

# A guided tour through WTO NAMA Formula Simulations

Negotiating Group on  
Market Access – 30 May 2006

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## Basis for Simulations:

- This statistical exercise does not prejudice any Members' negotiating position and all proposals remain on the table. The variables utilized, as well as the numbers generated, are hypothetical.
- Simulations were made with a limited number of parameters for practical purposes (following those in Job(06)/57)

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## Members Coverage

- All Members except those falling under:  
(so far 65 Members, 30 May 2006)
- Paragraph 6 (developing countries with a binding coverage below 35 per cent) or
  - Paragraph 9 (least-developed countries)
  - No special provisions were made for small and vulnerable economies as yet

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## Data Requirements

- Final WTO bound tariffs (CTS)
- 2001 MFN applied tariffs (IDB, unbound)
- 2005 MFN applied tariffs (IDB, CAMAD) converted to HS96 nomenclature through
  - national line concordance (if provided)
  - HS 6 digit WTO transposition
- Ad Valorem Equivalents (if provided)
- Import data for reference period 1999-2001 in HS96 at the national tariff line level
- NAMA product coverage : Job(05)/32.

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## Ad Valorem Equivalents (AVEs)

- For bound or unbound 2001 MFN applied tariffs
- Members calculated ad valorem equivalents (AVEs) based on Job (05)/166/Rev.1
- For 2005 MFN applied AVEs were provided by some Members
- If not available no applied effects were calculated for concerned tariff lines

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## Formula Scenarios

### Developed Countries:

- Swiss coefficients of 2, 5, 10, 15,
- ABI formula with B=1, B=3

### Developing:

- Swiss coefficients of 15, 20, 25, 30, 35, 40, (50)
- ABI formula with B=1, B=3

### Line-by-Line Analysis

Available in the  
electronic files only

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## Unbound Mark-up

- 2001 Applied tariff + 5 percentage points
- 2001 Applied tariff + 30 percentage points

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## Paragraph 8 Flexibilities Methodology

- Tariff lines were selected one-by-one in descending order of (1) highest 2005 MFN applied tariff, (2) highest base duties and (3) lowest import values.
- **Paragraph 8a:** <=10% of NAMA tariff lines and “half cut” <=10% of NAMA imports
- **Paragraph 8b:** <=5% of NAMA tariff lines and “no cut” <=5% of NAMA imports
- Entire HS chapters were sometimes covered.

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## Results

- In printed form – as room document
  - One table per Member
  - Summary statistics for total NAMA
- In electronic form – WTO website or CD-ROM
  - Detailed tariff line data & analytical summary data
  - One EXCEL file per Member (if 100% bound)
  - Two EXCEL files per Member (if <100% bound, one for each mark up factor)

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## Summary results

- Follows mostly Job(06)/57
  - Dropped: maximum applied duties
  - Added: applied tariff lines affected by cuts in %
- For column descriptions see Annex 3

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## Summary – effects on bound rates

Swiss Coeff.	Unbound Markup	Para 8 Flex	AVG Base	New AVG Bound	AVG % Reduction	
					per Bound	per Dutiable Bound Tariff
1	2	2b	3	4	5	6
20	5	no	49	14	70.1%	70.1%
20	30	no	50.9	14.3	71.5%	71.5%
20	30	8a	50.9	16.7	67.8%	67.8%
20	30	8b	50.9	17.3	67.7%	67.7%

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## Summary – effects on applied rates

Swiss Coeff.	Unbound Markup	Para 8 Flex	2005 AVG Appl	New AVG Appl	AVG % Reduction		% Tariff Lines Cut on Applied
					per Applied Tariff	per Dutiable Applied Tariff	
1	2	2b	7	8	9	10	11
20	5	no	9.7	6.9	9.3%	11.5%	28.2%
20	30	no	9.7	7.1	8.2%	10.1%	27.4%
20	30	8a	9.7	8.6	4.4%	5.4%	18.8%
20	30	8b	9.7	8.5	5.5%	6.9%	22.6%

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## Summary – effects on applied rates

Swiss Coeff.	Unbound Markup	Para 8 Flex	2005 AVG Appl	2005 AVG Appl	New AVG Appl	AVG % Reduction		% Tariff Lines Cut on Applied Tariff
						per Applied Tariff	per Dutiable Applied Tariff	
1	2	2b	7	8	9	10	11	
20	30	8a	9.7	8.6	4.4%	5.4%	18.8%	
20	30	8b	9.7	8.5	5.5%	6.9%	22.6%	
30	30	8a	9.7	9.2	1.1%	1.4%	13.3%	
30	30	8b	9.7	9.4	1.2%	1.6%	17.2%	

