The Doha Round: Where Do We Stand?

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EXECUTIVE SUMMARY

The Doha Round discussions have started again in Geneva. But, the many missed deadlines during the last six years are taking their toll. They have created such a pessimistic mood that few people do bother to look at the facts, hence to realize that there is an attractive package within reach. This note describes this package and analyzes it.

In a nutshell, the three major types of trade barriers – tariffs on industrial goods and on agricultural products, domestic support in agriculture – would converge to a roughly similar level (12-15 percent). A key mandate of the Hong Kong Ministerial – the "equivalent level of ambition" between liberalization in industrial and agricultural products – would be met. DCs exporters would get what they asked for decades. ACs exporters would get what they asked for during the last decade.

If things are fine on average, there are still efforts to be done for the highest tariffs. People believe that we live in a world of moderate tariffs. But there are still a notable number of scandalously high tariffs – up to 400 percent in Europe, 700 percent in Japan, several thousands of percent in many developing countries. Economic analysis shows that cutting these hight tariffs is by far the largest source of the welfare gains for the consumers.

As most of the high tariffs protect agricultural products, consumers tend to back off because they often support small farmers. But the term "agriculture" is a misnomer. The Doha negotiators deal with processed food roughly three times more often than with farm products *per se*. Moreover, the high "agricultural" tariffs in the developed countries are concentrated in processed food. For instance, the EU would cut its average tariff to 6-10 percent for farm products, but to 15-17 percent for food products produced by (often large) industrial firms or cooperatives. Cutting less the farm tariffs and more the food tariffs would be economically sound, politically feasible and honest.

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Discussions on the Doha Round have started again on the basis of two texts tabled (in their personal capacity) by the Chairs of the Agriculture Committee and of the NAMA (industrial goods) Committee. If agreed, these texts would open the last phase of the negotiations in goods – the detailed design of their schedule of commitments by the WTO Members.

The note aims to provide the information that business people and consumers need to decide whether they should intensify their efforts to support the Doha Round or not. This support is critical. Without it, there is a serious risk that the negotiators would get bogged down in inflated trivia, ultimatly loosing control of the situation.

First, the note presents the Chair texts on market access issues as factually as possible. It decomposes them in "liberalization" and "exceptions" formulas because, in the real world, any Round needs to balance efforts to open markets (liberalization) and efforts to safeguard some powerful vested interests (exceptions, or "flexibilities" in the Doha jargon).

Second, the note presents an economic assessment of the Chair texts. This is the most important part. First, it is ultimatly what matters most to businesses and consumers, hence triggers their decision to be supportive or not. Second, such an assessment suggests whether the "package" on the table balance the interests of the WTO Members, a critical condition for the Round success.

The note comes to the conclusion that the two Chair texts offer a good and balanced package – hence that the advanced countries (ACs) as well as the developing countries (DCs) would be foolish not to grab the opportunity for two reasons. A successful Doha Round will be the robust stabilizing factor so much needed by a world increasingly worried about financial and economic crises. And, it will not be the last Round, but only a step in a series of Rounds [Messerlin 2007a]. That said, the Chair texts could be improved at the margin – in two cases, these improvements would be very beneficial. The note presents some options in this regard.

[1] I would like to thank very much Francis Ng and Ben Shepherd for their very generous help.

SECTION 1. THE NAMA CHAIR TEXT

The NAMA negotiators face two challenges. First, the ACs tariffs are low on average, but often high on the products crucial for DCs, such as textile, clothing or shoes. Second, the bound tariffs of the major DCs (Brazil, India, Indonesia, Mexico and South Africa) are high (on average 35 percent, with peaks up to 150 percent) while their applied tariffs are moderate (on average from 8 to 15 percent).[2] In other words, these five major DCs could, instantly and without compensation, increase their applied tariffs by a factor of two or three – possibly triggering a *tsunami* of tariff rises in the world trade system in case of a financial and economic crises.

1.1. The NAMA Chair text

Table 1 lists the main liberalization and exceptions formulas, leaving aside the non market access issues which are beyond the scope of this note.

Table 1. The NAMA Chair text on tariffs, July 2007

	Advanced countries	Developing countries
1. Liberalization formulas		
Mandatory		
Swiss formula coefficients	8-9	19-23
Free access to LDCs exports	yes	yes, for the willing
Non mandatory		
Sectoral liberalization	yes	yes
Elimination of low duties	yes	yes
2. Exceptions formulas	none	For all the DCs: yes, with 4 implementation variants For 4 specific groups of DCs [a]: LDCs, SVEs, RAMs, and Countries with low binding coverage

Source: The NAMA Chair text.
Note: [a] LDCs=least-developed countries, SVEs=small and vulnerable economies, RAMs= recently acceded Members.

The liberalization formulas

The Chair text provides four "liberalization formulas" – two mandatory and two non-mandatory. The key mandatory formula proposes two ranges of Swiss coefficients, from 8 to 9 for the ACs, and from 19 to 23 for the DCs.[3] The second mandatory liberalization formula

[2] In sharp contrast, China, Taiwan, and to a lesser extent Korea, apply their bound tariffs (no m"tariff water"0. For detail, see Messerlin [2007b].

[3] The Swiss formula is T = [rt/(r+t)] where 't' is the initial tariffs, 'T' the post-negotiation tariffs, and 'r' the reduction coefficient (hereafter the "Swiss coefficient"). The Swiss coefficient is thus the only element to

confirms the specific commitment made in the 2005 Hong Kong Ministerial by the ACs (and by the DCs willing to do so) to open as widely as possible their markets to exports from the Least-Developed Countries (LDCs) – the so-called "duty free, quota free" initiative.

The two non-mandatory liberalization formulas open (i) the possibility of a systematic elimination of low duties and (ii) the possibility of undertaking sectoral negotiations.

