

Measuring and predicting success

*Simon Shibli*

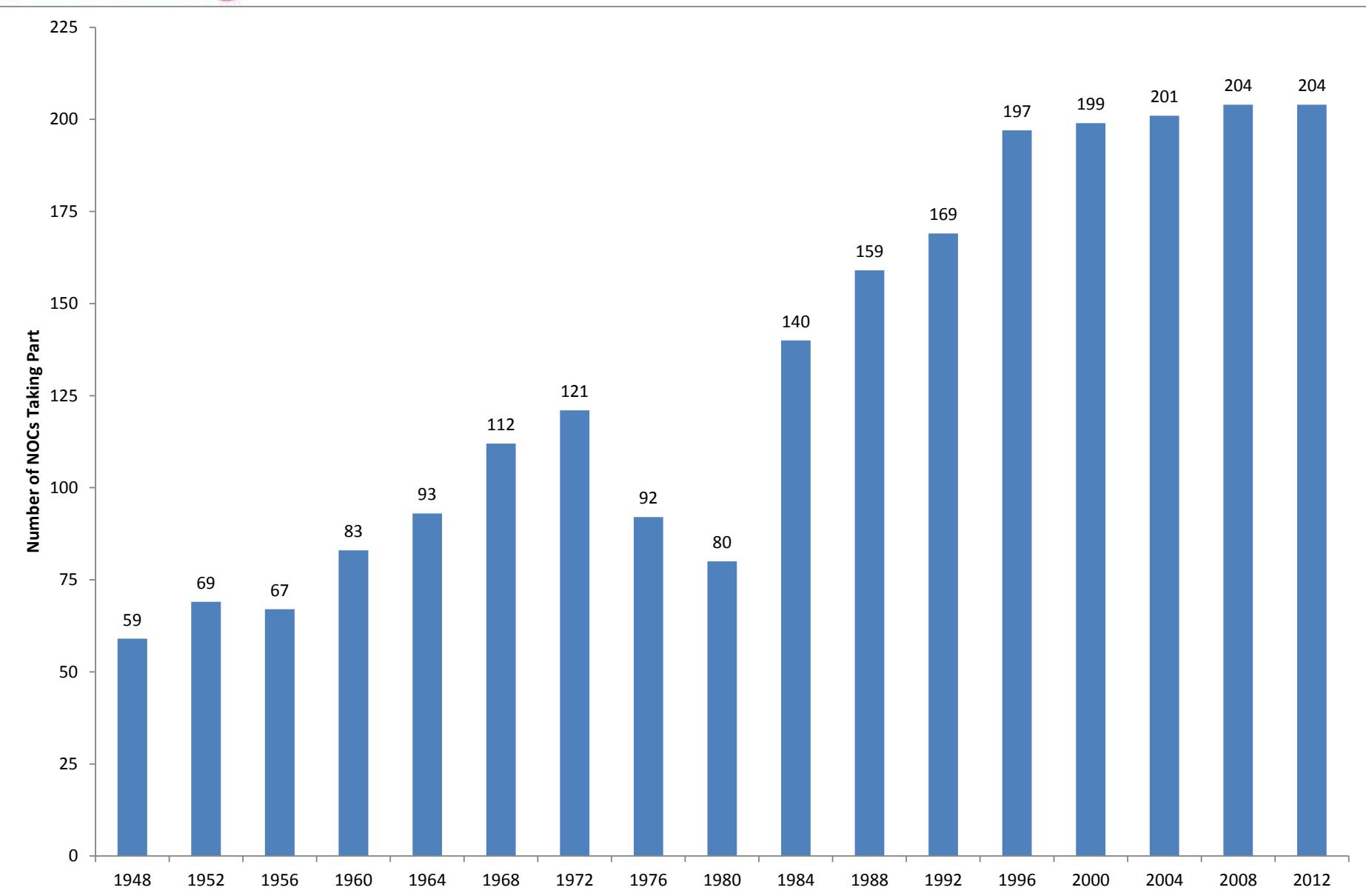


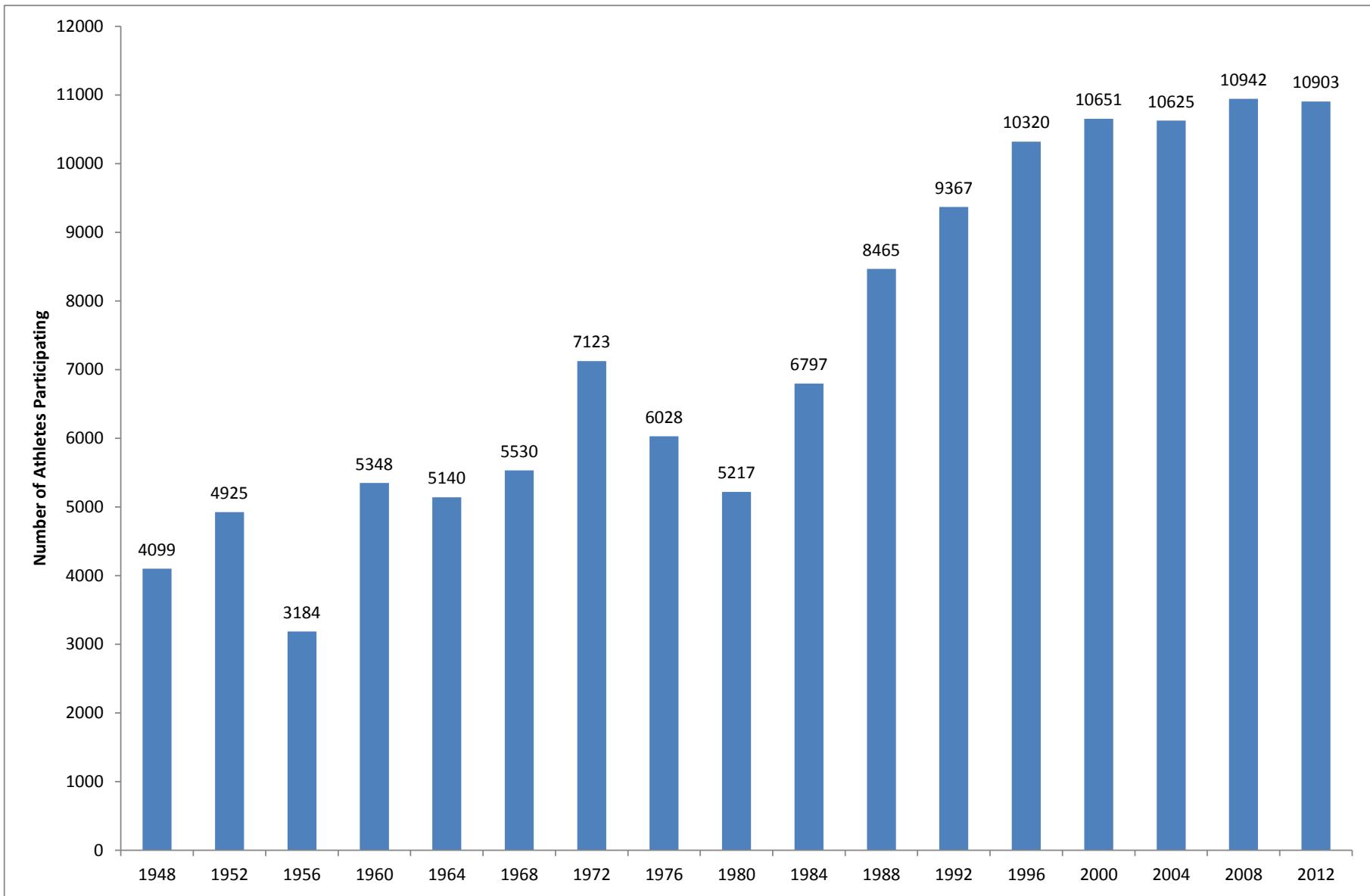
## Presentation Outline

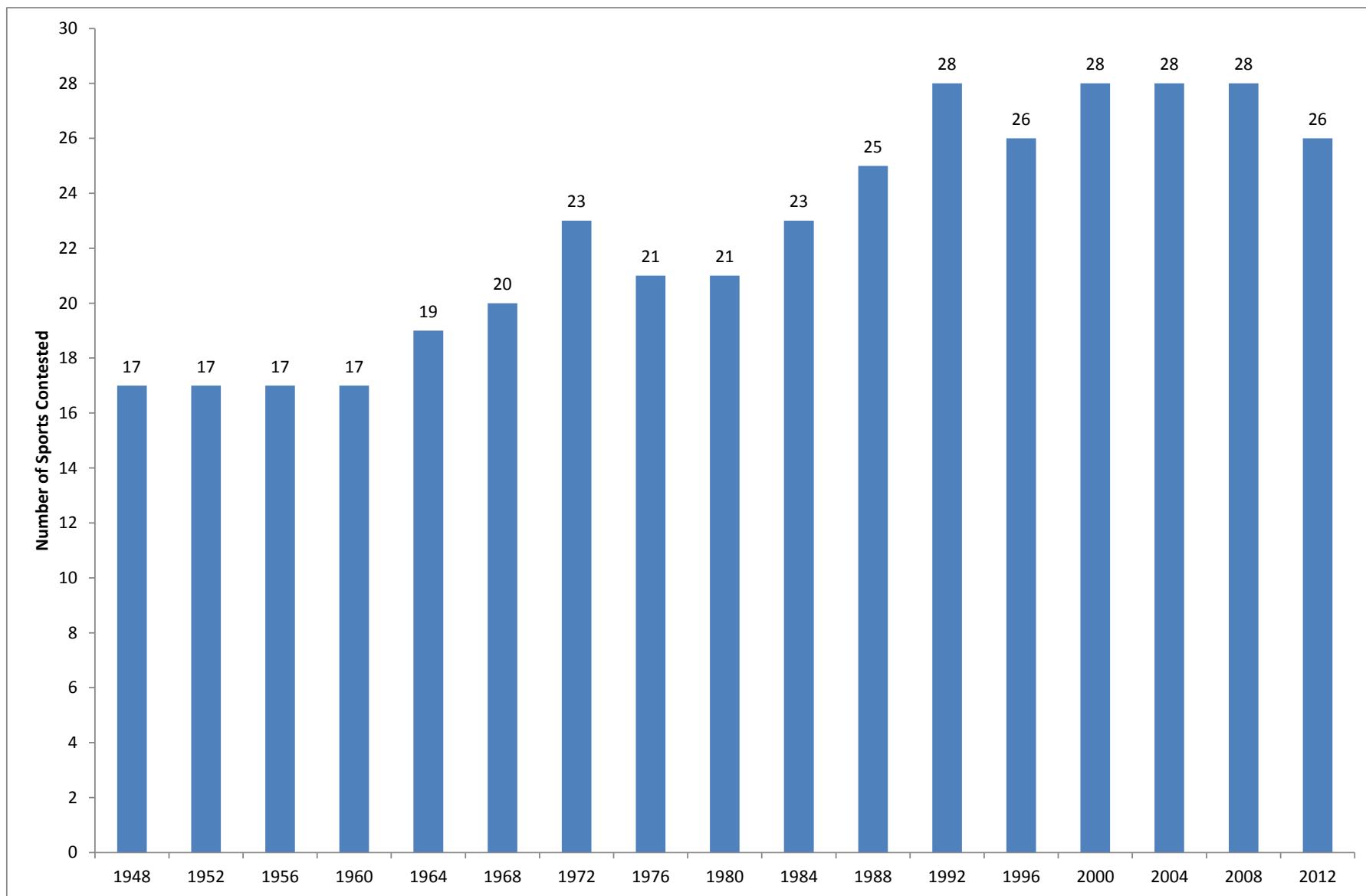
1. Background context
2. The distribution of Olympic success
3. The distribution of Olympic talent
4. Measuring performance
5. Linking INPUT to OUTPUT