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## Summary – effects of duty free lines

Swiss Coeff.	2005 AVG Appl	New AVG Appl	AVG % Reduction		% Tariff Lines Cut on Applied Tariff
			per Applied Tariff	per Dutiable Applied Tariff	
1	7	8	9	10	11
2	3.9	0.8	42.1%	70.4%	60.0%
5	3.9	1.5	30.4%	50.8%	60.0%
10	3.9	2.1	21.2%	35.5%	60.0%
15	3.9	2.5	16.4%	27.5%	60.0%

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## Detailed results

- Tariff line information
  - Raw data & tariff line results
- HS chapter and NAMA averages
- Frequency distribution of duties and cuts
  - Bound & applied duties
  - Before and after formula cuts
  - Depth of cuts for bound and applied
- Column descriptions: Annex 3, tables 2-4

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## Detailed results

- Some extracts from the electronic files
- Column numbering can guide in finding the required information

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This is our starting point at the detailed tariff line level

Tariff line (TL)	Description	Bound	Applied 2001	Base	Applied latest
4	5	9	10	11	12
850140	AC motors, ...	25	20	25	20
900620	Cameras ...	5	5	10	5

+5 Mark-up is applied to 2001 applied duties to establish Base rates for unbound tariff lines  
For bound tariff lines Base rates are taken from bound duties

Formula cuts will be applied on Base rates

Effects of the cut on bound and applied

A=20					
No Flexibility					
New Bound	New Applied	Bnd cut	Appl cut	% bnd cut	% appl cut
35	36	37	38	39	40
11.1	11.1	13.9	8.9	55.6	44.4
6.7	5.0	3.3	0.0	33.3	0.0

Add Para 8a flexibility

A=20					
Base	appl latest	Paragraph 8A Flexibility			
		New bnd	New appl	% appl cut	
11	12	15	41	42	46
25	20	1	18.1	18.1	9.7
10	5	0	6.7	5.0	0.0

Tariff line selected for flexibilities

Tariff line not selected for flexibilities

Try other Swiss coefficients

Base	appl latest	New bnd duty		
		A=30 No Flex	A=30 8a	A=40 No Flex
11	12	71	77	107
25	20	13.6	19.3	15.4
10	5	7.5	7.5	8.0

## Aggregating results to HS chapters

Base line data				Flexibilities	
HS Chapter	Base duty	Applied duty	Imports avg 99-01	Tariff lines	
				All	covered 8a 8b
2	avg 6	avg 7	M/III US\$ 9	TL count, % 11	12 13
NAMA	34.0	7.3	24945	6558	10 5
62	35.0	14.1	11	271	32
87	35.8	24.7	1490	160	68 56

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## Formula cuts with a=20 and no Para 8

A=20											
HS Chapter	No flexibility			Duties after cut			Avg % cut			Applied TL cut	
	Bound all tariff lines		Applied	Bound dutiable		Applied	Bound dutiable		Applied	Count of TL affected imports	
	avg	av	avg	avg	avg	avg	avg	avg	No	in %	
2	41	42	45	46	48	49					
NAMA	12.1	6.4	62.3	6.6	1399	12.8					
62	12.7	12.5	63.6	11.0	202	0.0					
87	12.0	11.2	60.1	42.8	134	4.9					

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## Formula cuts with a=20 + Para 8a

A=20											
HS Chapter	Paragraph 8A Flexibility			Paragraph 8B Flexibility			Paragraph 8C Flexibility			Applied TL cut	
	Bound all tariff lines		Applied	Bound dutiable		Applied	Bound dutiable		Applied	Count of TL affected imports	
	avg	av	avg	avg	avg	avg	avg	avg	No	in %	
2	50	51	54	55	57	58					
NAMA	13.4	6.8	58.9	4.2	834	8.5					
62	16.3	13.2	53.3	6.1	114	0.0					
87	21.6	18.7	38.3	20.7	97	3.4					

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## Formula cuts with a=20 + Para 8b

A=20											
HS Chapter	Paragraph 8B Flexibility			Paragraph 8C Flexibility			Paragraph 8D Flexibility			Applied TL cut	
	Bound all tariff lines		Applied	Bound dutiable		Applied	Bound dutiable		Applied	Count of TL affected imports	
	avg	av	avg	avg	avg	avg	avg	avg	No	in %	
2	59	60	63	64	66	67					
NAMA	13.4	6.8	59.0	4.7	1112	11.0					
62	12.7	12.5	63.6	11.0	202	0.0					
87	28.1	21.7	24.1	13.7	75	4.4					