The exceptions formulas

The Chair text provides no exception to the Swiss formula to be applied by the ACs. By contrast, it provides five exceptions formulas for the DCs. The most important formula is available to all the DCs, and it consists in four alternative variants:

1. applying less than formula cuts provided that (i) that the cuts are no less than half the Swiss coefficient-based cuts, (ii) that the tariff lines involved do not exceed 10 percent of the total number of NAMA tariff lines, (iii) that they do not exceed 10 percent of the total value of the country's NAMA imports, and (iv) that they do not exclude entire HS chapters (that is, broad ranges of similar products);
2. not applying formula cuts provided that (i) the tariff lines involved do not exceed 5 percent of the total number of NAMA tariff lines, (ii) that they do not exceed 5 percent of the total value of the country's NAMA imports, and (iii) that they do not exclude entire HS chapters;
3. keeping, as an exception, tariff lines unbound under the same conditions than those imposed on variant 2;
4. increasing the agreed base Swiss coefficient by 3 points on all the products (for instance, 26 if the agreed base Swiss coefficient is 23).

All the other exceptions formulas are limited to specific groups of WTO Members. The LDCs, the Small and Vulnerable Economies (SVEs), and the countries with low binding coverage (less than 35 percent of their NAMA tariff lines) would get a total, or almost total, exemption of tariff cuts. The "recently acceded members" (RAMs) would get the same

negotiate on. In what follows, the expression "a Swiss19" means a Swiss coefficient of 19. For illustration sake, a tariff of 300 percent (the highest existing NAMA tariff in the five emerging economies examined in detail) would be cut down to 17.9 percent (with a Swiss19) and to 21.4 percent (with a Swiss23).

treatment if they are very recent RAMs (such as Saudi Arabia or Vietnam) or a two-years grace period if they are less recently acceded members (such as China and Taiwan).

1.2. An economic assessment of the NAMA Chair text

End of July, the Chair text got a cool reception (probably because the Swiss formula makes clear the concessions to be made). From an economic perspective, the text raises two key questions. Do the liberalization formulas deliver a meaningful liberalization for all the Members? To which extent could the exceptions formulas unravel the liberalization commitments?

In the case of the ACs, the answer is straightforward. As there is no exceptions formulas for these countries, Table 2 shows that the highest bound post-Doha tariff would be lower than 8 percent (compared to 25 to 57.5 percent as of today). [4] Much more importantly for the DCs from an economic perspective, the high ACs tariffs are concentrated in textile, clothing and shoes – hence they have a highly discriminatory impact on the key DCs exports [Laird 2002]. Table 2 shows that this discriminatory impact would *de facto* vanish, and that the ACs tariffs would become a trade barrier less important than transport costs, non-tariff barriers (from antidumping to norms) or marketing costs in the ACs. DCs exporters and their ACs efficient competitors have requested such changes for years. ACs consumers – in particular, the poorest – would be the major beneficiaries.

[4] Calculations presented in Tables 2 and 3 are based on HS 6-digit tariff schedules. Negotiators work at a higher level of disaggregation, but a HS 6digit level of disaggregation gives reasonably accurate answers. There are conflicting information on some tariff peaks imposed by the advanced economies, depending from the sources (Forbes et alii, Trade Policy Review, etc.). These problems do not modify notably the results presented because of the characteristics of the Swiss formula. For instance, pre-Doha tariffs of 30 and 50 percent would become post-Doha tariffs of 6.9 and 7.6 percent, respectively.

Table 2. Bound and applied tariffs, selected advanced countries

	Number of tariff lines	Current tariffs			Post-Doha tariffs			
		bound tariffs		applied	Swiss 9		Swiss 8	
		average	maximum	average	average	maximum	average	maximum
	1	2	3	4	5	6	7	8
1. All NAMA products								
Canada	4427	5.3	25.0	3.3	2.6	6.6	2.5	6.1
EC	4441	4.0	57.5	3.9	2.3	7.8	2.2	7.0
Japan	4327	2.3	28.5	1.6	1.4	6.8	1.3	6.2
USA	4428	3.4	38.6	2.6	1.8	7.3	1.8	6.6
2. Clothing, textiles and shoes [a]								
Canada	824	13.1	21.0	10.9	5.0	6.3	4.7	5.8
EC	826	8.2	17.0	8.2	4.1	5.9	3.9	5.4
Japan	814	7.1	28.5	5.0	3.8	6.8	3.6	6.2
USA	824	9.4	38.6	8.2	4.1	7.3	3.8	6.6

Source: Data at the Harmonized System 6 digit [Forbes et alii 2004].
Note: [a] All tariff lines of HS Chapters 50 to 64.

The case of the DCs is more complicated to assess because of the many formulas involved. However, it ultimatly boils down to the balance between the main liberalization formula and the main exceptions formula, as shown in the three following steps.

Step 1. The exceptions formulas for the LDCs, SVEs and countries with low binding coverage would not have a major impact on world trade for two reasons. These countries represent a tiny part of world trade – all together, less than two percent of the world trade. Hence, these exceptions would hardly have an impact on the exporters from the rest of the world, be from ACs or DCs. Sadly, these exceptions would almost exclusively hurt their alleged "beneficiaries" by slowing down the gradual opening of their markets. Turning to the RAMS, the exceptions granted to them do not endanger the Doha trade liberalization either because the recent RAMs would be busy implementing the commitments included in their WTO accession protocols, or because the less recent RAMs would be subject to new commitments.[5]

Step 2. The step focuses on the impact of the liberalization formula, without introducing yet the exception formulas. In this sense, it is irrealistic. But its aim is to reveal, as simply and clearly as possible, an essential virtue of the Doha Round – its capacity to generate welfare gains (and increased trade flows) not only through cuts in applied tariffs (as the previous

[5] Interestingly, these "not so recent" RAMs have massively reduced their bound tariffs, and aligned their applied to their bound tariffs (no "tariff water"). For instance, China's average industrial tariff has been reduced from 60 (1985) to 15 (2001) to 9 percent (2005) – that is, only 3 percentage points above the 2005 EU average level. In a matter of few years (from 2001 to 2006) China has reduced its maximum bound industrial tariffs by almost half, bringing them much closer to the EU level in most industrial sectors. Moreover, China has reduced its highest agricultural (farm and food) tariffs by half, bringing them to a much lower level than the EU (despite the fact that two-thirds of the Chinese population still heavily rely on agriculture) [Messerlin and Wang 2007].

Rounds) but through cuts in bound tariffs reducing drastically the uncertainty surrounding the business decisions to export, or not to export.

