

## The Interim Measure for calculating financial contributions: review of cut-off points defining capacity-to-pay groups

### 1. Introduction

The calculation of Financial Contributions for individual Contracting Governments is achieved using the “Interim Measure” that was adopted by the Commission at IWC/54 in Shimonoseki in 2002. It was introduced to alleviate the financial burden of developing countries. In calculating contributions, the Interim Measure takes account of: (1) membership; (2) whaling activities; (3) the size of delegations to the Commission’s Annual Meeting; and (4) a country’s capacity to pay. With respect to capacity to pay, Contracting Governments are allocated into one of four groups depending on their Gross National Income (GNI) and their GNI per capita (GNIPC) as follows:

- Group 1 – countries with GNI < US\$10,000,000,000 and GNIPC <US\$ 10,000;
- Group 2 – countries with GNI > US\$10,000,000,000 and GNIPC <US\$ 10,000;
- Group 3 – countries with GNI < US\$ 1,000,000,000,000 and GNIPC >US\$ 10,000;
- Group 4 – countries with GNI > US\$ 1,000,000,000,000 and GNIPC >US\$ 10,000.

At IWC56 in 2004, the Commission agreed to take into account the special position of Very Small Countries in calculating Financial Contributions (Resolution 2004-4). At IWC57 in 2005 the Commission agreed that the criteria shown below are appropriate to define a “very small country” and that they be applied in the calculation of Financial Contributions for the financial year 2005-06 onwards:

*A “very small country will have the following characteristics and as a “very small country” will be placed in capacity-to-pay Group 2.*

<i>(a) a population of less than 100,000, AND</i>
<i>(b) a GNI of less than USD 5 billion, AND</i>
<i>(c) a GNIPC of more than USD 10,000</i>

Countries placed in Group 1 pay the lowest financial contributions, while those in Group 4 pay the highest. World Bank data for GNI and GNIPC are used. These data are published around April each year but relate to earlier years e.g. the data published in April 2007 refers to 2005. The practice up to IWC/59 was to use the most recent April data to allocate countries into capacity to pay groups in the process of calculating the Financial Contributions to be agreed at the Annual Meeting one or two months later. The cut-off points defining the capacity to pay groups have remained unchanged since IWC/54 in 2002.

During IWC/59, the then accepted procedure for implementing the Interim Measure resulted in the sudden promotion of three countries to higher capacity to pay groups and therefore exposed them to higher levels of Financial Contribution for which they had very little notice and consequently no time in which to make budgetary allowance. After some discussion the Commission therefore agreed:

- (a) that Contracting Governments be allocated to capacity-to-pay groups using the World Bank data on GNI and GNIPC available on 31 December of the previous year and that this take effect for the calculation of the 2007/08 financial contributions. This would provide more time for governments to make sufficient budgetary provision.
- (b) noting that the cut-off points defining the capacity to pay groups had remained unchanged since 2002 and had not be revised to take account of inflation, that the Secretariat be asked to review the cut-off points and report back at IWC/60, including on how they could be reviewed on a periodic basis.

This document therefore explores how the updating of the “cut offs” between group categories of countries (used to define their capacity to pay) to take account of inflation can be achieved and then reviewed on a periodic basis.

## 2. How to adjust for inflation

The cut off points need to be adjusted for inflation and so a method has to be found to achieve this.

Inflation in a country can be represented by the use of an index i.e. a single number summarizing price levels.

Example: Price Index in the year 2000 = 100      Price Index in the year 2005 = 150

The price of an item purchased in the year 2000 can be adjusted to 2005 price levels as follows:

Price in 2000 x (Price Index 2005 / Price Index 2000) = Price in 2005

So for an item costing \$ 50 in 2000, the price in 2005 would be : \$50 x (150/100) = \$ 75

To adjust the cut off-points for inflation requires application of an appropriate index. The data applied to current cut-off points are from the World Bank and so the Secretariat sought advice from the World Bank as to what indexes might be suitable for this purpose.