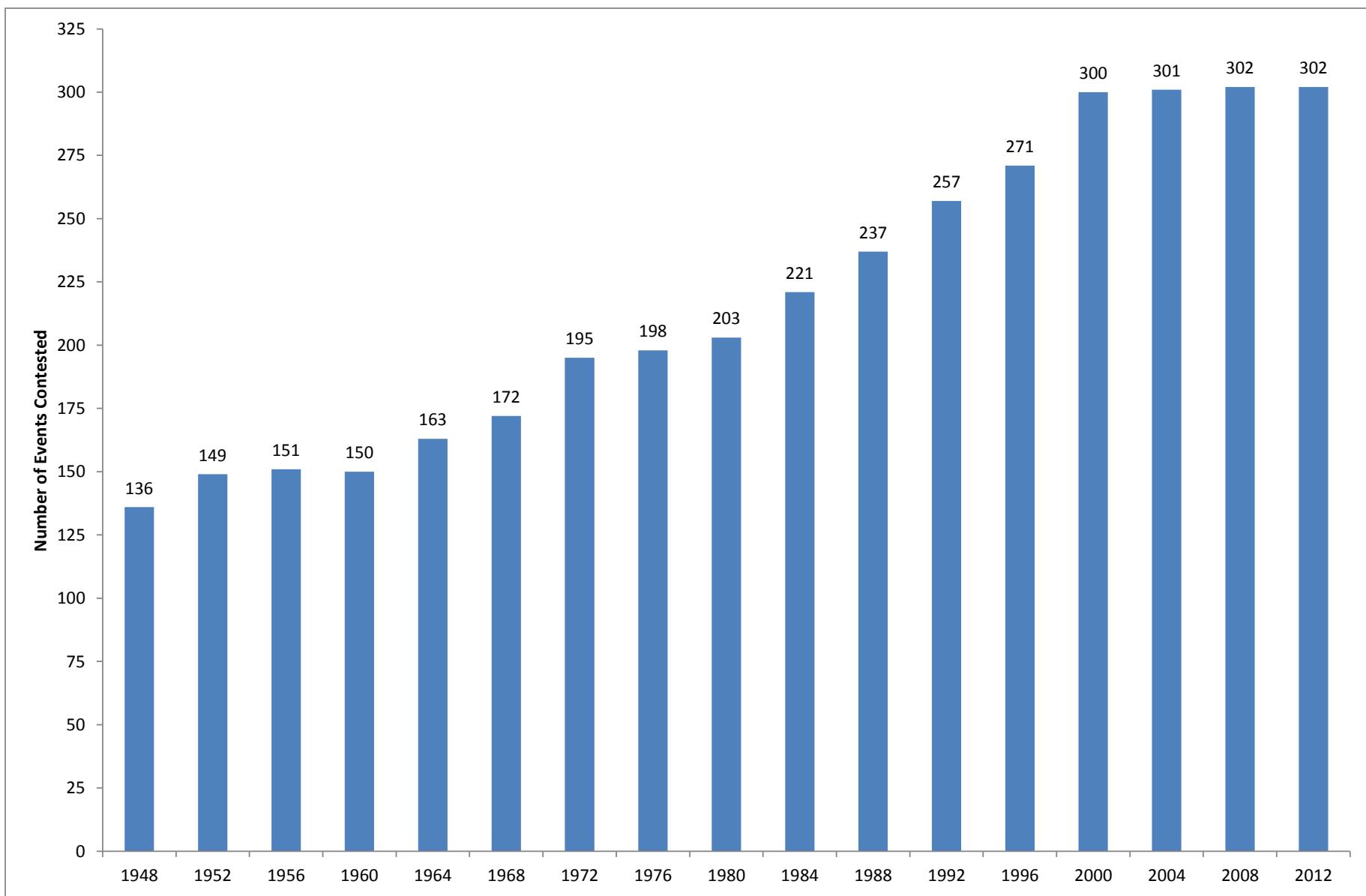
## 1. Background context

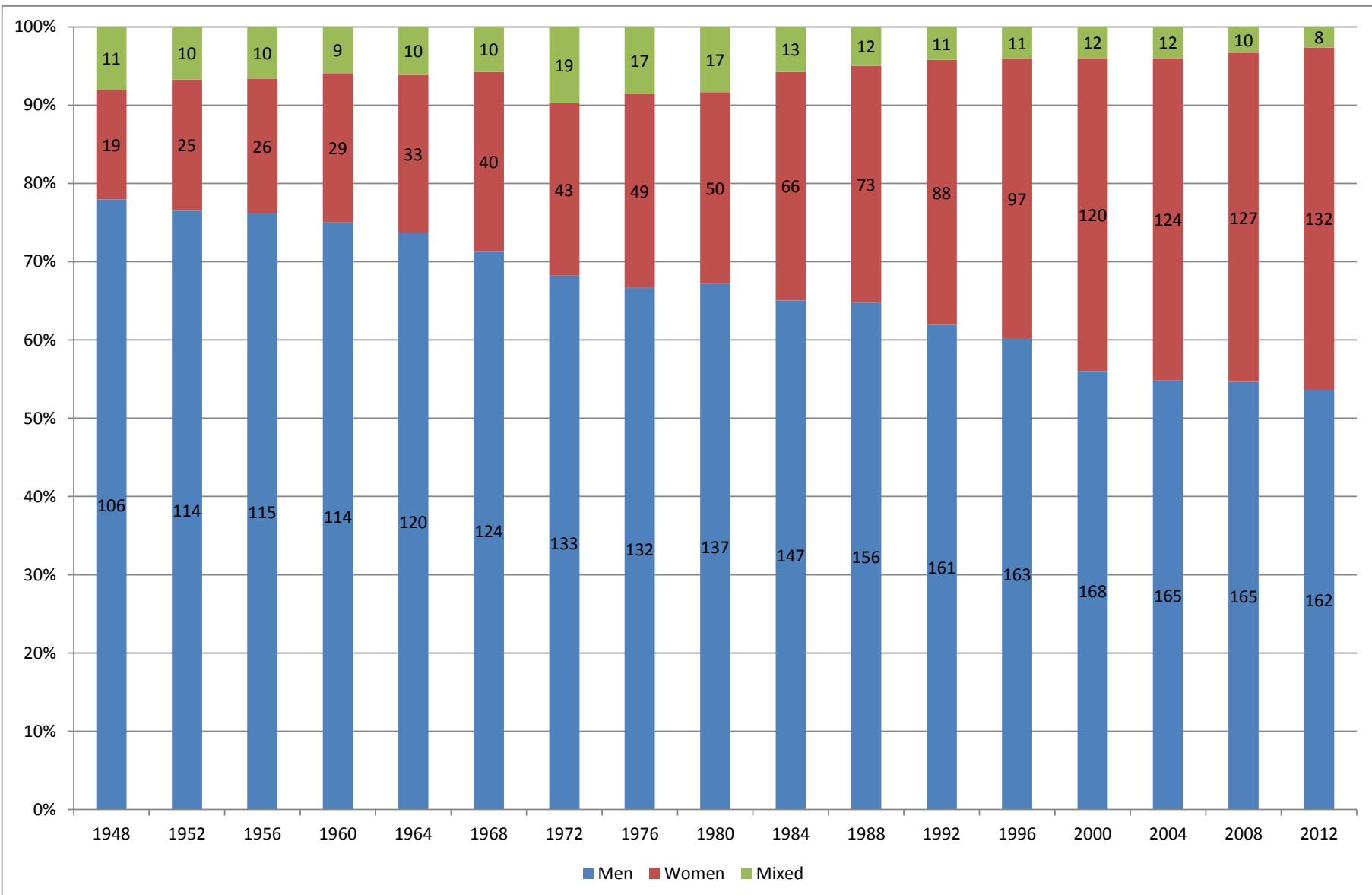


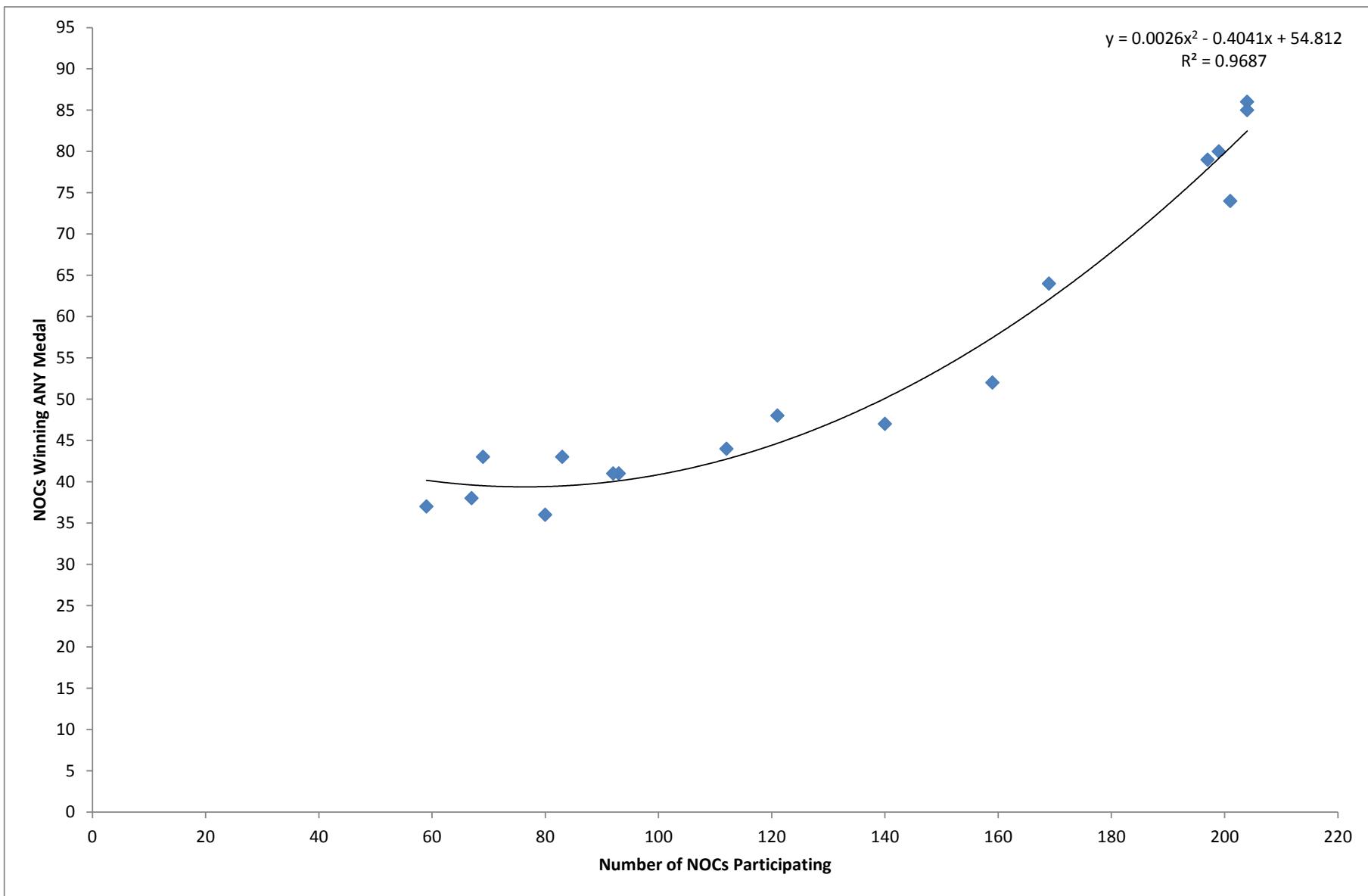












## Background context

### *Key points*

- The whole world is taking part
- The supply of success is fixed
- More nations are winning medals
- We should expect the price of success to rise.

# Sourcing the data: Infostrada Podium Performance

Infostradasports podium The Performance Manager

Search Athlete, Sport or other Country

Full Results

Date	Competition	Sport	Event	Gender	Phase	Ra	Person/Team	Country	Age (da)	Result
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	Combined E	1	Anastasiya Prokopenko (BLR, 20 Sep 1986)	Belarus	26-327	2336
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	Combined E	2	Gintare Venckauskaite (LTU, 04 Nov 1991)	Lithuania	19-282	2236
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	Combined E	3	Chen Qian (CHN, 14 Jan 1987)	China	25-211	2152
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	Combined E	4	Margaux Isaksen (USA, 07 Oct 1991)	United States	20-310	2144
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	Combined E	5	Chloe Esposito (AUS, 19 Sep 1991)	Australia	20-328	2140
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	Combined E	6	Laura Asadauskaitė (LTU, 28 Feb 1984)	Lithuania	28-166	2140
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	Combined E	7	Lena Schöneborn (GER, 11 Apr 1986)	Germany	26-123	2128
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	Combined E	8	Shino Yamanaka (JPN, 03 Aug 1990)	Japan	22-009	2128
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	-	-	Laura Asadauskaitė (LTU, 28 Feb 1984)	Lithuania	28-166	5408
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	-	-	Samantha Murray (GBR, 25 Sep 1989)	Great Britain	22-322	5356
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	-	-	Yane Marques (BRA, 07 Jan 1984)	Brazil	28-218	5340
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	-	-	Margaux Isaksen (USA, 07 Oct 1991)	United States	20-310	5332
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	-	-	Chen Qian (CHN, 14 Jan 1987)	China	25-211	5324
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	-	-	Anastasiya Prokopenko (BLR, 20 Sep 1986)	Belarus	26-327	5256
12 Aug 2012	Olympic Games	Modern Pentathlon	Individual	Women	-	-	Chloe Esposito (AUS, 19 Sep 1991)	Australia	20-328	5248

Medals Person

Participant	Gold	Silver	Bronze	Total	Participations
Michael Phelps (USA, 30 Jun 1985)	4	2	0	6	7
Missy Franklin (USA, 10 May 1995)	4	0	1	5	7
Allison Schmitt (USA, 07 Jun 1990)	3	1	1	5	5
Allison Feild (USA, 18 Nov 1985)	3	0	0	3	4
Dana Vollmer (USA, 13 Nov 1987)	3	0	0	3	3
Usain Bolt (JAM, 21 Aug 1986)	3	0	0	3	3
Ryan Lochte (USA, 03 Aug 1984)	2	2	1	5	6
Sun Yang (CHN, 01 Dec 1991)	2	1	1	4	4
Ranomi Kromowidjojo (NED, 20 Aug 1992)	2	1	0	3	4
Yannick Agnel (FRA, 09 Jun 1992)	2	1	0	3	4

Medals Country

Country	Gold	Silver	Bronze	Total
United States	302	304	356	962
China	46	29	29	104
Great Britain	38	27	23	88
Russia	29	17	19	65
Korea	24	26	32	82
Germany	13	8	7	28
France	11	11	12	34
Italy	8	9	11	28
Hungary	8	4	6	18
Australia	7	16	12	35