Realizing this point is essential because the ongoing negotiations on the liberalization formula for the DCs are heavily suffering from a language that has bogged down the negotiations during the last two years. Since the 2003 Cancun Ministerial, some ACs negotiators have repeatedly requested that DCs should make tariff cuts large enough to create "new commercial opportunities" or "new trade flows". For most people, these expressions have meant that the DCs should cut their bound tariffs to a level lower than their current applied tariffs.

It is astonishing that such a narrow and irrealistic interpretation has prevailed unchallenged for so long – even among economists. It ignores the value of "certainty" – a key parameter for businesses and the *raison d'être* of "binding" in WTO law [Messerlin 2007a]. Bound tariffs are delivering certainty, certainty reduces transaction costs, and lower costs generate "new commercial opportunities" – all those not exploited by fear of sudden changes in the importing country's tariffs.

What follows assesses the twin capacity of the Chair liberalization formula (i) to cut DCs applied tariffs for some products and (ii) to deliver increased certainty for the other products through the substantial reduction of their bound tariffs (despite unchanged DCs applied tariffs).

For illustration sake, Table 3 presents the averages of the tariff changes expected for the five largest DCs (Brazil, India, Indonesia, Mexico and South Africa) when applying the lowest (19) and highest (23) Swiss coefficients proposed by the Chair text.[6] The results speak for themselves.

1. The average post-Doha bound tariff would be roughly 11-13 percent (column 3), with the average applied tariffs being roughly 8-9 percent (column 4).
2. The two possible sources of increased commercial opportunities are of almost equal importance. Increasing commercial opportunities generated by cuts in applied tariffs

[6] China and Taiwan are not included in Table 3 because their applied tariffs are already at their bound level, so that all their tariff cuts under the Doha Agreement would be cuts in bound and applied tariffs. Korea is not included either because it is mostly in the same situation.

would occur in about 47 percent of the tariff lines (column 7). Those associated with increased certainty (cuts in bound tariffs, but not in applied tariffs) would occur in roughly 52 percent of the tariff lines (column 13).[7]

3. The average cut in applied tariffs would be 5-6 percent (column 15), with sharp cuts (on average 50 percent, see column 15) when the currently applied tariffs are close to high bound tariffs. A Swiss23 would leave some tariff lines with tariffs higher than 15 percent, but lower than 18 percent.[8]
4. The average cut in bound tariffs without changes in applied tariffs would amount to roughly 18 percentage points (column 9). The remaining "tariff water" (the excess of the post-Doha bound tariffs over the currently applied tariffs) would be cut to 6-7 percent (column 10) down from 25 percent, a bearable risk for most traders and investors.

Combined altogether, these results are very close to what European and world businesses have asked for since the early 2000s [Businesseurop (formerly UNICE) 2007, International Chamber of Commerce 2007]. They should also be very attractive for the exporters from all over the world since such improved market access would be delivered on a non-discriminatory basis.

Table 3. The NAMA Chair text: the balance between increased certainty and cuts in applied tariffs, simple averages based on five selected emerging economies (Brazil, India, Indonesia, Mexico and South Africa) Provisional

	All tariffs				Increased commercial opportunities generated by increased certainty						Increased commercial opportunities generated by cuts in applied tariffs				
	Current bound	Current applied (MFN)	Post Doha bound	Post Doha applied	Current bound	Current applied (MFN)	Occur-rences [c]	Post Doha average	Increased certainty [a]	Tariff water [b]	Current bound	Current applied (MFN)	Occur-rences [c]	Post Doha average	Cuts in applied tar. [d]
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. The case of the Swiss 19 coefficient															
average tariff	30.6	11.1	11.1	8.2	28.9	4.5	56.2	10.9	-18.0	6.4	33.0	17.5	35.5	11.8	-5.8
maximum tariff	83.0	61.6	15.0	14.7	61.2	13.3	45.0	14.3	-46.9	13.9	79.0	61.6	53.4	14.7	-50.2
"high" tariffs [e]	--	2014	14	12	1748	3	--	4	--	--	2375	2010	--	11	--
2. The case of the Swiss 23 coefficient															
average tariff	30.6	11.1	12.4	9.0	29.0	4.8	60.0	12.2	-16.8	7.3	33.2	18.0	31.6	13.3	-4.7
maximum tariff	83.0	61.6	17.4	16.9	61.2	14.7	48.3	16.4	-44.8	15.9	78.2	61.6	51.5	16.9	-48.4
"high" tariffs [e]	--	2014	112	98	1870	6	--	21	--	--	2254	2008	--	91	--

Source: WITS data. Author's computations.

Notes: [a] Decreases from current bound tariffs to post-Doha bound tariffs. [b] Gaps between current applied tariffs and post-Doha bound tariffs.
[c] In this column, the top figure provides the import share concerned, and the bottom figure the share of the tariff lines concerned.
[d] Decreases from initial applied tariffs to post-Doha bound tariffs. [e] Number of tariff lines with MFN tariffs higher than 15%.

[7] The two shares do not sum to 100 percent because of current zero tariffs.

[8] The figure of 91 is the average over the five countries, but almost all these tariff lines are from the Indian and South African tariff schedules.

Step 3. Could the exceptions formula unravel these attractive results? A precise answer to this question depends upon the detailed implementation of the exceptions. What follows assumes that the exceptions would be concentrated on the tariff lines with the currently highest applied tariffs. This criterion is not the only one that would be used, but it is the most likely.[9] Based on this assumption, Table 4 presents the calculations for Brazil (a case of current high bound tariffs and substantial applied tariffs) and for Indonesia (a case of current high bound tariffs and low applied tariffs).[10]

Table 4 provides three important results. First, variant 4 (the base Swiss formula on all the products plus 3 points) increases modestly the average tariff while minimizing the change in tariff dispersion. In short, it minimizes the damages to the importing country and its trading partners from an economic point of view. Second, variant 1 is more damaging, particularly for the DCs' trading partners since it imposes already substantial tariffs (high enough to have the capacity to deter imports in some cases) on the largest number of tariff lines. Lastly, variant 2 seems the most damaging for the DC using it because it generates the highest tariffs, hence the largest domestic production distortions. (It is impossible to provide estimates for variant 3 without more information, but it is likely to be close to variants 1 or 2.)