## 3. How the World Bank adjusts for inflation

The World Bank uses an index for world inflation to adjust its GNIPC data (technical details are included in Appendices 2 and 3). The Bank advised that this index would also be suitable for the adjustment of its GNI data. However, it noted that such an adjustment may not be practical, given that GNI numbers are so large, and questioned whether Contracting Governments would prefer to maintain total GNI thresholds at easily-understandable round numbers.

The inflation index for 2007 will be released by the World Bank in July 2008. The latest index that is currently available is for 2006.

## 4. How often should the IWC review and update the cut-off points to take inflation into account?

The World Bank data available in December 2007 (to be used in the calculation of Financial Contributions for 2008/09) was published in April 2007 and refers to 2005. For the cut-off points be consistent with the published World Bank data (i.e. to 2005) then they should be adjusted from 2002 to 2005 levels.

Given that the GNI and GNIPC data and the inflation index are published by the World Bank on an annual basis, the Secretariat suggests that the cut-off points used in the Interim Measure also be reviewed and updated as appropriate on an annual basis. This is not an onerous task for the Secretariat and would be the fairest procedure for Contracting Governments.

## 5. Where should the cut-off points be set for calculating financial contributions for 2008/09?

Given that the most recent GNI and GNIPC data available are those for 2005 (published in April 2007), it would seem most appropriate to update the cut-off points defining capacity to pay groups set in 2002 to 2005 levels..

The application of the inflation index as used by the World Bank to bring the cut off values up to 2005 levels produces the following result (*please see Appendix 4 for details of the calculations*):

- Group 1 - countries with GNI < US\$ 11,850,000,000 and GNIPC <US\$ 11,850
- Group 2 - countries with GNI > US\$ 11,850,000,000 and GNIPC <US\$ 11,850
- Group 3 - countries with GNI < US\$ 1,185,000,000,000 and GNIPC >US\$ 11,850
- Group 4 - countries with GNI > US\$ 1,185,000,000,000 and GNIPC >US\$ 11,850

Note that the Secretariat has applied the inflation index to both GNIPC and GNI data (and rounded to give sensible numbers).

The criteria used to define a “very small country” would be adjusted for inflation as follows:

(a) a population of less than 100,000, AND
(b) a GNI of less than USD 5.925 billion, AND
(c) a GNIPC of more than USD 11,850

## **6. Affect of revising the cut-off points on allocation to capacity to pay group**

Appendix 1 shows two tables. The left hand table shows the allocation to capacity to pay group when the existing “cut-off points” are updated to 2005 levels together with the World Bank data available in December 2007, published in April 2007 and relating to 2005. The right hand table shows the allocation to capacity to pay group arising when the existing “cut-off points” are applied to the World Bank data available in December 2006, published in April 2006 and relating to 2004, i.e. the situation used for the calculation of Financial Contributions for the year 2007/08.

The tables in Appendix 1 show no difference in allocation to capacity to pay groups.

## **7. Conclusion**

The specific levels of GNI and GNIPC used to define the “cut-off points” for the capacity to pay groups in the Interim Measure agreed at IWC54 in 2002 have not been revised since that time to take account of inflation. The World Bank has provided the necessary index to adjust the “cut-off points” which originated in 2002, to 2005 levels. The application of the inflation-adjusted “cut-off points”, together with World Bank data published in April 2007 (and available for use in Dec 07 preceding IWC60), produce an allocation to capacity to pay groups for 2008/09 unchanged from 2007/08.

The “cut-off points” could be reviewed and updated annually which the Secretariat believes would be the fairest procedure for Contracting Governments.

***Action required: The F&A Committee is invited to:***

- (i) review and comment on the document;***
- (ii) discuss the Secretariat’s recommendation to update the current cut-off points to 2005 levels to be consistent with the GNI and GNIPC data available in December 2007 and thereafter to review and update the cut-off points on an annual basis;***
- (iii) recommend to the Commission that it adopt the Secretariat’s recommendation amended as appropriate.***

# Appendix 1

Allocation to capacity to pay group arising from the use of  
updated "cut-off points" to 2005 levels and WB data  
available as at 31 December 2007 (2005 data \*\*)

(alternative to calculate Financial Contributions for 2008/09)

World Bank – World Development Indicators Database (extract)