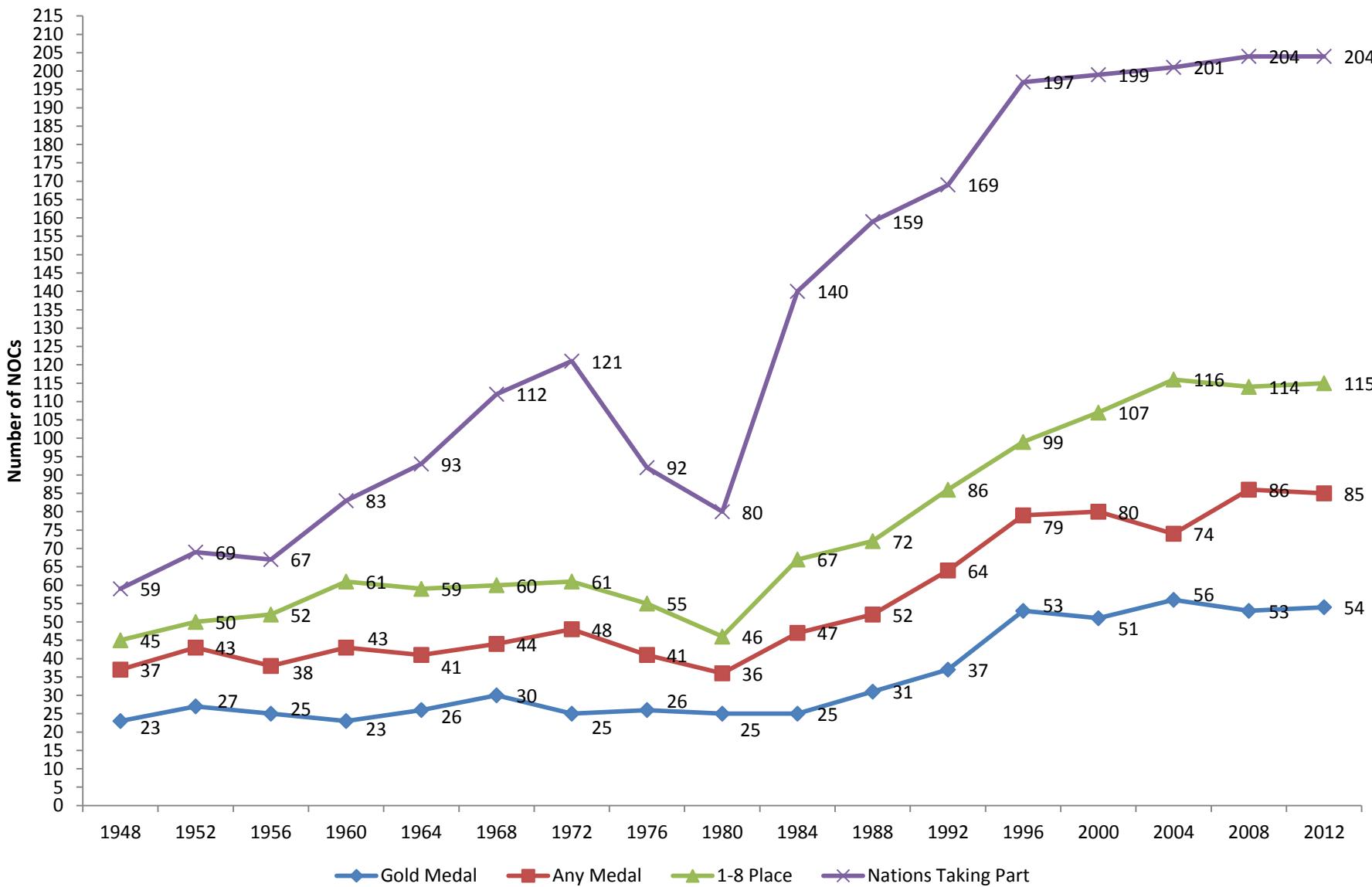
Application information

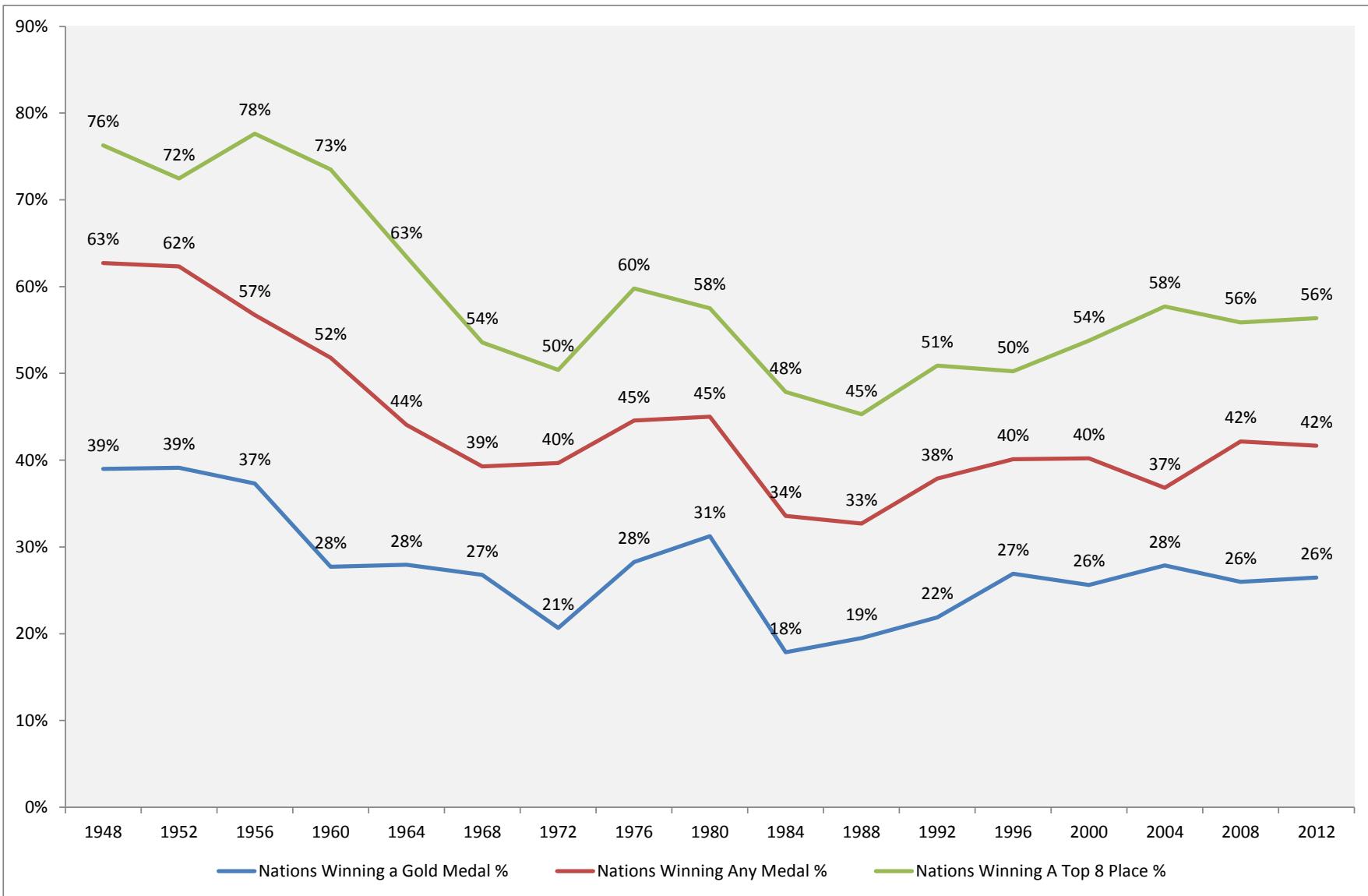
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> 100 Sports > 20,000 Events > 5,000 Competitions > 100 Years of History > 200+ Nations > Over 200,000 Athletes

## 2. The distribution of Olympic success

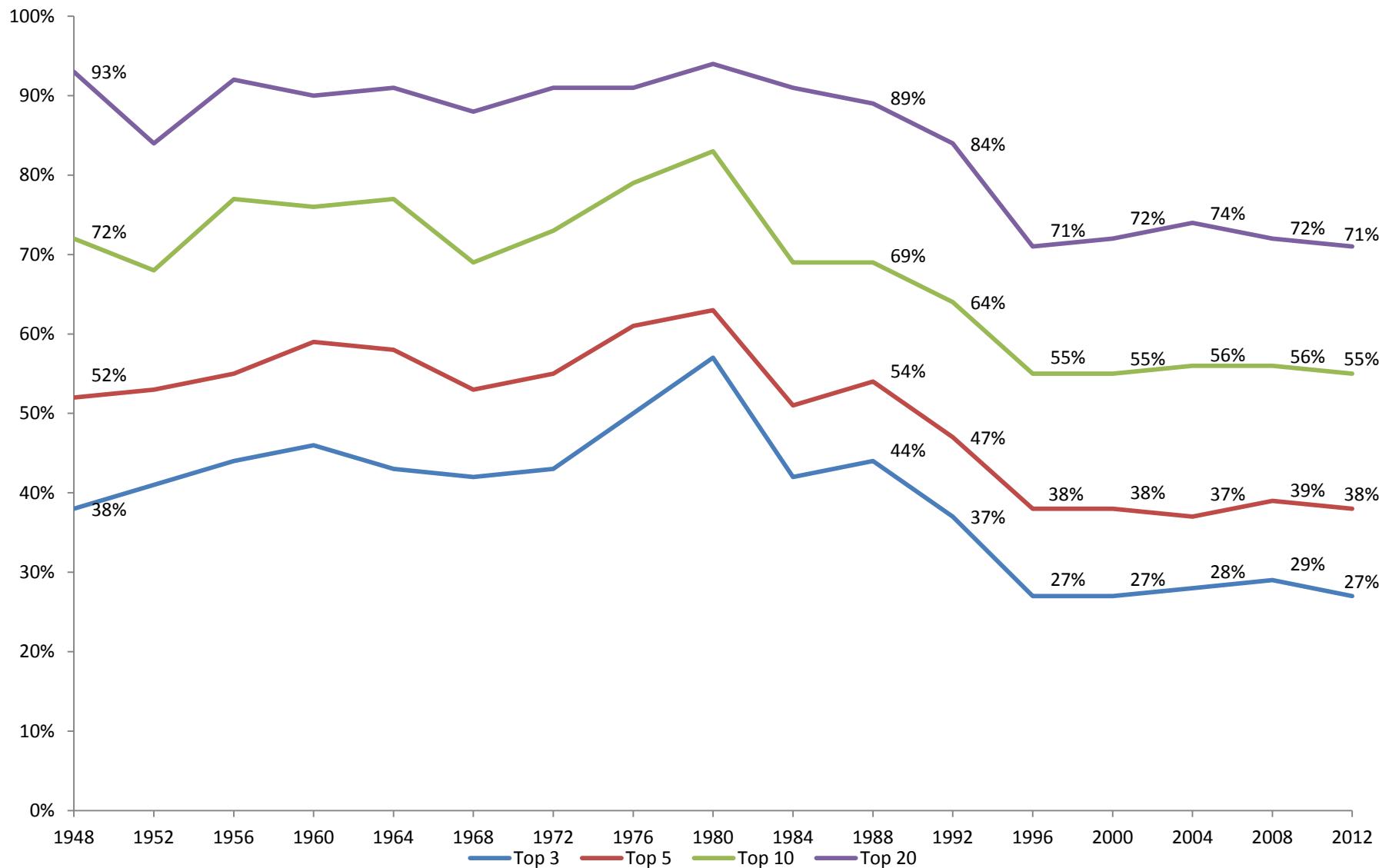






## More nations achieving success

Measure	1988	2012	Change	% Change
Nations winning a gold medal	19%	26%	+7	37%
Nations winning any medal	33%	42%	+9	27%
Nations winning a Top 8 place	45%	56%	+11	24%
Nations winning a Top 16 place	47%	72%	+25	53%



## Key Points

1. Around 26% win a gold medal
2. Around 42% win any kind of medal
3. The top 20 nations win around 71% of all medals
4. More nations are achieving some measure of success