Table 4. The impact of the exception formulas: the case of Brazil and Indonesia

Post Doha tariffs	Liberalization formula: Swiss19				Liberalization formula: Swiss23			
	No ex-ception	Variant 1 [a]	Variant 2 [b]	Variant 4 [c][d]	No ex-ception	Variant 1 [a]	Variant 2 [b]	Variant 4 [c][d]
1. Brazil								
Average tariff	11.6	13.0	13.1	12.6	13.0	14.3	14.4	13.9
Maximum tariff	14.1	23.7	35.0	15.7	16.2	24.4	35.0	17.7
High tariffs [e]								
Average tariff	--	23.6	34.8	15.7	16.2	24.4	34.9	17.7
Number tariff lines	0	600	301	5	5	606	306	5
2. Indonesia								
Average tariff	12.0	13.3	13.8	13.1	13.5	14.9	15.2	14.5
Maximum tariff	16.0	27.6	100.0	18.0	18.7	29.5	100.0	20.6
High tariffs [e]								
Average tariff	16.0	22.9	40.1	16.0	16.5	24.5	40.1	15.8
Number tariff lines	3	599	299	20	24	599	299	2986

Source: WITS data. Author's computations.

Notes [a] Half cuts on 10 percent of the tariff lines with the current highest applied tariffs.
[b] No cuts on 5 percent of the tariff lines with the current highest applied tariffs.
[c] The base Swiss coefficient (19 or 23) plus 3 points.
[d] Variant 3 cannot be calculated with the publicly available information.
[e] High tariffs are defined as those higher than 15%.

[9] Under this assumption, it is important to underline that the condition on the share in total value of imports has no role to play because applied tariffs are high enough to limit severely the value of the imports in question. For instance, the share of the 10 percent tariff lines with the highest tariffs represents less than 5 percent of Brazil's total imports.

[10] In the Swiss23 case, 99 percent of the Indonesian 2966 tariff lines exhibit a tariff ranging from 15 to 16 percent.

In short, the ideal solution would be to make variant 4 – adding a given number of points to the base Swiss coefficient – the only exception formula. If eliminating the variants 1 to 3 is impossible, ranking all the variants (4 being the first) would be a (weak) alternative.

1.3. Concluding remarks

The NAMA Chair text has attracted two main criticisms. First, some ACs negotiators argue that a too limited liberalization is requested from the DCs. As shown above, this criticism ignores the huge benefits of increased certainty. Moreover, shifting to a Swiss15 would increase the occurrence of increased commercial opportunities via cuts in applied tariffs by only a couple of percentage points, whereas the post-Doha bound tariffs would decrease by one percentage point.

Second, some DCs negotiators argue that the gap between the ACs and DCs level of commitments in NAMA is too small – the difference between the Swiss coefficients for the ACs and the DCs should be larger. This argument ignores the crucial – for the DCs – elimination of the ACs discriminatory protection against the key DCs exports, such as textile, clothing or shoes, and the negligeable additional liberalization in the ACs if the DCs negotiators try to impose a Swiss5 or so. Lastly, some DCs negotiators argue the level of liberalization in agriculture would not match the level in NAMA. This point is analyzed in the following section.

SECTION 2. THE AGRICULTURE CHAIR TEXT

The term of negotiations in "agriculture" is a misnomer. The current negotiations deal with many more tariff lines for processed food products (from two-thirds to three-quarters of all the tariff lines under negotiation) than for farm products (the remaining tariff lines).

Ignoring this crucial point leaves the wrong impression among the public opinion and the farmers that all the tariff cuts under discussion concern the farmers, while in fact, most of them deal with industrial goods produced by (often large) industrial firms or cooperatives. In fact, most of the currently high tariffs are concentrated in food (not farm) products.[11] A key

[11] This situation is the heritage of the massive tariff escalation granted to the food processors during the Uruguay Round tariffication for compensating them for the high level of protection of farm products.

to the success of the Doha Round consists in making the public opinion aware of this feature – people support small farmers, not food industries – and in using the political degree of manoeuver that such a feature allows.

Trade negotiations in agriculture deal with three aspects: tariff cuts (market access) production subsidies ("domestic support" in negotiators' parlance) and export subsidies of all kinds ("export measures" in negotiators' jargon) hence the much more complicated structure of the Chair text in agriculture, compared to the NAMA Chair text.

2.1. Tariffs

The following description is limited to the most essential aspects of the liberalization and exceptions formulas in the Chair text. It leaves aside the many provisions (which are often "exceptions to exceptions") the main reason of which is to ensure that the core formulas are not too much circumvented.

2.1.1. The Chair text: the liberalization formulas

The Chair text puts forward two core tariff liberalization formulas, one for the ACs and one for the DCs. Table 5 presents the proposed range of tariff cut rates for each of the four tiers defined. It is important to note that the proposed "tiered" formulas are "discontinuous", that is, that the current tariffs at the low end of any tier are more deeply cut than the current tariffs at the high end of the preceding tier. For instance, the Chair formula for the ACs would cut a current tariff of 51 percent to 19.4 percent, while it would cut a current tariff of 49 percent to 22.1 percent. Graph 1 illustrates this bizarre and unsatisfactory feature.

Table 5. Tabled proposals on farm tariff cuts, September 2007

	EC proposal		G20 proposal		U.S. proposal		Chair proposal	
	definition of the tiers	tariff cut rate (%)	definition of the tiers	tariff cut rate (%)	definition of the tiers	tariff cut rate (%)	definition of the tiers	tariff cut rate (%)
	1	2	3	4	5	6	7	8
Tariff cuts to be imposed on advanced countries								
highest tier	>90%	60	>75%	75	>60%	85-90	>75%	66-73
medium high tier	60-90%	50	50-75%	65	40-60%	75-85	50-75%	62-65
medium low tier	30-60%	45	20-50%	55	20-40%	65-75	20-50%	55-60
lowest tier	0-30%	35	0-20%	45	0-20%	55-65	0-20%	48-52
Tariff cuts to be imposed on developing countries [a]								
highest tier	>130%	40	>130%	40	>60%	[a]	>130%	44-49
medium high tier	80-130%	35	80-130%	35	40-60%	[a]	80-130%	41-43
medium low tier	30-80%	30	30-80%	30	20-40%	[a]	30-80%	37-40
lowest tier	0-30%	25	<30%	25	0-20%	[a]	<30%	32-35
Thresholds for defining a cap on the highest tariffs								
advanced countries	--	100	--	100	--	75	--	--
developing countries	--	150	--	150	--	100	--	--

Source: The Chair, EC, G20 and U.S. proposals.
Note: [a] The Chair text (columns 7 and 8) defines the coefficients for DCs as two-thirds of the coefficients for the advanced countries.