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## Formula cuts with a=25 + Para 8a

A=25									
Paragraph 8A Flexibility									
HS Chapter	Duties after cut			Avg % cut			Applied TL cut		
	Bound all tariff lines		Applied	Bound dutiable		Applied	Count of TL		Applied
	avg	avg	avg	avg	avg	avg	No	No	in %
2	77	78	81	82	82	82	84	84	85
NAMA	15.0	6.9	54.0	3.0	710	7.9			
62	17.9	14.0	48.9	1.1	106	0.0			
87	22.7	19.3	35.0	18.5	97	3.4			

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## Formula cuts with a=30 + Para 8a

A=30									
Paragraph 8A Flexibility									
HS Chapter	Duties after cut			Avg % cut			Applied TL cut		
	Bound all tariff lines		Applied	Bound dutiable		Applied	Count of TL		Applied
	avg	avg	avg	avg	avg	avg	No	No	in %
2	104	105	108	109	109	112	111	111	112
NAMA	16.4	7.0	49.9	2.4	298	6.6			
62	19.2	14.1	45.1	0.0					
87	23.6	19.7	32.2	16.7	92	3.4			

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## Frequency distributions

Markup=5		Swiss Formula: A=10			
Range	Bound	Applied 2005	New bound	New applied	Absolute applied Cut
2	3	4	13	14	16
Number of Tariff Lines in %					
MISSING	4.0				
0	18.8	44.4	18.8	44.4	72.5
0 <= 1	5.9		5.9		3.5
1 <= 2	0.3		0.3	0.0	11.0
2 <= 3	0.3		0.8		3.4
3 <= 4	0.4	0.0	12.2	8.4	4.6
4 <= 5	10.8	38.9	26.8	30.7	0.2
and so on					
>5	59.4	16.7	35.2	16.5	4.8

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## Full results

- The remaining 12 Members will be processed in the coming days (difficult date to say we need to re-visit)
- Loaded to IDB website on continuous basis
  - <https://sft.wto.org>
- Revised Annex tables:
  - additional country pages will be made available by Friday 2 June
- New CD ROM and complete results as Job
  - next week

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## Caveats

cannot be 100% accurate  
indicative

- Selection of flexibilities → mechanical approach
- Effects on applied duties - indicative only in few cases line x line coordination
- Newly acceded Members
- Partially bound HS subheadings
- Non ad valorem duties
- Reductions of base/bound duties <sup>Effect of some mark-up, duty not take into account p. & b)</sup>
- Reductions of dutiable vs all tariff lines <sup>deklarasi konsolidasi</sup>

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## Caveats

- Selection of flexibilities
  - Mechanical best guess
  - Possibly a good starting point
  - Likely to be modified by Members
- Effects on applied duties
  - Accurate "prediction" requires full tariff line link
  - Tariff dispersion affects ease of predictability

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## Caveats

- Partially bound HS subheadings
  - Some unbound national tariff lines may have been left out because no link done as yet
  - Members need to verify and check with Secretariat
- Newly acceded Members
  - Effects on applied rates may be overestimated if bound rates not yet implemented
- Non ad valorem duties
  - AVEs for applied not available for most Members
  - Translation of bound AVE cuts into specific duty cuts

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## Caveats

- Reductions of base/bound duties
  - Higher mark up means :
    - Higher base rates and base rate cuts
    - Higher final bound rates
    - New bound duties under Para 8b include marked up base duties
- Reductions of dutiable vs all tariff lines
  - Different averages can mean the same
  - Transparency in the use of figures required

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## Some fallacies with averages

Same tariff reductions can be summarized in different ways:

- Average % reduction of all tariff lines
- Average % reduction of dutiable tariff lines
- % reduction of the average
  - All tariff lines = Dutiable tariff lines

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## Some fallacies with averages

different numbers can describe the same cuts

TL code	Duty rate	Swiss cut with a=	Cuts in %	
			All TL	Dutiable
TI_1	0	0	0	n.a.
TI_2	5	4	-25	-25
TI_3	5	4	-25	-25
TI_4	10	6	-40	-40
TI_5	30	10	-67	-67
Avg	10.0	4.7	-31	-39
		Cut of average	Average of cuts	
			-53	

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## Technical Questions?

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My thanks to the IDB team

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