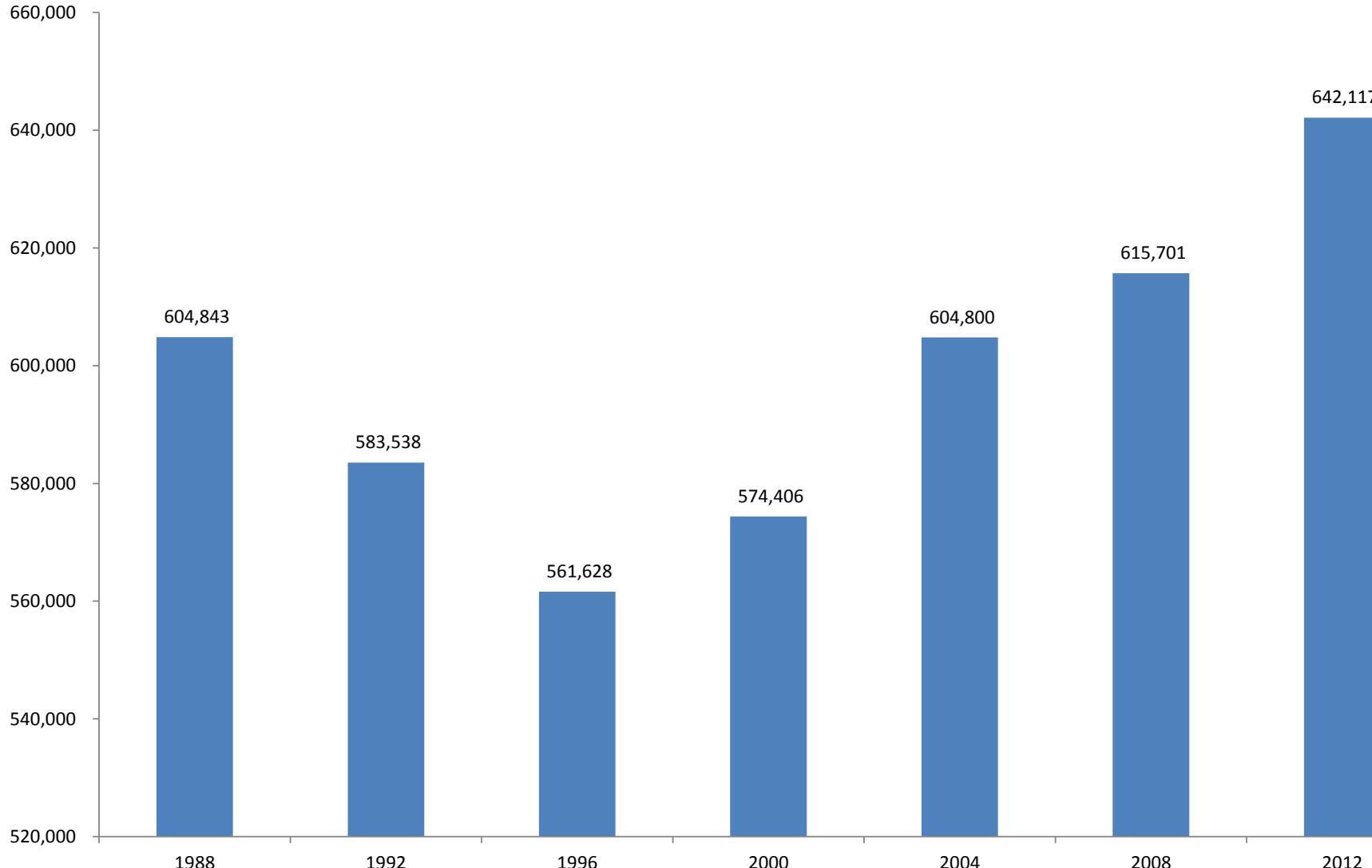
### | 3. The distribution of Olympic talent

