff schedule.[20]

Just prior to the June 30-July 1, 2006 mini-ministerial in Geneva, Pascal Lamy suggested a possible compromise in the form of the 20-20-20 proposal. In addition to advocating a ceiling of $20 billion in U.S. domestic agriculture support and the use of the G-20 agricultural market access proposal for developed countries, Lamy advocated a developing country of coefficient of 20 for the NAMA Swiss formula. The NAMA element of the proposal was criticized by U.S. and EU officials as lacking ambition. U.S. manufacturing groups scored the proposal as failing to

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[16] "U.S., EU to Work Together on NAMA," *Inside U.S. Trade,* March 3, 2006.

[17] "The Way Forward, Communication from Pakistan, (TN/MA/W/60), July 21, 2005.

[18] "New Zealand's Ambitious NAMA Plan," *Washington Trade Daily*, June 9, 2006.

[19] "Market Access for Non Agricultural Products," (TN/MA/W/54), April 15, 2005.

[20] Sam Laird, "Economic Implications of WTO Negotiations on Non-Agricultural Market Access.," [http://www.nathaninc.com/nathan/files/ccLibraryFiles/Filename/000000000044/Economic%20Implications_Laird.pdf].

provide sufficient market access to make a deal worthwhile to U.S. manufacturers. Brazil, for its part, attacked the proposal as too ambitious, and renewed its call for a coefficient of 30 for developing countries. Although this proposal was dismissed during the mini-ministerial, it was subsequently endorsed by World Bank President Paul Wolfowitz in a letter to leaders prior to the G-8 summit in St. Petersburg in July 2006.[21]

Tariff Binding. A second issue in the negotiations is the process of tariff binding and the use of bound tariffs in the reduction formula. Under Article II of the GATT, tariffs are "bound" at a specific levels of customs duty when an agreement is reached between nations on a most-favored nation basis to: (1) lower a duty to a stated level; (2) maintain an existing level of duty; or (3) not to raise a duty above a specified level. Tariffs can be bound as a specific duty per item or as an *ad valorem* duty. An *ad valorem* tariff is set as a percentage of the value of an imported good, while a non-*ad valorem* or specific tariff uses some other measurement such as a fixed rate per unit or weight of goods. The binding of tariffs provides for stability and predictability in the trading system by preventing the raising of tariff rates except under strict circumstances accompanied by compensatory actions.

The Uruguay Round achieved success in binding tariffs in both developing and developed countries. For all countries, the percentage of imports under bound rates increased from 68% to 87%. The percentage of imports under bound rates increased from 78% to 99% in developed countries, from 73% to 98% in transition economies, and from 21% to 73% in developing countries.[22]

The value of tariff binding to the world trading system is that it sets a maximum tariff which cannot be exceeded without penalty. However, many countries actually apply much lower tariffs to imported goods. These applied tariffs can vary widely from bound tariffs especially in developing countries. Although the United States, the EU, and several other NAMA "Friends of Ambition" advocated the use of applied tariffs as the basis by which tariff formula cuts be made, the July Framework and the subsequent Hong Kong Ministerial document decided to implement tariff cuts based on bound rates.

This decision has implications for the tariff formula. Because bound tariffs are often significantly higher than applied tariff levels, reductions from applied rates would result in greater cuts to actually applied tariffs. Thus for the negotiations to provide actual market access, as opposed to just cutting the binding rate, the formula coefficient must be lower. Higher coefficients would work to exclude some tariffs line from any actual cuts in applied tariffs, especially in developing countries.

However, it has been noted that the use of the applied rate may serve as a disincentive for countries to undertake unilateral liberalization in the future. Under this reasoning, countries would hesitate to undertake unilateral tariff reductions if

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[21] "World Bank Chief Backs 20-20-20 Plan to Break Impasse in WTO Agriculture Talks," *WTO Reporter*, July 11, 2006.

[22] "Understanding the WTO. Tariffs: More Bindings and Closer to Zero," [http://www.wto.int/english/thewto_e/whatis_e/tif_e/agrm2_e.htm].

they knew that multilateral liberalization efforts would use the applied rate that the country had already unilaterally lowered as a starting point. It may also increase the incentive to raise applied rates prior to negotiation.[23]

