



Detailed explanation of the Proposed Dues Formula

Introduction

The IFUW dues are currently calculated using a single full *per capita* rate of 18 Swiss francs. Under the current sliding scale only two national federations and associations (NFAs), the American Association (AAUW) and the Canadian Federation (CFUW), benefit from a reduction because of their membership numbers. A reduction (maximum 60%) is calculated separately for NFAs in countries with a low *per capita* gross national income (GNI).

The proposed dues formula would still reward higher membership numbers with a decrease in dues and provide for a decrease in dues for NFAs in countries with a low per capita GNI, but it uses a single formula that would be applied to all affiliates. The formula uses mathematical logarithms to provide a meaningful and comparable base for the calculation of dues. The formula is based on seven bands (or levels) of *per capita* dues. The benefit of using bands is that there would only be seven possible dues amounts, instead of the individual amounts that are calculated currently for every NFA that receives a reduction as a result of low per capita GNI. The bands would also provide an incentive to NFAs to increase their membership numbers in order to move into a lower band.

AAUW has not been included in the final step of these calculations, because the calculations are based on the IFUW's Triennial planning 2008-2010. This planning does not include any dues income from AAUW.

How the Formula Works

The formula uses a standard mathematical method of logarithms to put membership numbers and gross national income into a comparable form.

The natural logarithm is determined for the per capita GNI for each member NFA – Ln(GNI) – the poorer the country, the lower the log number. As the log number becomes smaller, the reduction in dues increases. Ln(GNI) is multiplied by 2 to give the GNI more weighting.

The natural logarithm is also determined for the membership numbers for each member NFA – Ln(Membership) – the greater the number of members, the larger the log number. As this log number becomes greater, the reduction in dues increases.

The two logarithms for an NFA are then combined in the following formula to determine which of the seven per capita levels should apply to that NFA:

$$x = (2 \times \text{Ln}(\text{GNI per capita})) - \text{Ln}(\text{Membership})$$

- If x is less than 7, the per capita dues is 3 Swiss francs per member
- If x is between 7 and 8, the per capita dues is 5.5 Swiss francs per member
- If x is between 8 and 9, the per capita dues is 8 Swiss francs per member
- If x is between 9 and 10, the per capita dues is 10.5 Swiss francs per member
- If x is between 10 and 11, the per capita dues is 13 Swiss francs per member
- If x is between 11 and 12, the per capita dues is 15.5 Swiss francs per member
- If x is greater than 12, the per capita dues is 18 Swiss francs per member.

To have the lowest dues level, an NFA must have a low per capita GNI and a large number of members. The highest dues level is paid by NFAs with a high GNI and a low number of members.

The range within which the dues model will operate is determined by the agreed dues per capita decided by Conference (in this case 18 Swiss francs), where the maximum dues per capita equals the dues set by Conference. The minimum was chosen based on the current maximum reduction allowed.

Seven bands were chosen to give more incentive to increase membership and the bands are divided equally within the range. The average of the calculated figures is allocated to the highest band and the rest of the calculated figures are divided evenly through the bands*.

* The table entitled "Calculation of Dues using the proposed Dues Formula" shows the predicted impact on dues for each NFA.

Table: Calculation of Dues using the proposed Dues Formula

(Based on Natural Logarithms)

Gross National Income (GNI) per capita, in US\$
data from World Bank Atlas 2005

Rating Scale

Membership figures at April 2007

Band	Range
18	$x \geq 12$
15.5	$12 > x \geq 11$
13	$11 > x \geq 10$
10.5	$10 > x \geq 9$
8	$9 > x \geq 8$
5.5	$8 > x \geq 7$
3	$x < 7$