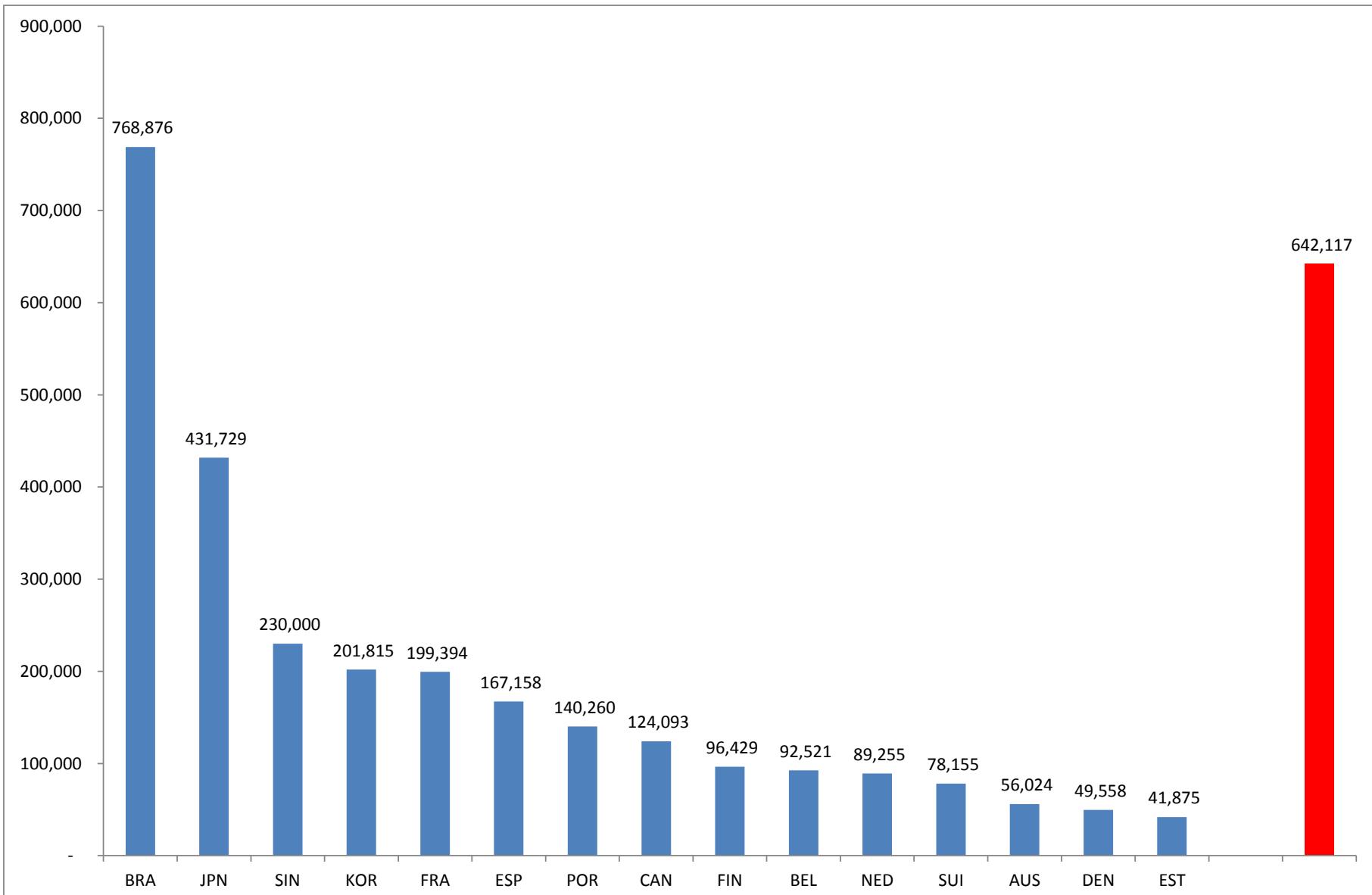


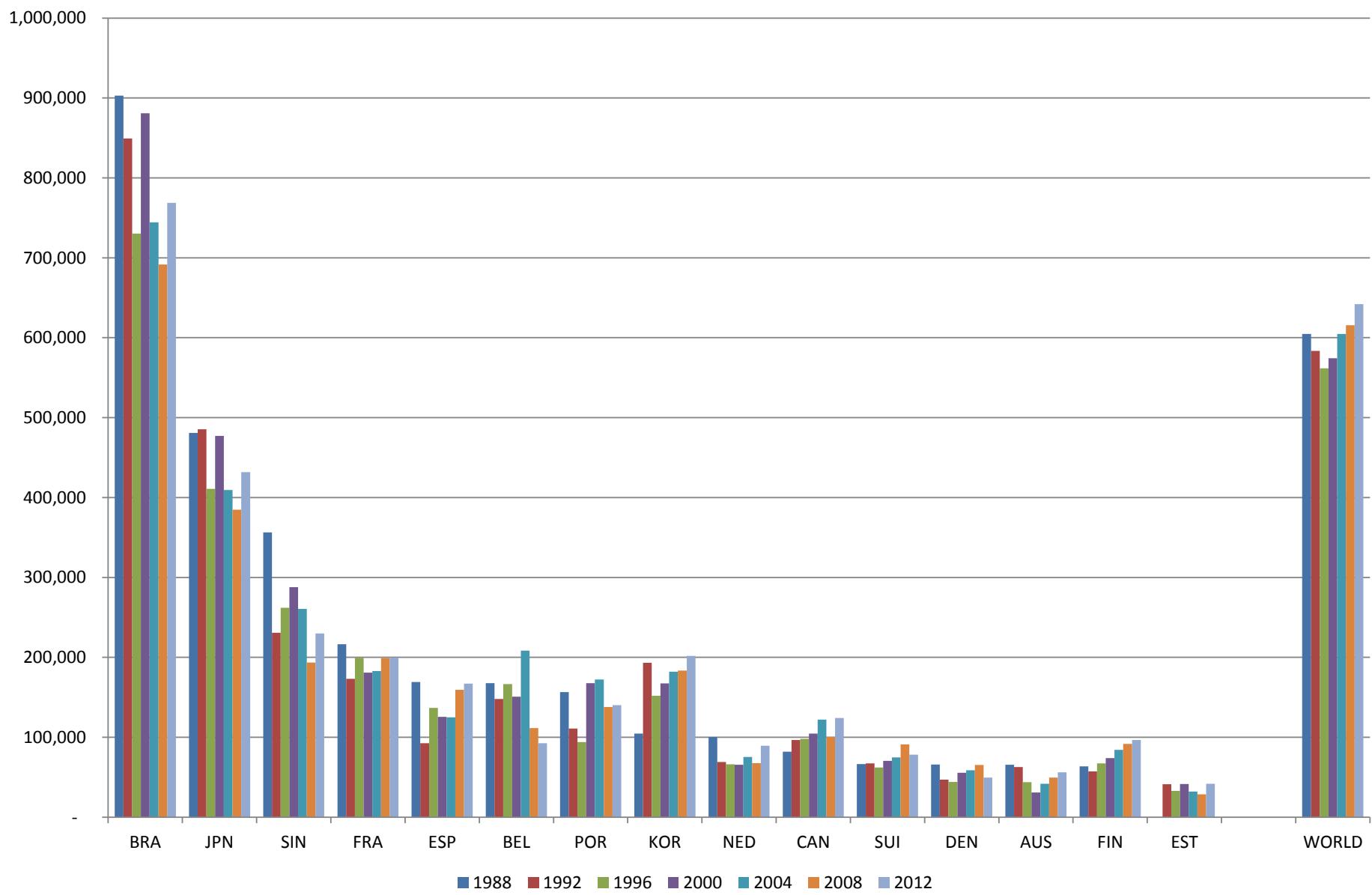
## The likelihood of being an Olympian

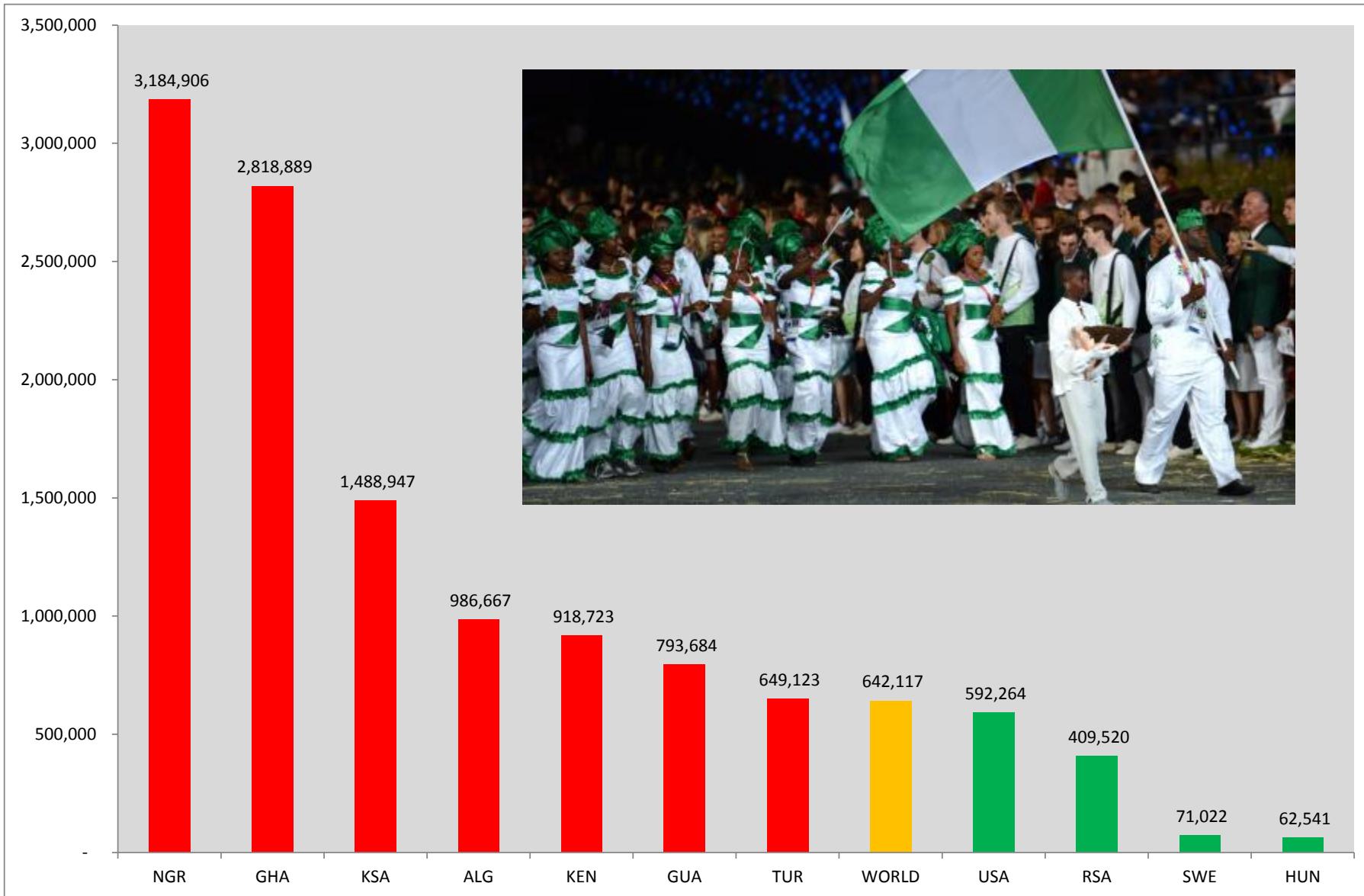
World population in 2012	7,001,000,000
Olympians at London 2012	10,903
World population per Olympian	642,117