The Chair text proposes four more liberalization formulas:

1. the end of the special agricultural safeguard (an Uruguay exception granted to the ACs) although it could partly survive under the sensitive products provision (see below);
2. the commitment made at the Hong Kong Ministerial by the ACs (and by the willing DCs) to eliminate all barriers (tariffs and quotas) imposed on imports of agricultural products from LDCs.
3. a similar commitment for another group of DCs – the cotton exporters.
4. possible additional market access for commodity-dependent countries and for tropical and associated products.

2.1.2. The Chair text: the exceptions formulas

The Chair text in agriculture is much richer in exceptions formulas than the NAMA text. First, in sharp contrast with NAMA, the ACs can designate some products as "sensitive". The tariff cuts on imports of such products would be smaller than those required by the tiered liberalization formula. For compensating this more limited tariff liberalization, tariff-rate quotas (TRQs) would be put in place for these products. The quota component of the TRQs should amount to no less than 4 to 6 percent of the domestic consumption expressed in physical units. Moreover, the use of this exceptions formula would be limited to 4 to 6 percent of the dutiable tariff lines in agriculture (possibly extended to 8 percent, subject to some conditions). A 6 percent coverage would roughly correspond to a hundred of tariff lines at the HS 8-digit level of disaggregation (the level used for the calculations presented below).

Second, exceptions formulas close to those granted in NAMA would be available to the three above-mentioned specific groups of DCs (LDCs, SVEs and RAMs). In addition, all the DCs would have access to four exceptions formulas:

1. the right to designate sensitive products on more generous terms than for the ACs (for up to one third of the tariff lines);
2. the right to protect products designated as "special" (pending negotiations specifying the definition of "special" and the conditions for using this provision);
3. the access to a "special safeguard mechanism" (pending negotiations designing such a mechanism); and,
4. the possibility of compensations in case of "preference erosion" (that is, when DCs are loosing their preferential access to ACs markets).

2.1.3. An economic assessment of the Chair text

The calculations presented below are exclusively based on the tiered liberalization formula and on the sensitive-products exceptions formula because they are the two crucial formulas for the ACs and for the critical group of DCs (the emerging economies). They focus on the EC which is the pivotal player in this domain. The case of the DCs is examined much more briefly due to the lack of adequate publicly available information.

Table 6 illustrates the Chair liberalization formula in the EC case. Rows A show the "average tariff" and the "average tariff cut" which are the most frequently used indicators by the negotiators. However, these indicators are not very meaningful from an economic point of view because the current tariffs on agricultural products vary hugely. For instance, the highest bound tariffs in agriculture range from 407 percent in the EC to 1705 percent in Japan.[12]

Table 6 provides the two important informations from an economic perspective. First, Rows C focus on the 100 highest tariffs since, as economic analysis shows, cutting high tariffs delivers the largest welfare gains. In this respect, it is worth noting that, in the EC case, 87 out of the 100 highest tariffs are imposed on processed food products, and 10 on semi-processed food products.

[12] For information sake, the highest bound tariffs amount to much higher level in DCs, such as 3000 percent (Egypt) or more than 140000 percent (Malaysia).

Second, Rows B of Table 6 make a distinction between the farm and food products in order to assess the different impact of the current negotiations on these two groups of goods (and related producers). As said above, this feature is essential for finding innovative compromises. It makes the "rebalancing" of the proposed tariff reductions – cutting more the high tariffs, and less the low tariffs – an alternative attractive for economic and policitical reasons [Messerlin 2007b]. Cutting deeper the high tariffs would deliver more economic welfare gains to the European consumers than the current proposals. Cutting less the low tariffs would deliver political benefits, since a vast majority of EC farm producers (all those protected by small and moderate tariffs) would find the rebalancing of the EC tariff proposal favourable for their interests, compared to the current proposals.

That said, column 1 provides the EC current tariffs (including the *ad valorem* equivalents of the many EC specific tariffs). Columns 2 to 4 gives the post-Doha EC tariffs based on the proposals tabled by the three major negotiators – the EC, the US, and the G20 (the G20 proposal has become the median proposal thanks to the US tactic of tabling very large tariff cuts).

Columns 5 and 6 provides the post-Doha EC tariffs based on the Chair liberalization formula. They show that, before exceptions, the tariff cuts suggested by the Chair are close to those generated by the G20 proposal.[13]

[13] The EC, US and G20 proposals do not specify the exceptions formula.

Table 6. The Chair text on tariff cuts in farm and food products: the EC case

	Current tariffs	Post-Doha tariffs before exceptions [a] put forward by			Post-Doha tariffs generated by the Chair text				Post-Doha tariffs based on variants of the Chair formula		
					before exceptions [b]		after exceptions [b][d]		Variant A [e]		Variant B [f]
		EC	G20	US	low [c]	high [c]	low [c]	high [c]	low [c]	high [c]	low [c]
	1	2	3	4	5	6	7	8	9	10	11
A. All tariffs											
average tariff	24,2	12,3	9,2	5,8	10,0	8,7	12,2	11,2	11,6	10,4	11,2
average tariff cut rate [	--	49,4	62,0	76,1	58,8	64,0	49,5	53,7	52,1	57,0	53,9
B. Average tariffs by type of products											
farm commodities	19,7	10,2	7,9	5,0	8,3	7,3	8,5	7,6	8,6	7,8	8,8
farm horticulture	13,6	7,7	6,3	4,3	6,3	5,6	6,6	5,9	6,7	6,1	6,6
semi-processed food	12,6	6,4	4,8	3,1	5,2	4,6	6,0	5,4	5,9	5,3	5,8
processed food	32,6	16,2	12,0	7,5	13,2	11,5	16,8	15,5	15,7	14,1	14,9
C. The 100 tariff lines with the current highest tariffs											
average tariff	137,4	55,0	34,4	17,2	46,7	37,1	92,1	87,3	87,7	76,8	62,8
minimum tariff	89,8	35,9	22,4	11,2	30,5	24,2	60,1	57,0	72,8	65,0	51,4
maximum tariff	264,3	105,7	66,1	33,0	89,9	71,4	177,1	167,8	124,9	106,4	82,5

Source: EC agriculture tariff schedule (including ad valorem equivalents, except the 407.8 percent tariff). Author's computations.

