

Olympics 2000: Some Statistical Results

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I include below two ways of looking at the olympic medal results by country. First, I present the data on a per capita basis, showing that the ranking comes out quite differently from the one reported by the media.

Second, I regress medals per capita on income (GDP per capita), the size of the state (government consumption as % of GDP), and democracy (ten-point scale calculated by Gurr and Jagers, www.bsos.umd.edu/cidcm/polity/).

1. Ranking according to total medals per 100 million population

Country Name	Medals per capita	Number of medals
Bahamas,The	680.27	2
Barbados	376.46	1
Iceland	364.96	1
Australia	309.32	58
Jamaica	271.74	7
Cuba	261.19	29
Norway	225.63	10
Estonia	206.94	3
Hungary	168.08	17
Belarus	166.03	17
Netherlands	159.26	25
Bulgaria	157.44	13
TrinidadandTobago	155.63	2
Sweden	135.57	12
Lithuania	135.03	5
Qatar	134.71	1
Switzerland	126.65	9
Greece	123.63	13
Latvia	122.50	3
Romania	115.54	26
Denmark	113.19	6
Georgia	110.25	6
NewZealand	105.48	4
Slovenia	100.91	2
SlovakRepublic	92.75	5
CzechRepublic	77.71	8
Finland	77.62	4
Germany	69.47	57

France	64.57	38
Korea,Rep.	60.31	28
RussianFederation	59.90	88
Italy	59.04	34
CostaRica	56.72	2
Kuwait	53.59	1
Macedonia,FYR	49.75	1
Belgium	49.00	5
UnitedKingdom	47.41	28
Moldova	46.53	2
Canada	46.20	14
Ukraine	45.73	23
Kazakhstan	44.89	7
Croatia	44.43	2
Azerbaijan	37.93	3
Austria	37.14	3
Poland	36.21	14
UnitedStates	35.89	97
Uruguay	30.40	1
Yugoslavia,FR(Serbia/Montenegro)	28.26	3
Spain	27.94	11
Ireland	26.99	1
Armenia	26.35	1
Kenya	23.89	7
Taiwan	22.73	5
Portugal	20.06	2
Morocco	18.00	5
Korea,Dem.Rep.	17.26	4
Israel	16.77	1
Algeria	16.71	5
Uzbekistan	16.63	4
Japan	14.24	18
Ethiopia	13.06	8
SouthAfrica	12.08	5
Argentina	11.07	4
SaudiArabia	9.64	2
Brazil	7.23	12
Cameroon	6.99	1
Chile	6.75	1
Iran,IslamicRep.	6.46	4
Turkey	6.30	4
Mexico	6.26	6
Mozambique	5.90	1
SriLanka	5.33	1
Thailand	4.90	3
China	4.76	59
Indonesia	2.95	6
Nigeria	2.48	3

Colombia	2.45	1
Vietnam	1.31	1
India	0.10	1

2. Regression results

The results for 112 countries (with or without medals) show that the wealthier the country, the greater the size of the state, and the more democratic the country, the more medals per capita.

I am personally quite happy about these results. After all, we all know that the Olympics are about money, and government intervention. I am encouraged to see that controlling for money and government intervention, the more democratic a country, the more medals.

Regression with robust standard errors

Number of obs = 112
 F(3, 108) = 6.07
 Prob > F = 0.0007
 R-squared = 0.1701
 Root MSE = 45.683

medalpc	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
GDP percapita	.0024763	.00143	1.732	0.086	-.0003582	.0053109
State size	1.349338	.7342177	1.838	0.069	-.1060092	2.804684
Democracy	3.204952	1.42328	2.252	0.026	.3837651	6.026139
Constant	-22.63615	10.76569	-2.103	0.038	-43.97561	-1.2967