### World Population per Olympic Athlete 1988-2012







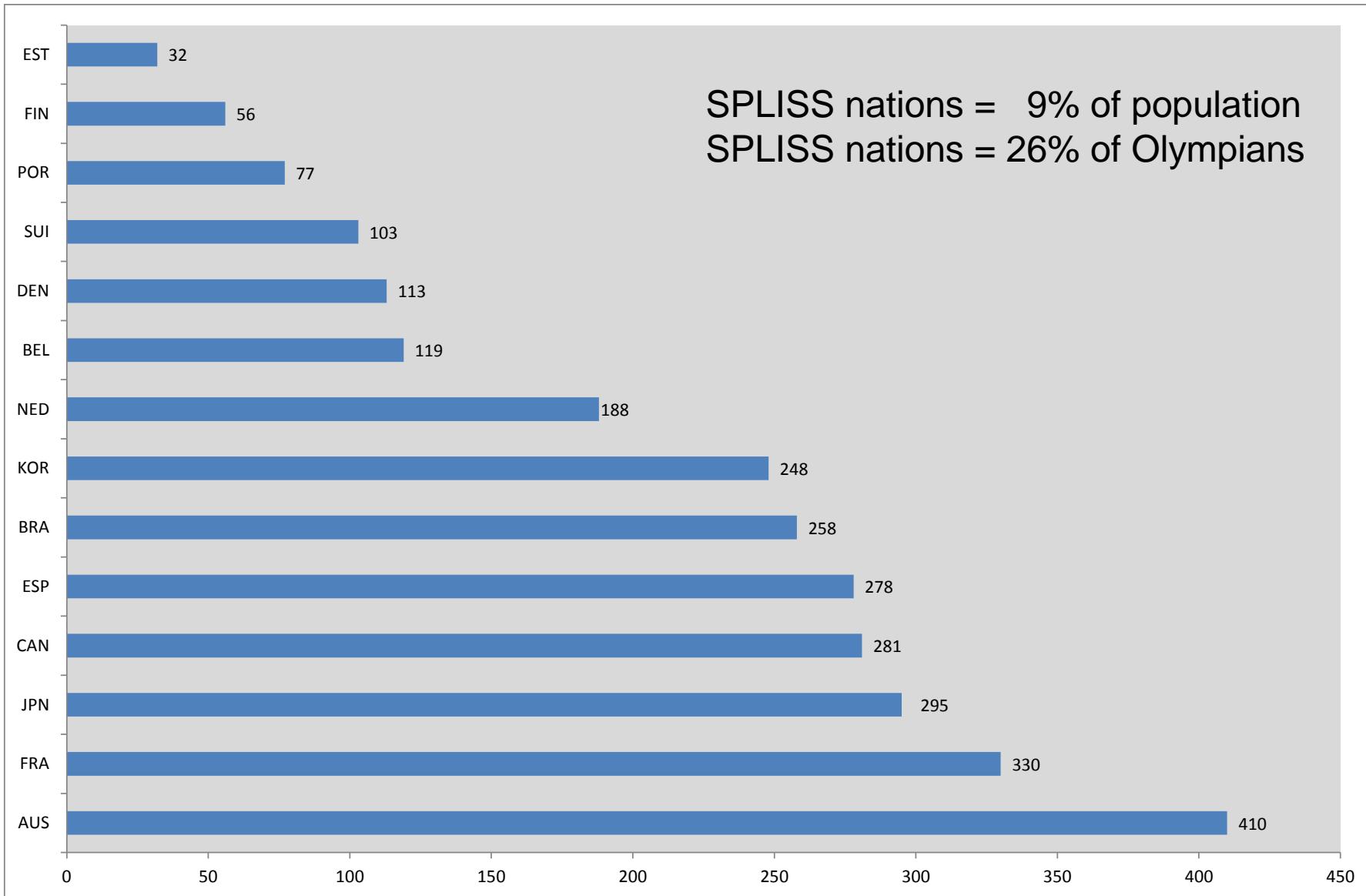


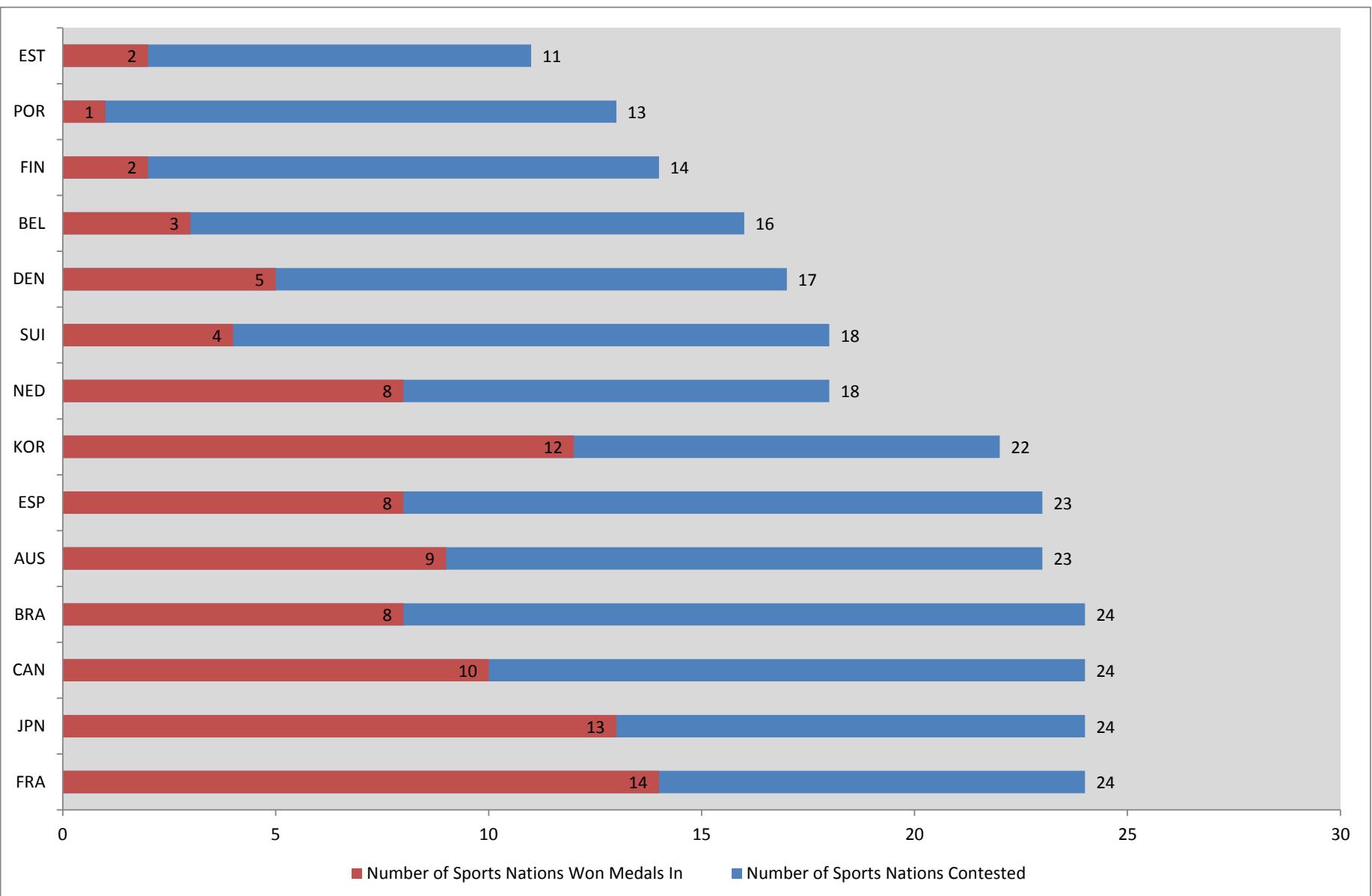
## Key Points

1. Olympians are rare
2. The production of Olympians favours larger nations
3. Some nations are more efficient producers than others

## 4. Measuring performance



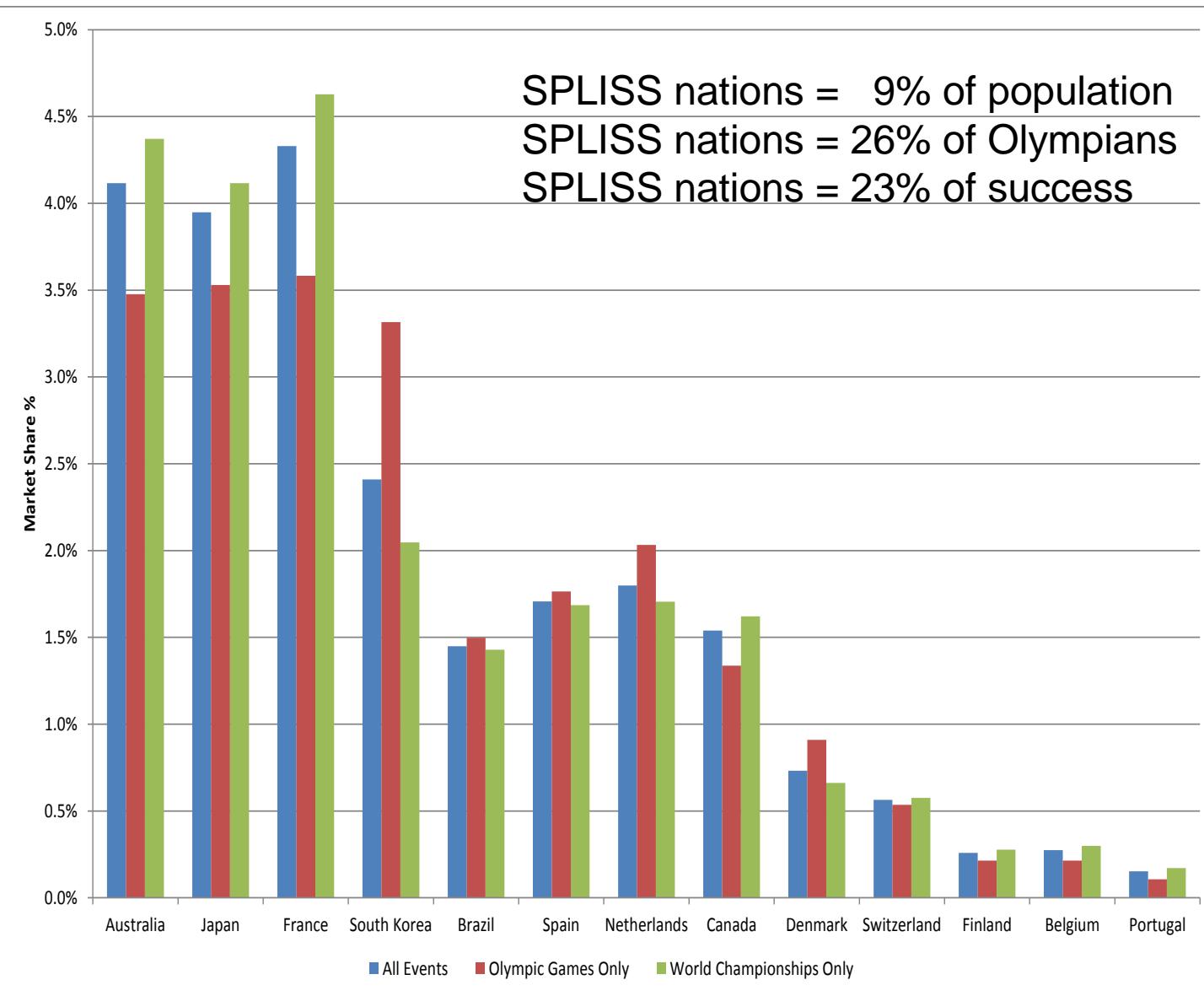




<b>Measure</b>	<b>Gold</b>	<b>Silver</b>	<b>Bronze</b>	<b>Total</b>	<b>Market Share %</b>