Notes: [a] Before exceptions (not specified enough in the proposals).

[b] Limited to the exceptions formula related to sensitive products.

[c] Calculations based on the low and high cut rates of the range proposed by the Chair text.

[d] Assuming a deviation of half in the tariff cuts (see text).

[e] The variant is a continuous form of the tiered formula, with an add up factor of 35 percentage points on 4 percent of the tariff lines (see text).

[f] The variant is a continuous form of the tiered formula, with an exception based on a Swiss120 on the 6 percent of the tariff lines (see text).

[g] The ratio of the post-Doha tariffs to the current tariffs (including the ad valorem equivalents of the specific tariffs).

Of course, what matters are the tariff cuts after the implementation of the exceptions formula based on sensitive products. Three assumptions have been used for calculating the impact of such a formula.

1. the EC applies the exceptions formula only to the tariff lines with the highest tariffs. This is a plausible criterion, but one should expect other criteria to play some role for two reasons. First, the discontinuity of the tiered formula would make difficult for governments to explain to their producers at a lower end of a tier that they would end up with post-Doha tariffs notably lower than those situated at the higher end of the preceding tier. Using the exceptions formula for the tariffs at the lower end of each tier would reduce the hard fights to be expected between the domestic interests involved. Second, a substantial number of products which do not exhibit the highest tariffs are already subject to tariff-rate quotas. The domestic producers concerned are likely to fight hard for keeping their tariff-rate quotas by getting access to the "sensitive product" status.
2. the EC designates a large coverage of products (6 percent of the tariff lines, that is, roughly 100 products). This is a likely assumption because of the above-described strong pressures for designating sensitive products.

3. the EC deviates by one half (the Chair text allows deviations by one third to two third). This assumption of moderation is far to be guaranteed, but it is adopted in order to present a "middle-of-the-road" picture.

Under these assumptions, columns 7 and 8 of Table 6 show that the post-Doha EC average tariff based on the Chair proposal after exceptions ranges from 12 to 13 percent, that is, is close to the post-Doha average tariff before exceptions suggested by the EC proposal.

Columns 7 and 8 deserve two final remarks. First, the exceptions formula tends to favor strongly the processed food sector. Tariffs on processed food would increase, on average, by three points, while the tariffs on farm and semi-processed food products would increase by half a point or less. Second, the Chair exceptions formula raises a serious problem to the extent that a substantial number of post-Doha tariffs would be higher than 100 percent, a threshold for which the EC, G20 and US proposals have envisaged the introduction of a cap. Once again, the concentration of the high tariffs in the food products is an opportunity of innovative compromises that negotiators should not waste all the more because many of these food products are waste products (dog and cat food, whey, etc) goods with very little potential in international trade (yoghurts) or with questionable importance (cucumbers, gherkins, etc) [Messerlin 2007b].

Turning to the DCs, the lack of publicly available data at the required level of disaggregation (and including the *ad valorem* equivalents used by the trade negotiators) prevents to present similar detailed calculations. However, the following simple exercise sheds an interesting light on what would happen for these countries. It assumes that the DCs have the same tariff structure than the EC. This is likely to be a conservative assumption because DCs tend to have much higher bound average tariffs in agriculture than the EC (from 1,5 to 30 times). In other words, such an exercise gives a sense of the minimal difference between tariff cuts required from ACs and DCs.

Under this assumption, the DC average post-Doha tariff would be above 15 percent before exceptions, the highest tariffs being close to 150 percent. In short, liberalization in DCs agriculture would mostly consist in reducing "tariff water" (the difference between bound and applied tariffs). Of course, it would also be important to make the distinction between farm and food products. It would be surprizing thet the DCs (or, at least, the emerging economies)

would not have also a strong tariff escalation, with their highest tariffs concentrated in the food products.

2.1.4. Alternative options for the exceptions formula

The above analysis shows that the Chair text would lead to a substantial – on average – tariff liberalization of the ACs agriculture. For instance, the EU would cut its average tariff on agricultural imports to roughly 12 percent. This outcome is very important. It means that the average ACs post-Doha tariffs in agriculture are close to the average DCs post-Doha tariffs in NAMA. In short, the key objective of a "*comparably high level of ambition*" in NAMA and agriculture that has been decided at the Hong Kong Ministerial would be roughly achieved in its tariff dimension (see below for its subsidy dimension).