A second goal of the Doha negotiations in the area of tariff bindings concerns the binding of tariffs by developing countries. Because the binding process commits a country not to raise tariffs beyond a certain level, binding has been seen as the first step in tariff reduction. Under the 2004 Framework Agreement, reductions in unbound tariff lines would be calculated from twice the currently applied rate. However, the Hong Kong Ministerial Declaration adopted a 'constant non-linear mark-up approach,' but did not adopt any particular formula. Generally, such an approach would add a certain number of percentage points to the applied rate of the unbound tariff line in order to establish the base rate on which the tariff reduction formula would be applied. Discussions have ranged from 5-30 percentage points as the addition. The Framework also provided flexibility for developing countries who have bound less than 35% of their tariff lines. They would be exempt from tariff reduction commitments in the Round provided that they bound the remainder of their non-agricultural tariff lines at the average tariff for all developing countries, which now stands at 28.5%. Subsequent discussions on this issue have backtracked somewhat, however, with some developing countries seeking binding rates of 70-95%.[24]

In addition, all tariffs are to be bound in *ad valorem* terms; all remaining non-*ad valorem* tariffs would be converted and bound by a methodology to be determined through negotiation. While *non-ad valorem* tariffs are more prevalent in agriculture, they continue to be employed for non-agricultural tariffs and are not solely a developing country phenomenon. One study calculates that 4.2% of lines in the United States tariff schedule remain non *ad-valorem* and for Switzerland the figure is 82.8%.[25]

Special and Differential Treatment for Developing Countries. The July Framework provided several flexibilities (known as Paragraph 8 flexibilities) to developing country members. It permits developing countries longer periods to implement tariff reductions. Under the Framework, developing countries may also choose one of the following flexibilities: (1) apply less than formula cuts for up to 10% of tariff lines provided that the cuts applied are no less than half the formula cuts and that the tariff lines do not exceed 10% of the value of all imports, or (2) keep tariff lines unbound or not applying formula cuts for 5% of tariff lines provided they do not exceed 5% of the value of a member's imports. The aforementioned percentages are working hypotheses and have not been formally agreed upon.

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[23] Joseph Francois and Will Martin, "Formula Approaches for Market Access Negotiations," *The World Economy,* January 2003, p. 17.

[24] WTO Negotiating Group on Market Access, "Towards NAMA Modalities," (TN/MA/W/80), July 19, 2006. Available at WTO Documents Online, [http://docsonline.wto.org].

[25] Marc Bacchetta and Bigit Bora, "Industrial Tariff Liberalization and the Doha Development Agenda," WTO Working Paper, 2003, p. 15.

Least developed countries (LDCs) would not be required to apply formula cuts, nor participate in the sectoral cuts, but would undertake to "substantially" increase their level of bound tariffs. The Hong Kong Ministerial also agreed that developed countries and developing countries in a position to do so would grant LDCs duty-free and quota-free access to 97% of their tariff lines as part of their Doha obligations. The negotiations have also acknowledged the challenge of designing tariff reductions for countries that are already beneficiaries to various preference programs such as the U.S. African Growth and Opportunity Act or the EU's Everything But Arms Initiative.[26]

The relationship between the Paragraph 8 flexibilities and the formula negotiations have proved controversial. Developed countries, such as the U.S. and the EU have linked the flexibilities to the value of the coefficient in the tariff reduction formula. At Hong Kong, the U.S. and EU wanted developing countries to give up some of the flexibilities they would be granted under paragraph 8 in exchange for a higher coefficient in a tariff reduction formula.[27] Developing countries rejected this linkage, contending that the Paragraph 8 flexibilities stand alone and are unrelated to the value of the coefficients in the tariff reduction formula. While the Hong Kong Ministerial Declaration reaffirmed the Paragraph 8 flexibilities "as an integral part of the modalities," the Declaration did not endorse that group's contention that the flexibilities are a stand-alone provision immune to negotiation concerning the tariff reduction formula.[28]

Non-Tariff Barriers. The industrial market access talks also encompass negotiations on the reduction of non-tariff barriers. Non-tariff barriers include such activities as import licensing, quotas and other quantitative import restrictions, conformity assessment procedures, and technical barriers to trade. The July Framework instructed members to submit notification of NTBs by October 31, 2004, for negotiators to identify, examine, categorize and, ultimately, negotiate. Although this notification procedure occurred, little substantive negotiations on NTBs have taken place.

The NAMA chairman's statement prior to the July 2006 Geneva mini-ministerial indicates that specific requests and proposals have been made on export taxes, export restrictions, and remanufactured goods, and on NTBs affecting the automobile, electronic products, textiles, clothing and footware, and wood product sectors. However, the chairman noted that some members oppose discussing disciplines over export taxes or export restrictions as being outside the mandate of the negotiations, while others argue that the negotiations are being hampered by the lack of an agreed upon definition of non-tariff barriers.[29] Recently, the European Union and the NAMA-11 Group, an *ad hoc* negotiating group of developing

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[26] The EBA is an EU tariff preference program that provides LDCs with tariff-free, quota-free access for their exports, excluding armaments.

[27] "NAMA Official Warns of Impasse," *Inside U.S. Trade*, December 16, 2005.