Total Medals	302	304	356	962	
Points Awarded	3	2	1		
Total Points	906	608	356	1,870	100%
France (7 <sup>th</sup> )	11	11	12	34	
Points	33	22	12	67	3.6%
South Korea (5 <sup>th</sup> )	13	8	7	28	
Points	39	16	7	62	3.3%

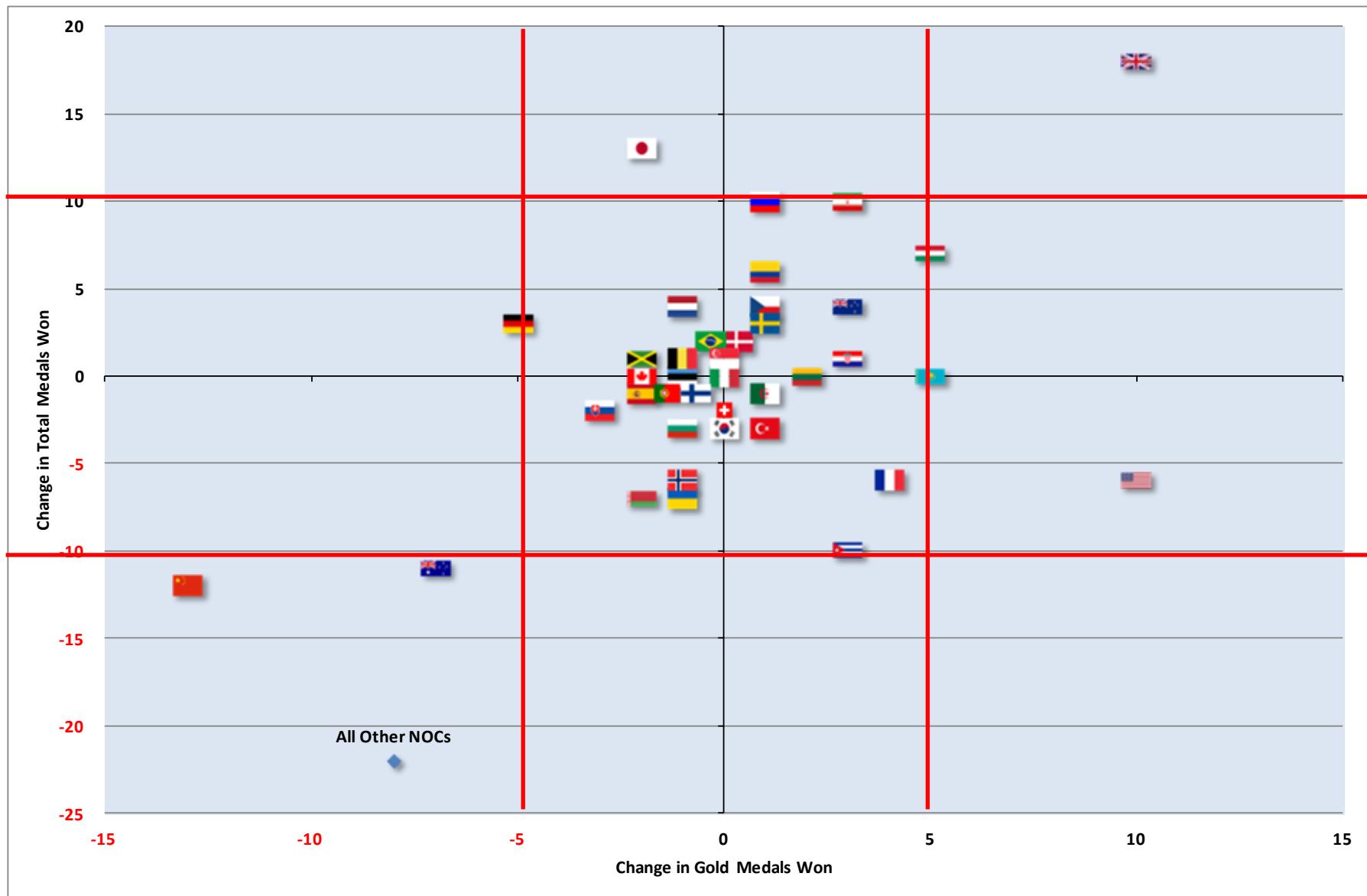
<b>Measure</b>	<b>Korea</b>	<b>France</b>
MS% London 2012	3.3%	3.6%
MS% Beijing 2008	3.6%	3.8%
Change in MS%	-0.3	-0.2
Percentage change in MS%	-8%	-5%