Allocation to capacity to pay group arising from the use of  
"cut-off points" at 2002 levels and WB data available  
as at 31 December 2006 (2004 data \*\*)

(as used to calculate Financial Contributions for 2007/08)

IWC.CCG.640 - extract from Table 5

Contracting Governments - May 08	World Bank data (pub Apr07)		Capacity to Pay Group
	GNI	GNI/capita	
	US\$ billion	US\$	
1 Antigua and Barbuda	0.7592	9,480	1
2 Argentina	173.1	4,470	2
3 Australia	673.2	33,120	3
4 Austria	306.2	37,190	3
5 Belgium	378.7	36,140	3
6 Belize	1	3,570	1
7 Benin	4.3	510	1
8 Brazil	662	3,550	2
9 Cambodia	6.1	430	1
10 Cameroon	16.4	1,000	2
11 Chile	95.7	5,870	2
12 China, P.R of	2300	1,740	2
13 Costa Rica	20.3	4,700	2
14 Cote d'Ivoire	15.7	870	2
15 Croatia	36.9	8,290	2
16 Cyprus	13.6	16,510	3
17 Czech Republic	114.8	11,220	2
18 Denmark	261.8	48,330	3
19 Dominica	0.2621	3,670	1
20 Ecuador	34.7	2,620	2
21 Finland	196.9	37,530	3
22 France	2200	34,600	4
23 Gabon	6.9	5,010	1
24 Gambia, The	0.442	290	1
25 Germany	2900	34,870	4
26 Greece	220.3	19,840	3
27 Grenada	0.3965	3,750	1
28 Guatemala	30.3	2,400	2
29 Guinea	3.9	420	1
30 Guinea-Bissau	0.2824	180	1
31 Hungary	101.6	10,070	2
32 Iceland	14.4	48,570	3
33 India	804.1	730	2
34 Ireland	171.1	41,140	3
35 Israel	128.7	18,580	3
36 Italy	1800	30,250	4
37 Japan	5000	38,950	4

Contracting Governments - Aug 07	World Bank data (pub Apr06)		Capacity to Pay Group
	GNI	GNI/capita	
	US\$ billion	US\$	
1 Antigua and Barbuda	0.7592	9,480	1
2 Argentina	137.3	3,580	2
3 Australia	544.3	27,070	3
4 Austria	263.9	32,280	3
5 Belgium	326	31,280	3
6 Belize	1.1	3,940	1
7 Benin	3.7	450	1
8 Brazil	551.6	3,000	2
9 Cambodia	4.8	350	1
10 Cameroon	13	810	2
11 Chile	84.2	5,220	2
12 China, P.R of	1900	1,500	2
13 Costa Rica	19	4,470	2
14 Cote d'Ivoire	13.6	760	2
15 Croatia	30.3	6,820	2
16 Cyprus	13.6	16,510	3
17 Czech Republic	93.3	9,130	2
18 Denmark	220.2	40,750	3
19 Dominica	0.2621	3,670	1
20 Ecuador	28.9	2,210	2
21 Finland	171.9	32,880	3
22 France	1900	30,370	4
23 Gabon	5.6	4,080	1
24 Gambia, The	0.4137	280	1
25 Germany	2500	30,690	4
26 Greece	185	16,730	3
27 Grenada	0.3965	3,750	1
28 Guatemala	26.9	2,190	2
29 Guinea	3.8	410	1
30 Guinea-Bissau	0.2502	160	1
31 Hungary	84.6	8,370	2
32 Iceland	11.1	37,920	3
33 India	673.2	620	2
34 Ireland	139.6	34,310	3
35 Israel	118	17,360	3
36 Italy	1500	26,280	4
37 Japan	4700	37,050	4

