

12.01 Capacity for innovation

In your country, how do companies obtain technology? [1 = exclusively from licensing or imitating foreign companies; 7 = by conducting formal research and pioneering their own new products and processes] | 2011–12 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.3	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.3	7
1	Japan	5.9				73	Mongolia.....	3.1			
2	Switzerland	5.8				74	Uruguay	3.1			
3	Germany	5.7				75	Mexico	3.1			
4	Finland	5.6				76	Zambia	3.1			
5	Sweden	5.5				77	Romania	3.1			
6	Israel	5.4				78	Vietnam	3.0			
7	United States	5.2				79	Thailand	3.0			
8	Netherlands	5.1				80	Egypt	3.0			
9	Austria	5.0				81	Ghana.....	3.0			
10	France	5.0				82	Ecuador.....	3.0			
11	Belgium	5.0				83	Chile	3.0			
12	United Kingdom.....	5.0				84	Seychelles.....	3.0			
13	Denmark.....	4.9				85	Jamaica	2.9			
14	Norway	4.7				86	Philippines	2.9			
15	Taiwan, China.....	4.7				87	Nicaragua	2.9			
16	Luxembourg	4.6				88	Slovak Republic	2.9			
17	Malaysia.....	4.6				89	Cyprus	2.9			
18	Qatar	4.6				90	Namibia	2.9			
19	Korea, Rep.	4.5				91	Barbados.....	2.9			
20	Singapore	4.4				92	Kazakhstan.....	2.9			
21	Iceland	4.4				93	Sri Lanka	2.9			
22	Czech Republic	4.1				94	Panama	2.9			
23	China	4.1				95	Argentina	2.9			
24	New Zealand	4.1				96	Botswana	2.8			
25	Canada.....	4.1				97	Madagascar.....	2.8			
26	Ireland.....	4.0				98	Honduras.....	2.8			
27	United Arab Emirates.....	4.0				99	Macedonia, FYR	2.8			
28	Italy	4.0				100	Malawi	2.8			
29	Saudi Arabia	3.9				101	Bosnia and Herzegovina	2.8			
30	Indonesia	3.9				102	Uganda.....	2.8			
31	Slovenia	3.9				103	Peru.....	2.8			
32	Australia.....	3.9				104	Greece.....	2.7			
33	Estonia.....	3.8				105	Chad.....	2.7			
34	Brazil.....	3.7				106	Suriname	2.7			
35	Guyana	3.7				107	El Salvador.....	2.7			
36	Liberia.....	3.6				108	Mauritania	2.7			
37	Hong Kong SAR.....	3.6				109	Paraguay	2.7			
38	Puerto Rico.....	3.6				110	Cameroon.....	2.7			
39	Azerbaijan.....	3.5				111	Mali.....	2.7			
40	Portugal.....	3.5				112	Mauritius	2.7			
41	South Africa	3.5				113	Kuwait	2.6			
42	India.....	3.5				114	Lebanon	2.6			
43	Costa Rica.....	3.5				115	Morocco.....	2.6			
44	Spain	3.5				116	Georgia.....	2.5			
45	Hungary.....	3.5				117	Bahrain	2.5			
46	Kenya	3.5				118	Dominican Republic.....	2.5			
47	Lithuania	3.4				119	Lesotho	2.5			
48	Turkey.....	3.4				120	Serbia	2.5			
49	Latvia	3.4				121	Benin	2.5			
50	Oman	3.4				122	Moldova.....	2.5			
51	Tajikistan.....	3.4				123	Libya.....	2.5			
52	Gambia, The.....	3.3				124	Trinidad and Tobago.....	2.4			
53	Montenegro	3.3				125	Timor-Leste	2.4			
54	Poland	3.3				126	Nepal	2.4			
55	Rwanda	3.3				127	Guinea	2.4			
56	Russian Federation	3.3				128	Albania.....	2.4			
57	Jordan	3.3				129	Zimbabwe.....	2.4			
58	Ukraine	3.3				130	Swaziland	2.4			
59	Iran, Islamic Rep.	3.3				131	Bangladesh.....	2.4			
60	Pakistan.....	3.3				132	Mozambique.....	2.3			
61	Bolivia	3.2				133	Ethiopia.....	2.3			
62	Armenia	3.2				134	Venezuela	2.3			
63	Nigeria	3.2				135	Burkina Faso.....	2.3			
64	Bulgaria	3.2				136	Sierra Leone	2.3			
65	Cambodia.....	3.2				137	Cape Verde	2.3			
66	Colombia	3.2				138	Haiti	2.3			
67	Guatemala	3.2				139	Côte d'Ivoire	2.2			
68	Brunei Darussalam.....	3.2				140	Kyrgyz Republic.....	2.1			
69	Senegal	3.2				141	Gabon	2.0			
70	Malta	3.2				142	Yemen	1.9			
71	Tanzania	3.1				143	Algeria	1.9			
72	Croatia.....	3.1				144	Burundi	1.8			