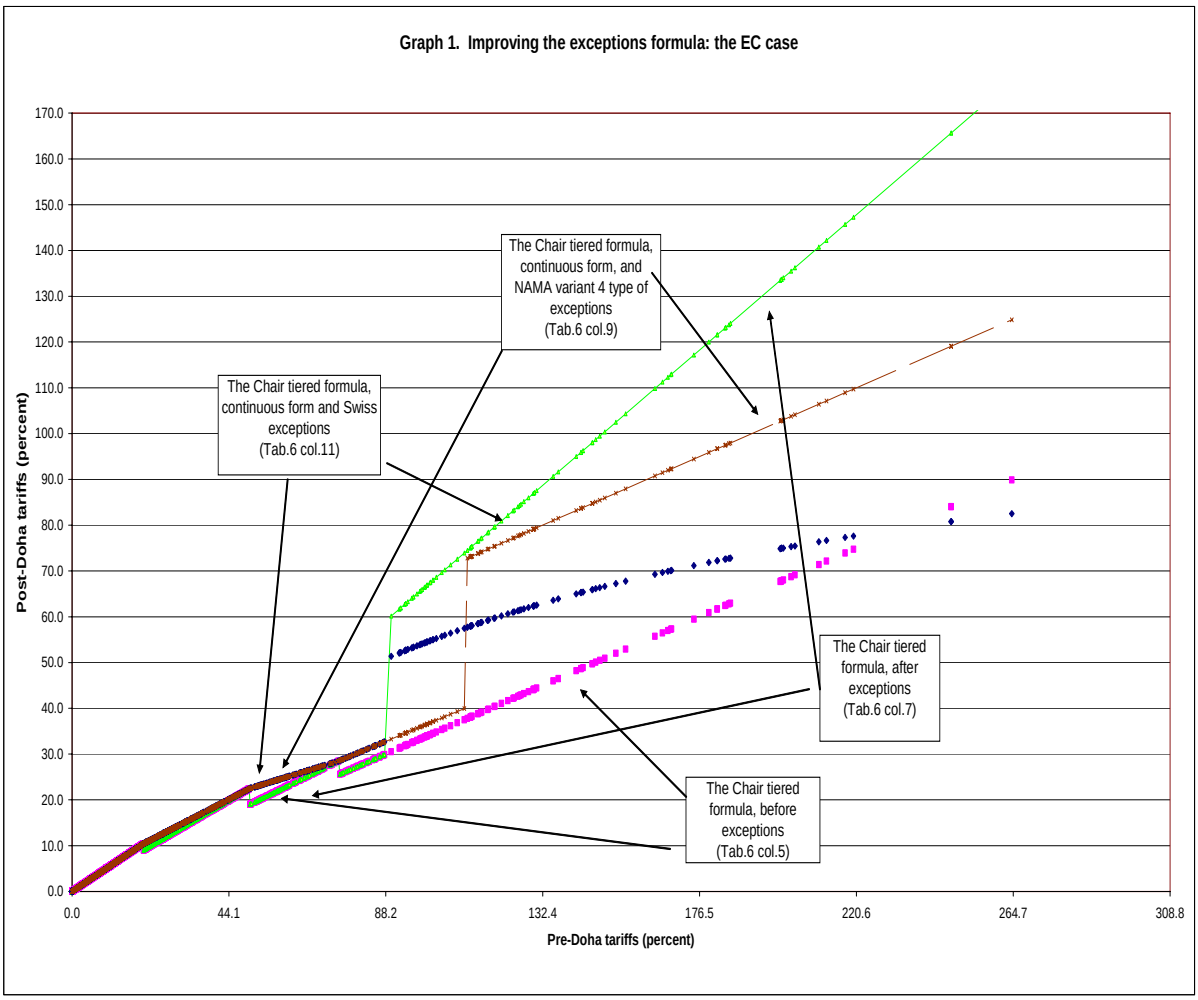
However, this positive conclusion requires a *caveat* – it is based on average post-Doha tariffs. It does not take into account the dispersion of tariffs, in other words, the importance of the high tariffs. For the same average post-Doha tariff of 12 percent, maximum tariffs would mostly be within the range of 30 percent in NAMA (except if one uses the variant 2 of the NAMA exceptions formula) and within the range of 90-100 percent in agriculture, with a notable share of them being much above 100 percent.

The negotiators have two options for solving this problem. First, they could agree on the lowest commun denominator, that is, a Swiss23 coupled with the variant 2 in NAMA and the Chair proposal in agriculture with the current exceptions. Such an option would have a minimal liberalization content. It would thus trigger the frustations of the businesses without calming the anti-globalizers – a combination that will make the return to their capitals difficult for the negotiators.

Alternatively, they could improve the exceptions formula in agriculture. This alternative may be easier to reach that it seems at a first glance if the negotiators use the opportunity offered by focusing on the high (but politically easier to fight) tariffs on food products. What follows looks at various alternatives to improve the situation.

Before looking at these alternatives, it is useful to note an apparent paradox. Improving the exceptions formula would be made easier if the tiered liberalization formula itself is

improved. This condition could be achieved at almost no cost for the existing negotiating balance – simply by making the liberalization formula "continuous", that is, by imposing that the starting point of a tier should be the same than the end point of the previous tier. A continuous tiered liberalization formula would eliminate the many pressures to have recourse to exceptions when shifting from one tier to another one (a particularly important point for the current tariffs around the 75 to 85 percent in the EC case).



That said, improving the existing exceptions formula on sensitive products could be done in two, alternative or combined, ways. First, the maximum coverage of the exceptions formula, that is, the percentage of tariff lines eligible for exceptions, could be reduced (a move made easier if the tiered formula is continuous). Second, the exception for sensitive products could

be expressed in terms similar to those used for the variant 4 in NAMA – adding a fixed amount of percentage points to the base tariff cuts.[14]

For illustration sake, Graph 1 and Columns 9 and 10 of Table 6 provide the post-Doha tariffs delivered by a continuous tiered formula (based on the same tiers and tariff cut rates than those put forward by the Chair text) with a coverage of sensitive products limited to 4 percent of the tariff lines, combined with the addition of 35 percentage points to the post-Doha tariffs before exception. The average tariff does not change much (by half a percentage point) but the need for a cap on tariffs has almost vanished.

There is a last alternative. A continuous tiered formula is close to a Swiss formula except for the highest tariffs. Not using a Swiss formula in agriculture was a mistake made three years ago. It would have had the immense benefit to "rebalance" more smoothly and strongly than a tiered formula the "burden" of tariff cuts from farm to food products – that is, from politically and economically sensitive sectors to economically more resilient and politically less powerful sectors [Messerlin 2007b]. But negotiators have repeatedly indicated that they do not want to consider a systematic use of the Swiss formula at this very late stage of the negotiations.

That said, the negotiators could use the Swiss approach only for the exceptions formula. Graph 1 and Column 11 of Table 6 illustrate a case associating a continuous tiered formula for liberalization combined with a Swiss formula for the exceptions. More precisely, a Swiss coefficient of 120 is used for cutting the tariffs of the 6 percent of the products having the highest tariffs. This option associates a relatively stable average tariff with no post-Doha tariffs higher than 100 percent for the products under exceptions – in other words, the exceptions formula does not distort too much the domestic production structure, a very positive feature for countries willing to diversify their agriculture production.

2.2. Domestic support and export measures

Export measures do not require a long description and assessment. The Chair text spells out in detail the disciplines necessary for implementing the ban of these measures that was agreed

[14] Another alternative would be to define a tariff cap. But such a variant is a less attractive option, from an economic as well as negotiating perspective.

at the Hong Kong Ministerial. From the negotiating perspective, this part of the negotiations in agriculture should not raise serious problems for many reasons, one of the most compelling being the decision of the EC (by far the main provider of export subsidies) to eliminate unilaterally such subsidies. From an economic perspective, banning export measures is positive under a key condition – that the other instruments of protection (tariffs and domestic support) are reduced enough for boosting the production of efficient producers, in order to counterweight the inevitable decline in subsidized production.