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Contracting Governments - May 08		World Bank data (pub Apr07)		Capacity to Pay Group
		GNI	GNI/capita	
		US\$ billion	US\$	
38	Kenya	18.4	540	2
39	Kiribati	0.095	970	1
40	Korea, Rep of	765	15,840	3
41	Lao PDR	2.6	430	1
42	Luxembourg	25.6	56,380	3
43	Mali	5.2	380	1
44	Marshall Islands	0.1851	2,930	1
45	Mauritania	1.8	580	1
46	Mexico	753.4	7,310	2
47	Monaco #1 *1 *3	11.86	11,849	2
48	Mongolia	1.8	690	1
49	Morocco	52.6	1,740	2
50	Nauru *1*2	0.1	7,270	1
51	Netherlands	642	39,340	3
52	New Zealand	106.3	25,920	3
53	Nicaragua	4.9	950	1
54	Norway	281.5	60,890	3
55	Oman	23	9,070	2
56	Palau	0.1542	7,670	1
57	Panama	15	4,630	2
58	Peru	74	2,650	2
59	Portugal	181.3	17,190	3
60	Romania	84.6	3,910	2
61	Russian Federation	638.1	4,460	2
62	San Marino #2 *1 *3	11.86	11,849	2
63	Senegal	8.2	700	1
64	Slovak Republic	42.8	7,950	2
65	Slovenia	34.9	17,440	3
66	Solomon Islands	0.2967	620	1
67	South Africa	223.5	4,770	2
68	Spain	1100	25,250	3
69	St Kitts and Nevis	0.3259	6,980	1
70	St Vincent & The G.	0.4207	3,530	1
71	St. Lucia	0.6844	4,180	1
72	Suriname	1.1	2,540	1
73	Sweden	369.1	40,910	3
74	Switzerland	411.4	55,320	3
75	Togo	2.2	350	1

Contracting Governments - Aug 07		World Bank data (pub Apr06)		Capacity to Pay Group
		GNI	GNI/capita	
		US\$ billion	US\$	
38	Kenya	16.1	480	2
39	Kiribati	0.095	970	1
40	Korea, Rep of	673.1	14,000	3
41	Lao PDR	2.3	390	1
42	Luxembourg	25.6	56,380	3
43	Mali	4.3	330	1
44	Marshall Islands	0.1421	2,320	1
45	Mauritania	1.6	530	1
46	Mexico	704.9	6,790	2
47	Monaco #1 *1 *3	10.1	9,999	2
48	Mongolia	1.5	600	1
49	Morocco	46.9	1,570	2
50	Nauru *1*2	0.1	7,270	1
51	Netherlands	523.1	32,130	3
52	New Zealand	81.2	19,990	3
53	Nicaragua	4.5	830	1
54	Norway	237.8	51,810	3
55	Oman	23	9,070	2
56	Palau	0.1373	6,870	1
57	Panama	13.4	4,210	2
58	Peru	65	2,360	2
59	Portugal	149.3	14,220	3
60	Russian Federation	488.5	3,400	2
61	San Marino #2 *1 *3	10.1	9,999	2
62	Senegal	7.2	630	1
63	Slovak Republic	34.9	6,480	2
64	Slovenia	29.5	14,770	3
65	Solomon Islands	0.2625	560	1
66	South Africa	165.3	3,630	2
67	Spain	919.1	21,530	3
68	St Kitts and Nevis	0.3259	6,980	1
69	St Vincent & The G.	0.4026	3,400	1
70	St. Lucia	0.6844	4,180	1
71	Suriname	0.9967	2,230	1
72	Sweden	322.3	35,840	3
73	Switzerland	366.5	49,600	3
74	Togo	1.9	310	1

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Contracting Governments - May 08		World Bank data (pub Apr07)		Capacity to Pay Group
		GNI	GNI/capita	
		US\$ billion	US\$	
76	Tuvalu *1*2	0.003	825	1
77	United Kingdom	2300	37,740	4
78	Uruguay	15.1	4,360	2
79	USA	12900	43,560	4

Contracting Governments - Aug 07		World Bank data (pub Apr06)		Capacity to Pay Group
		GNI	GNI/capita	
		US\$ billion	US\$	
75	Tuvalu *1*2	0.003	825	1
76	United Kingdom	2000	33,630	4
77	USA	12200	41,440	4

# = Very Small Country Status (#1 population: (July 2006 est.): 32,543 #2 population (September 2006): 30,002) - Data from US State Dept

\*1 = No World Bank data. \*2 Data (if any) provided by Lonely Planet Travel Guide \*3 Data shown is arbitrary to fit into Group 2.