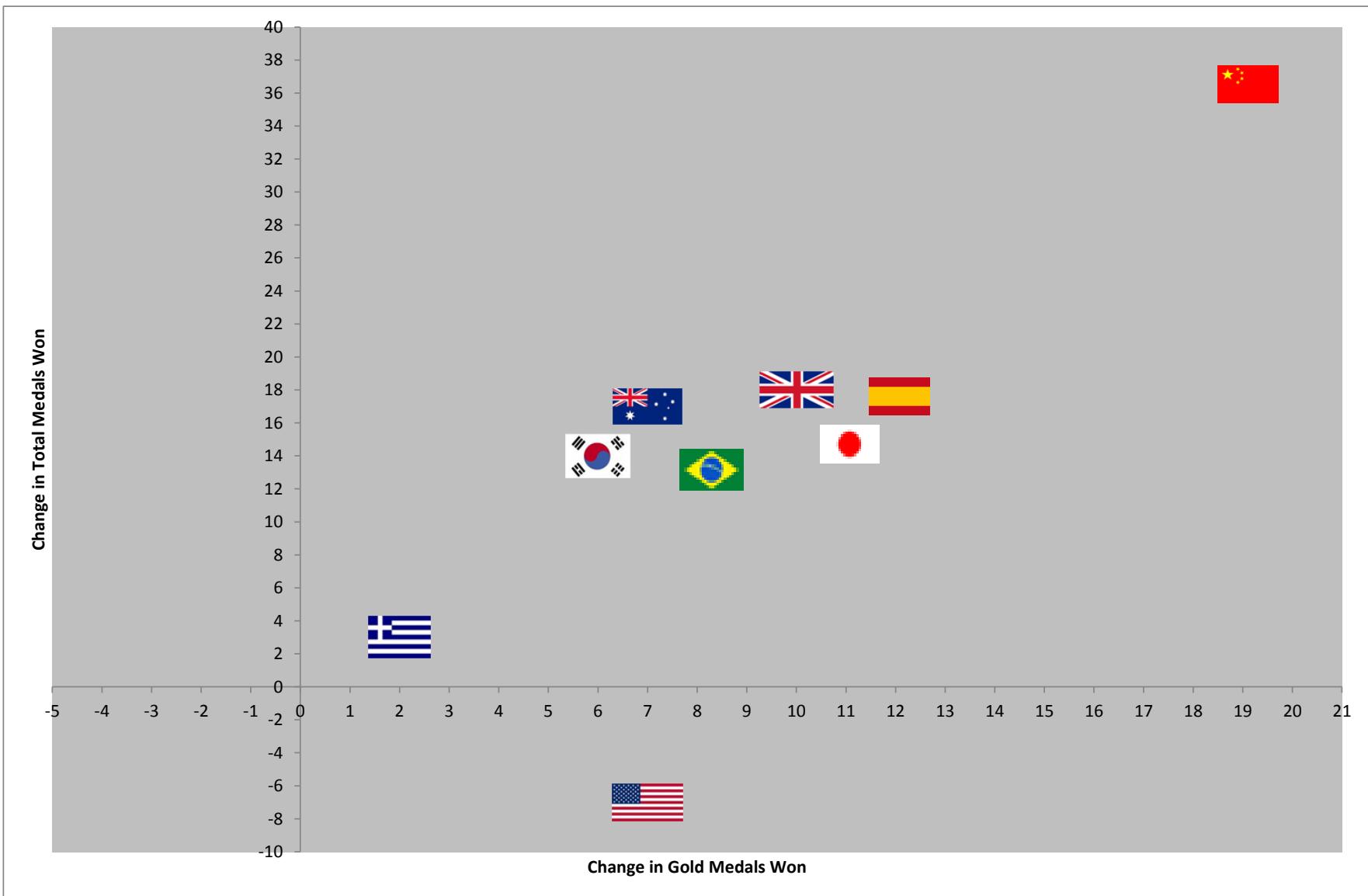
<b>Reference Period</b>	<b>Gold</b>	<b>Silver</b>	<b>Bronze</b>	<b>Total</b>
Olympic Games	302	304	356	962
4 Year Cycle	1,065	1,068	1,285	3,418



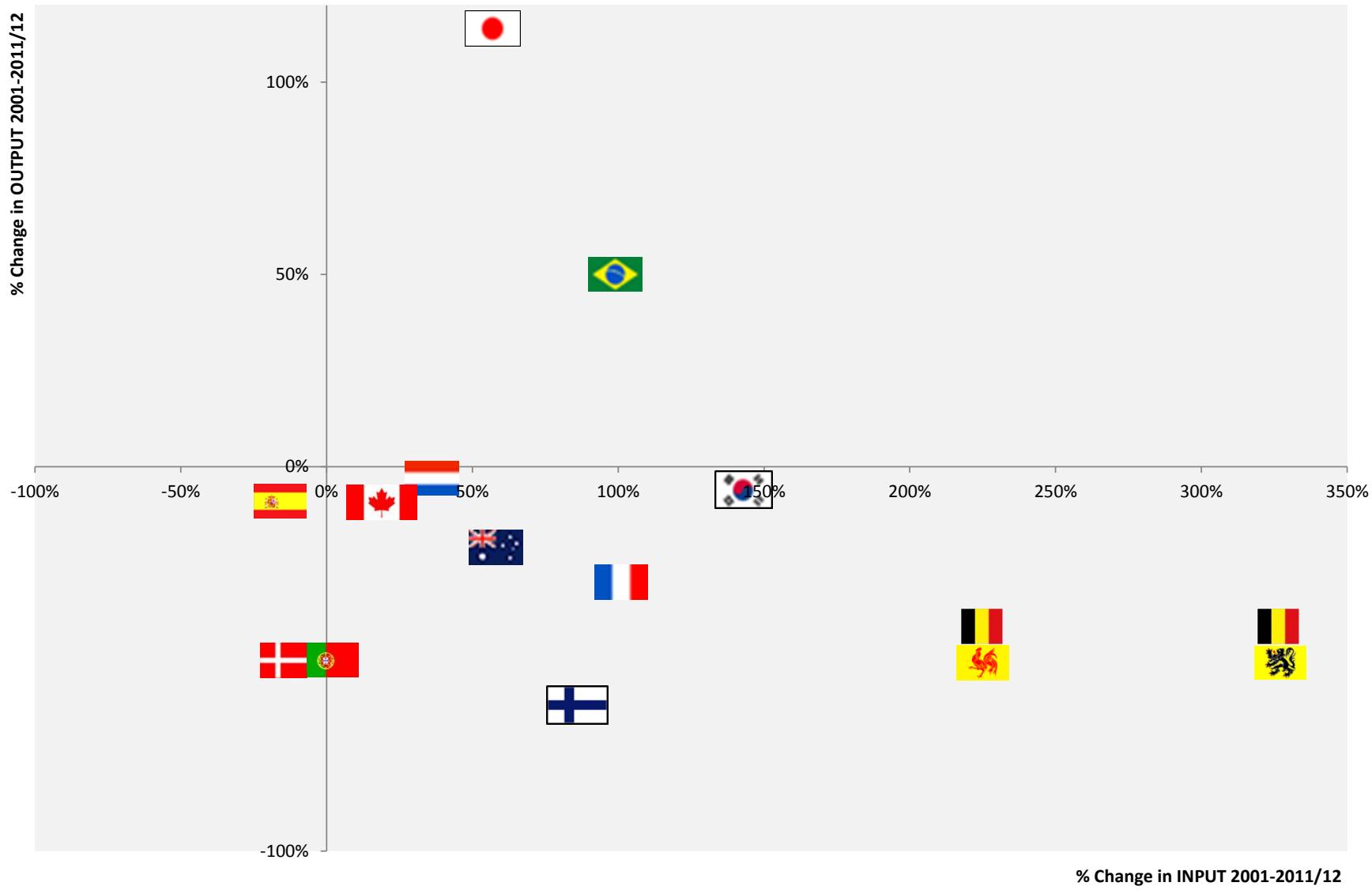
## | 5. Linking INPUT to OUTPUT







% Change in OUTPUT 2001-2011/12



## Conclusions

- SPLISS nations over produce Olympians
- SPLISS nations over achieve success
- Success is typically achieved in a minority of sports contested
- Generally variations in performance over time are modest
- More money in ≠ more medals out
- Standing still would be an achievement

Thank you for listening,  
any questions?

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