Quite different is the situation of domestic support where some DCs negotiators are strongly arguing that more substantial concessions should be requested from the ACs. What follows focuses on the ACs because domestic support in DCs is much smaller, though often on the rise [OECD 2007].

2.2.1. The Chair text on domestic support

The full machinery for cutting progressively domestic support put in place since the Uruguay Round is becoming increasingly complex. For brevity sake, what follows focuses on the two major elements of domestic support – the so-called "overall trade distorting support" (OTDS) and its main component, the "final bound total aggregate measure of support" (FAMS). Both deal with the most distortive subsidies (those with a notable impact on production and prices).

Table 7 presents the tiered cuts proposed by the Chair text. Rows A to C of Columns 1 and 2 show the various elements of current situation: the amounts (in US dollars) of the bound commitments at the end of the implementation period of the Uruguay Round Agreement (2004) the effective amounts of the distortive domestic support spent in 2004, and the estimated amounts of expenses until 2010 (with the *caveat* that these amounts are highly dependent from the world prices, especially in the US case). Then, Rows D show the cuts proposed by the EC, the US and the G20. Finally, Rows E present the cuts proposed by the Chair. These cuts tend to be close to the G20 proposal in the OTSD case, and similar to the EC proposal in the FAMS case.

In addition, the Chair text puts forward additional liberalization formulas, notably (i) caps for product-specific AMS, (ii) cuts in *de minimis* domestic support, (iii) caps for the Blue Box

support, and (iv) reductions in support for cotton production. There is no exception available to the ACs.

Table 7. Domestic support in the EC and the U.S. (billion U.S.$)

		Commitments and effective support (billion US dollars)		Commitments and effective support in % ag. prod. [a]	
		U.S.	EC25	U.S.	EC25
		1	2	3	4
1. Overall Trade Distorting Support (OTDS)					
A.	The Uruguay final bound commitments	55,0	149,0	47,4	70,6
B.	Effective amounts in 2004	23,0	74,0	19,8	35,1
C.	Estimated amounts in 2006-2010	18.0 [b]	40,0	15,5	19,0
D.	The WTO Members' proposals				
	EC	22,0	44,7	19,0	21,2
	US	25,9	37,3	22,3	17,7
	G20	13,8	29,8	11,9	14,1
E.	The Chair text				
	low coefficient	18,7	37,3	16,1	17,7
	high coefficient	14,9	22,4	12,8	10,6
2. The Final Bound total AMS (FAMS)					
A.	The Uruguay final bound commitments	19,1	89,0	16,5	42,2
B.	Effective amounts in 2004	13,0	42,0	11,2	19,9
C.	Estimated amounts in 2006-2010	[c]	26,0	--	12,3
D.	The WTO Members' proposals				
	EC	7,6	26,7	6,6	12,7
	US	7,6	15,1	6,6	7,2
	G20	5,7	17,8	4,9	8,4
E.	The Chair text	7,6	26,7	6,6	12,7

Sources: EC, US, G20 and Chair proposals. Penn [2005] Jales and Nassar [2006] Kutas [2006].
Notes:
[a] Agriculture value added, in current dollars [Source: World Development Indicators]
[b] Estimate based on the USDA Farm Bill 2007 Proposal.
[c] Difficult to forecast (depend on world prices evolution).

2.2.2. An economic assessment of the Chair text on domestic support

A key problem of the proposals on domestic support is that they are expressed in value terms (billions of US dollars or euros). That makes hard to compare the domestic support cuts with the rest of the Doha package which is expressed in tariff cuts. This absence of comparison opens the doors to endless discussions about the fairness of the cuts in domestic support compared to tariff cuts, be in NAMA or in agriculture.

Columns 3 and 4 of Table 7 "translate" the domestic support cuts expressed in monetary amounts in terms equivalent to tariff cuts.[15] Rows A to C of Columns 3 and 4 present the OTDS and FAMS amounts, respectively, as percentages of the value of agricultural

[15] Technically, tariffs and production subsidies have the same effect – raising the domestic prices received by producers. In case of tariffs, the domestic price is the world price boosted by the tariff. In case of subsidies, the domestic price is the world price plus the subsidy paid by the government.

production (value added) which are percentages similar to tariff rates.[16] In 2004, the Uruguay OTSD commitments represented 50 to 71 percent of the US and EC (respectively) agricultural value added. But, the same year, the effective amount spent represented only 20 to 35 percent, whereas the currently expected spending for the years 2006-2010 would represent 16 to 19 percent (assuming a constant value added in agriculture). There is thus a huge AC "subsidy water" (the difference between bound subsidies and effectively spent subsidies) which is symmetrical to the huge DC tariff water in NAMA.

Rows D and E of Columns 3 and 4 "translate" the cuts proposed by the EC, US, G20 and the Chair in terms equivalent to post-Doha tariffs. For instance, the Chair proposal cuts the post-Doha bound "subsidy rates" (quite equivalent to tariff rates) to 11-18 percent.

This information should be connected with the post-Doha tariffs on imports calculated in Table 6. In the EC case for instance, farm products would have an average post-Doha tariff of 6-8 percent and a subsidy rate (generated by domestic support paid to farmers only) of 11-18 percent. Average post-Doha tariff on food products would be roughly 16 percent (with little domestic support).

In sum, the level of protection in agriculture would come quite close from the post-Doha bound tariff rates in NAMA for the DCs. Translating these calculations into Swiss coefficients is not difficult. It shows that the Swiss coefficients for OTDS would range from 15 to 30, that is, within the range of the Swiss coefficients proposed for the DCs in NAMA.

These comparisons are based on averages. As in the tariff case, it would be important to look at the highest domestic support rates – be in specific products or not. The absence of publicly available and detailed enough information on "peak subsidy rates" makes this task impossible in this note. Suffice to say, then, that, in accordance with the approach taken in NAMA and agriculture tariffs, cut rates should be higher for the highest domestic support rates – as indeed, it would be the case for cotton.

[16] Tariff rates are tariff values as a percentage of the imported values. Expressing the subsidies as a percentage of the production (value added) net of subsidies would not change substantially the conclusions drawn from columns 3 and 4.

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