

Appendix table 5-46  
**Breadth of international S&E collaboration, by country/economy and income level: 1996 and 2003**

Income level, rank, and country/economy	Collaborating countries	
	1996	2003
<b>High income</b>		
1 United States.....	155	172
2 United Kingdom.....	144	158
3 France.....	126	146
4 European Union.....	136	143
5 Germany.....	123	136
6 Netherlands.....	110	131
7 Canada.....	110	130
8 Japan.....	97	128
9 Italy.....	110	126
10 Belgium.....	111	121
11 Sweden.....	100	116
12 Spain.....	88	115
13 Australia.....	101	114
14 Denmark.....	89	112
15 Austria.....	78	101
16 Israel.....	70	91
17 South Korea.....	54	91
18 Ireland.....	53	77
19 Taiwan.....	52	69
20 Singapore.....	50	64
<b>Middle and low income</b>		
1 India.....	82	107
2 Brazil.....	83	106
3 South Africa.....	76	104
4 China.....	83	102
5 Mexico.....	77	98
6 Russia.....	82	94
7 Turkey.....	57	94
8 Poland.....	70	90
9 Argentina.....	55	87
10 Thailand.....	60	80
11 Chile.....	63	78
12 Hungary.....	71	77
13 Kenya.....	66	75
14 Egypt.....	60	72
15 Ukraine.....	59	68
16 Zimbabwe.....	37	67
17 Saudi Arabia.....	42	63
18 Nigeria.....	49	61
19 Morocco.....	41	60
20 Algeria.....	33	54
21 Armenia.....	34	43
22 Ethiopia.....	26	40

NOTES: Data are number of countries that have jointly authored publications (based on institutional address) with indicated country. Countries ranked by number of collaborating countries in 2003.

SOURCES: Thomson ISI, *Science Citation Index* and *Social Sciences Citation Index*, <http://www.isinet.com/products/citation/>; iplQ, Inc.; and National Science Foundation, Division of Science Resources Statistics, special tabulations. Income classification by the World Bank, <http://www.worldbank.org/data/countryclass/countryclass.html>.