Source (*unless indicated otherwise*) : World Development Indicators database, published April 2006 and April 2007

\*\* Data from earlier years may be used where necessary

## Appendix 2

World Bank email response to a question as to whether an index exists that could be applied to the GNI and GNIPC to bring them up-to-date.

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ECDG Client Services

Thanks for contacting the World Bank.

Here is a file with the SDR deflators and international inflation rates that we use to adjust our World Bank Atlas method GNI per capita thresholds.

The inflation rate for Japan, the United Kingdom, the United States, and the Euro Zone, representing international inflation, is measured by the change in the SDR deflator. Special drawing rights, or SDRs, are the IMF's unit of account. The SDR deflator is calculated as a weighted average of the above country's GDP deflators in SDR terms, the weights being the amount of each country's currency in one SDR unit. Weights vary over time because both the composition of the SDR and the relative exchange rates for each currency change.

Our practice is to multiply the existing thresholds each year by the SDR inflation rate and then round to the nearest number ending in 5. We set the thresholds to a number ending in 5 since our country data are rounded to 10.

That way no country will fall right on the threshold.

For example, if the 2002 thresholds were \$1000 and \$5000, then 2006 thresholds would be \$1225 and \$6135 using our methodology.

(See attached file: SDR.xls)

Client Services Team  
Development Data Group  
The World Bank

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*Extract from file SDR.xls*

Year	SDR deflator in US\$ terms	SDR inflation rate (% change)
2002	241.5	-1.4
2003	249.9	3.5
2004	268.1	7.3
2005	285.6	6.5
2006	296.2	3.7
Note: The World Bank Atlas method uses the SDR deflator as a measure of world inflation.		
Source: World Bank.		

### Comment from the Secretariat

In the above email an abbreviated example is given to show the uplift of a 2002 value to a 2006 value. A fuller explanation is as follows:

Example (please refer to the above table for the 2002 and 2006 deflators)

2002 Threshold = (a) \$1000 and (b) \$ 5,000

2006 Threshold = 2002 Threshold x (2006 deflator / 2002 deflator)

2006 Threshold (a) 1225 = 1000 x (296.2 / 241.5)

2006 Threshold (b) 6135 = 5000 x (296.2 / 241.5)

### Appendix 3

World Bank email response to a question as to whether there was any reason that the index usually applied by the World Bank to their GNI per capita thresholds (Atlas method) could not be applied to the GNI (Atlas method) as well?

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DECDG Client Services

From our specialist:

"Our income classifications are based Atlas method GNI per capita. We do not set thresholds for total GNI. However, there's no problem applying SDR deflators and international inflation rates to adjust a total GNI threshold. It may not be practical, though, given that GNI is so large. They may want to maintain total GNI thresholds at easily-understandable round numbers."

Client Services & Communications  
Development Data Group  
The World Bank  
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## Appendix 4

### Calculation of updated “cut-off points”

The application of the index as used by the World Bank to bring the 2002 cut off values up to 2005 levels is achieved as follows:

**Standard Table**

Cut-off point (COP) 2002 Levels	2002 Index	2005 Index	Actual (COP) 2005 Level	Rounded (COP) 2005 Level	Rnd / Act %
A	B	C	$A \times (C/B) = D$	$E = D$ (rounded)	$E/D$ (%)
10,000,000,000 (GNI)	241.5	285.6	11,826,086,957	11,850,000,000	100.20%
1,000,000,000,000 (GNI)	241.5	285.6	1,182,608,695,652	1,185,000,000,000	100.20%
10,000 (GNIPC)	241.5	285.6	11,826	11,850	100.20%

**Very Small Country Table**

Cut-off point (COP) 2002 Levels	2002 Index	2005 Index	Actual 2005 Level	Rounded 2005 Level	Rnd / Act %
A	B	C	$A \times (C/B) = D$	$E = D$ (rounded)	$E/D$ (%)
5,000,000,000 (GNI)	241.5	285.6	5,913,043,478	5,925,000,000	100.20%
10,000 (GNIPC)	241.5	285.6	11,826	11,850	100.20%

#### *Rounding of GNI and GNIPC cut-off points after indexation*

In Appendix 3 the World Bank notes the practical difficulties of making adjustments to numbers as large as GNI and still maintain cut-off points (or thresholds) at easily understandable round numbers.