[28] New NAMA Text Adds Language on Sectorals, Treatment of Unbound Tariffs, *Inside U.S. Trade*, December 18, 2006.

[29] TN/MA/W/18, p. 18.

countries, have advocated the establishment of a mechanism, apart from dispute settlement, to facilitate the resolution of NTBs in short-time frames as they arise.[30]

Sectoral Approaches. WTO members have agreed to consider the use of sectoral tariff elimination as a supplementary modality for the NAMA negotiations. Sectoral initiatives, such as tariff elimination or harmonization, permit a critical mass of countries representing the preponderance of world trade in a commodity to agree to eliminate tariffs in that good. Such an arrangement requires the participation of the major players, however, because under most-favored-nation principles those tariffs would be eliminated for all countries, even those not reciprocating. The 1996 Information Technology Agreement is an example of a completed sectoral tariff elimination agreement in which 41 countries have eliminated tariffs on 180 products.

Sectoral negotiations have been proposed for bicycles, chemicals, electronics/electrical equipment, fish, footwear, forest products, gems and jewelry, pharmaceuticals and medical equipment, raw materials and sporting goods.[31] Textiles, apparel, and auto parts have also been mentioned for sectoral negotiations. While some developing countries have participated in these discussions, and have proposed some sectors, other developing countries have questioned engagement in sectoral negotiations prior to settling on a formula for negotiations. The Hong Kong Ministerial Declaration took note of these sectoral negotiations and instructed negotiators to determine which sectors "could garner sufficient support to be realized."

Prospects for the Negotiations

The Doha Round negotiations have been suspended since negotiations broke down over agriculture tariffs and subsidies on July 23, 2006. Although negotiators have expressed hope for a quick resumption, the suspension of the negotiations has all but assured that any eventual agreement will not be reached in time for consideration under current U.S. trade promotion authority (TPA). The *de facto* deadline for the round has become the expiration of TPA in the United States on July 1, 2007. If the expedited TPA procedures are to apply, absent Congressional action, a completed agreement must be submitted to Congress by March 31, 2007. It is commonly assumed that even if the talks were moving forward in reaching their deadlines, it would take many months to produce a final schedule of concessions through bilateral negotiations and to verify the tariff schedules of others. Without the TPA deadline acting to concentrate the efforts of negotiators, the talks may be held hostage to the electoral time line, one that includes upcoming elections in the United States, Brazil, France, and Japan.

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[30] "Negotiating Proposal on WTO Means to Reduce the Risk of Future NTBs and to Facilitate their Resolution," Communication from the European Communities, (TN/MA/W/11/add.8), May 1, 2006; "Resolution of NTBs through a Facilitative Mechanism," Submission by the NAMA-11 Group, (TN/MA/W/68/Add.1), May 8, 2006.

[31] "Draft Ministerial Text," (Job(05)/298, Annex B) p. B-4.

Although the suspension of the negotiations does not, by itself, mean the end of the Doha Round, a prolonged pause may have consequences for industrial tariff liberalization. First, the negotiation of bilateral and regional free trade agreements may accelerate. In the wake of the suspension, the United States, the EU, Brazil, and India all announced plans to concentrate on additional bilateral liberalization. While bilateral or regional free trade agreements (FTA) potentially can completely remove tariffs any other trade distortions between negotiating countries, the proliferation of these agreements may complicate international trade as exporters must navigate competing tariff schedules, rules of origin, or other non-tariff barriers. This prospect can lead trade diversion, a trade distortion in which countries trade based on tariff levels and not on comparative advantage. A related question is whether the proliferation of these agreements may erode the willingness of participating countries to negotiate multilaterally, especially if countries are able to strike deals with their major trading partners.

A further consequence may be the loss of agreements already made at the negotiations. While the NAMA talks are far from completed, some components (such as the Swiss formula) have been agreed. It is possible that a prolonged suspension of talks may imperil the progress that has been made as countries may withdraw what they have agreed in an attempt to extract additional leverage in the talks.

It is also unlikely that the NAMA talks could continue without a renewal of the agriculture talks. For good or ill, the agriculture talks have become the linchpin of the negotiations. Aside from the intrinsic importance developing countries place on the agricultural talks, many developing countries appear to have used the NAMA negotiations as a bargaining chip to hold out for better agriculture offers. These countries often hold defensive positions in the NAMA talks and seek expanded agricultural access in protected and subsidized developed country agricultural markets as recompense for any NAMA concessions they might make. Conversely, developed countries seek market openings in industrial products to offset their concessions in agriculture. Because of the negotiating principle of the single undertaking, in which nothing is agreed until everything is agreed, separate agreements in discrete negotiating areas are unlikely.