Country	GNI per capita in US\$	Current Reduction %	(Ln GNI) x 2	Membership	-Ln M/Ship2x	Sum Ln(GNI) - Ln(M/Ship)	Dues in CHF	Proposed Dues Model Income 2009 in CHF	Dues Income 2008 with GNI reduct. present system
Albania	2,580	36	15.71	31	-3.43	12.28	18	558	355
Argentina	4,470	19	16.81	251	-5.53	11.28	15.5	3,891	3,654
Armenia	1,470	47	14.59	107	-4.67	9.91	10.5	1,124	1,029
Australia	32,220		20.76	912	-6.82	13.95	18	16,416	16,416
Austria	36,980		21.04	426	-6.05	14.98	18	7,668	7,668
Bangladesh	470	56	12.31	160	-5.08	7.23	5.5	880	1,276
Belgium	35,700		20.97	100	-4.61	16.36	18	1,800	1,800
Bolivia	1,010	51	13.84	120	-4.79	9.05	10.5	1,260	1,063
Brazil	3,460	28	16.30	65	-4.17	12.12	18	1,170	838
Bulgaria	3,450	28	16.29	55	-4.01	12.28	18	990	708
Burkina Faso	400	56	11.98	20	-3.00	8.99	8	160	157
Burundi	100	59	9.21	35	-3.56	5.65	3	105	258
Cameroon	1,010	51	13.84	105	-4.65	9.18	10.5	1,103	931
Canada	32,600	24	20.78	9,744	-9.18	11.60	15.5	151,032	133,298
Chile	5,870	6	17.36	20	-3.00	14.36	18	360	337
Costa Rica	4,590	18	16.86	50	-3.91	12.95	18	900	738
Croatia	8,060		17.99	90	-4.50	13.49	18	1,620	1,620
Denmark	47,390		21.53	100	-4.61	16.93	18	1,800	1,800
Egypt	1,250	49	14.26	100	-4.61	9.66	10.5	1,050	926
El Salvador	2,450	38	15.61	150	-5.01	10.60	13	1,950	1,685
Estonia	9,100		18.23	47	-3.85	14.38	18	846	846
Fiji	3,280	30	16.19	20	-3.00	13.20	18	360	252
Finland	37,460		21.06	1,144	-7.04	14.02	18	20,592	20,592
France	34,810		20.92	675	-6.51	14.40	18	12,150	12,150
Georgia	1,350	48	14.42	20	-3.00	11.42	15.5	310	188
Germany	34,580		20.90	598	-6.39	14.51	18	10,764	10,764
Great Britain	37,600		21.07	840	-6.73	14.34	18	15,120	15,120
Guatemala	2,400	38	15.57	30	-3.40	12.17	18	540	334
Guinea	370	57	11.83	20	-3.00	8.83	8	160	156
Hong Kong	27,670		20.46	101	-4.62	15.84	18	1,818	1,818
Iceland	46,320		21.49	105	-4.65	16.83	18	1,890	1,890
India	720	53	13.16	612	-6.42	6.74	3	1,836	5,132
Indonesia	1,280	48	14.31	20	-3.00	11.31	15.5	310	186
Ireland	40,150		21.20	370	-5.91	15.29	18	6,660	6,660
Israel	18,620		19.66	172	-5.15	14.52	18	3,096	3,096
Italy	30,010		20.62	176	-5.17	15.45	18	3,168	3,168
Japan	38,980		21.14	1,250	-7.13	14.01	18	22,500	22,500
Kazakhstan	2,930	33	15.97	20	-3.00	12.97	18	360	240
Kenya	530	55	12.55	20	-3.00	9.55	10.5	210	161
Korea	15,830		19.34	450	-6.11	13.23	18	8,100	8,100
Lebanon	6,180	4	17.46	110	-4.70	12.76	18	1,980	1,911
Lithuania	7,050		17.72	60	-4.09	13.63	18	1,080	1,080
Luxembourg	65,630		22.18	60	-4.09	18.09	18	1,080	1,080
Mexico	7,310		17.79	270	-5.60	12.20	18	4,860	4,860
Moldova	880	52	13.56	20	-3.00	10.56	13	260	173
Mongolia	690	54	13.07	20	-3.00	10.08	13	260	167
Nepal	270	58	11.20	51	-3.93	7.27	5.5	281	390
Netherlands	36,620		21.02	3,856	-8.26	12.76	18	69,408	69,408
New Zealand	25,960		20.33	1,065	-6.97	13.36	18	19,170	19,170
Nigeria	560	55	12.66	310	-5.74	6.92	3	930	2,518
Norway	59,590		21.99	97	-4.57	17.42	18	1,746	1,746
Pakistan	690	54	13.07	100	-4.61	8.47	8	800	834
Panama	4,630	18	16.88	55	-4.01	12.87	18	990	815
Philippines	1,300	48	14.34	110	-4.70	9.64	10.5	1,155	1,027
Poland	7,110		17.74	20	-3.00	14.74	18	360	360
Romania	3,830	25	16.50	104	-4.64	11.86	15.5	1,612	1,404
Russian Federation	4,460	19	16.81	71	-4.26	12.54	18	1,278	1,032
Rwanda	230	58	10.88	100	-4.61	6.27	3	300	758
Samoa	2,090	41	15.29	20	-3.00	12.29	18	360	213

	GNI per capita in US\$	Current Reduction %	(Ln GNI) x 2	Membership	-Ln M/Ship2x	Sum Ln(GNI) - Ln(M/Ship)	Dues in CHF	Proposed Dues Model Income 2009 in CHF	Dues Income 2008 with GNI reduct. present system
Senegal	710	54	13.13	20	-3.00	10.13	13	260	167
Sierra Leone	220	58	10.79	70	-4.25	6.54	3	210	529
Singapore	27,490		20.44	66	-4.19	16.25	18	1,188	1,188
Slovenia	17,350		19.52	55	-4.01	15.52	18	990	990
Solomon Islands	590	55	12.76	20	-3.00	9.76	10.5	210	163
South Africa	4,960	15	17.02	58	-4.06	12.96	18	1,044	891
Spain	25,360		20.28	30	-3.40	16.88	18	540	540
Sri Lanka	1,160	49	14.11	335	-5.81	8.30	8	2,680	3,051
Sweden	41,060		21.25	181	-5.20	16.05	18	3,258	3,258
Switzerland	54,930		21.83	899	-6.80	15.03	18	16,182	16,182
Tanzania	340	57	11.66	20	-3.00	8.66	8	160	155
Thailand	2,750	35	15.84	116	-4.75	11.09	15.5	1,798	1,360
Tonga	2,190	40	15.38	30	-3.40	11.98	15.5	465	324
Turkey	4,710	17	16.91	951	-6.86	10.06	13	12,363	14,218
Turkish Cyprus	16,510		19.42	100	-4.61	14.82	18	1,800	1,800
Uganda	280	57	11.27	100	-4.61	6.66	3	300	766
Uruguay	4,360	20	16.76	55	-4.01	12.75	18	990	791
USA	43,740		21.37	90,000	-11.41	9.96	10.5	-	
Vanuatu	1,600	45	14.76	20	-3.00	11.76	15.5	310	197
Zimbabwe	340	57	11.66	25	-3.22	8.44	8	200	194
					Maximum	18.09		459,483	445,621
					Minimum	5.65			
					Average	12.07			