As the Bank applies their index for world inflation to adjust GNIPC data, the Secretariat has followed this example and then by extension applied the result to the GNI data as follows:

The GNIPC cut-off at the 2002 level = USD 10,000 and USD 11,826 after indexation to the 2005 level. Drawing on the example given by the Bank in rounding indexed numbers to the nearest number ending in 5 (please see Appendix 2), the Secretariat has rounded the indexed GNIPC cut-off to the nearest 50 or 100 (e.g. round 24 down to 00 or round 26 up to 50). The unadjusted GNIPC cut-off indexed to 2005 has therefore been rounded from USD 11,826 to USD 11,850.

The 2002 GNI cut-off points are multiples of the 2002 GNIPC cut-off point. A common index can therefore be applied to the 2002 GNI and 2002 GNIPC cut-off points and the resulting 2005 GNI numbers will still be multiples of the 2005 GNIPC numbers. The Secretariat has taken the rounded 2005 GNIPC cut-off and applied the original GNI multiples, in order to produce 2005 GNI cut-off points (or thresholds) at easily understandable round numbers.

In the four tables shown below (Example 1 – Example 4) arbitrary changes have been made to the 2005 index to illustrate the effect of rounding on the GNI and GNIPC numbers. The Rounded Cut-Off Point as a percentage of the Indexed Cut-Off Point (un-rounded) varies from 99.85% in Example 1 to 100.07% in Example 4. This compares with 100.20% shown using actual indices in the Standard Table and Very Small Country Table shown above.

The above rounding method is suggested by the Secretariat as a viable option to produce GNI cut-off points (or thresholds) at easily understandable round numbers with minimal variation from the original un-rounded indexed number.

**Appendix 4** (continued)**Example 1**

Cut-off point (COP) 2002 Levels	2002 Index	Example 1 2005 Index 1	Example 1 (COP) 2005 Level	Rounded (COP) 1 2005 Level	Rnd / Act %
A	B	C	$A \times (C/B) = D$	E = D (rounded)	E/D (%)
10,000,000,000	241.5	286.6	11,867,494,824	11,850,000,000	99.85%
1,000,000,000,000	241.5	286.6	1,186,749,482,402	1,185,000,000,000	99.85%
10,000	241.5	286.6	11,867	11,850	99.85%

**Example 2**

Cut-off point (COP) 2002 Levels	2002 Index	Example 2 2005 Index 2	Example 2 (COP) 2005 Level	Rounded (COP) 2 2005 Level	Rnd / Act %
A	B	C	$A \times (C/B) = D$	E = D (rounded)	E/D (%)
10,000,000,000	241.5	287.6	11,908,902,692	11,900,000,000	99.93%
1,000,000,000,000	241.5	287.6	1,190,890,269,151	1,190,000,000,000	99.93%
10,000	241.5	287.6	11,909	11,900	99.93%

**Example 3**

Cut-off point (COP) 2002 Levels	2002 Index	Example 3 2005 Index 3	Example 3 (COP) 2005 Level	Rounded (COP) 3 2005 Level	Rnd / Act %
A	B	C	$A \times (C/B) = D$	E = D (rounded)	E/D (%)
10,000,000,000	241.5	288.6	11,950,310,559	11,950,000,000	100.00%
1,000,000,000,000	241.5	288.6	1,195,031,055,901	1,195,000,000,000	100.00%
10,000	241.5	288.6	11,950	11,950	100.00%

**Example 4**

Cut-off point (COP) 2002 Levels	2002 Index	Example 4 2005 Index 4	Example 4 (COP) 2005 Level	Rounded (COP) 4 2005 Level	Rnd / Act %
A	B	C	$A \times (C/B) = D$	E = D (rounded)	E/D (%)
10,000,000,000	241.5	289.6	11,991,718,427	12,000,000,000	100.07%
1,000,000,000,000	241.5	289.6	1,199,171,842,650	1,200,000,000,000	100.07%
10,000	241.5	289.6	11,992	12,000	100.07%