SOURCE: World Economic Forum, Executive Opinion Survey

12.02 Quality of scientific research institutions

How would you assess the quality of scientific research institutions in your country? [1 = very poor; 7 = the best in their field internationally] | 2011–12 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.8	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.8	7
1	Israel	6.3				73	Botswana	3.6			
2	Switzerland	6.3				74	Oman	3.5			
3	United Kingdom	6.2				75	Bulgaria	3.5			
4	Belgium	5.9				76	Tajikistan	3.5			
5	Qatar	5.8				77	Jordan	3.5			
6	United States	5.8				78	Pakistan	3.5			
7	Australia	5.8				79	Ghana	3.5			
8	Netherlands	5.7				80	Liberia	3.5			
9	Sweden	5.6				81	Zambia	3.5			
10	Germany	5.6				82	Brunei Darussalam	3.4			
11	Japan	5.6				83	Mauritius	3.4			
12	Singapore	5.6				84	Romania	3.4			
13	Finland	5.5				85	Colombia	3.4			
14	Ireland	5.5				86	Uganda	3.4			
15	France	5.5				87	Vietnam	3.4			
16	Canada	5.5				88	Turkey	3.4			
17	New Zealand	5.4				89	Malawi	3.4			
18	Denmark	5.3				90	Slovak Republic	3.4			
19	Taiwan, China	5.2				91	Cameroon	3.4			
20	Hungary	5.1				92	Namibia	3.4			
21	Austria	5.1				93	Greece	3.3			
22	Portugal	5.0				94	Bolivia	3.3			
23	Iceland	5.0				95	Seychelles	3.3			
24	Korea, Rep.	4.9				96	Guyana	3.3			
25	Estonia	4.9				97	Nigeria	3.2			
26	Czech Republic	4.9				98	Trinidad and Tobago	3.2			
27	Norway	4.9				99	Macedonia, FYR	3.2			
28	Malaysia	4.9				100	Ethiopia	3.2			
29	Slovenia	4.8				101	Benin	3.2			
30	Luxembourg	4.8				102	Philippines	3.2			
31	Hong Kong SAR	4.7				103	Kuwait	3.2			
32	Lithuania	4.7				104	Morocco	3.2			
33	Costa Rica	4.6				105	Mongolia	3.2			
34	South Africa	4.6				106	Guatemala	3.1			
35	United Arab Emirates	4.6				107	Bahrain	3.1			
36	Spain	4.6				108	Kazakhstan	3.0			
37	Saudi Arabia	4.5				109	Madagascar	3.0			
38	Puerto Rico	4.5				110	Ecuador	3.0			
39	India	4.4				111	Armenia	3.0			
40	Iran, Islamic Rep.	4.2				112	Mozambique	2.9			
41	Barbados	4.2				113	Côte d'Ivoire	2.9			
42	Chile	4.2				114	Egypt	2.9			
43	Italy	4.2				115	Zimbabwe	2.9			
44	China	4.2				116	Peru	2.8			
45	Poland	4.1				117	Honduras	2.8			
46	Brazil	4.1				118	Venezuela	2.8			
47	Argentina	4.1				119	Cape Verde	2.8			
48	Croatia	4.1				120	Chad	2.7			
49	Mexico	4.0				121	Mauritania	2.7			
50	Kenya	4.0				122	Libya	2.7			
51	Cyprus	4.0				123	Gabon	2.7			
52	Jamaica	4.0				124	Nicaragua	2.7			
53	Panama	4.0				125	Georgia	2.6			
54	Montenegro	3.9				126	Dominican Republic	2.6			
55	Senegal	3.9				127	Bangladesh	2.5			
56	Indonesia	3.9				128	Suriname	2.5			
57	Sri Lanka	3.9				129	Lebanon	2.5			
58	Latvia	3.8				130	Guinea	2.5			
59	Burkina Faso	3.7				131	Moldova	2.4			
60	Thailand	3.7				132	Albania	2.4			
61	Gambia, The	3.7				133	Swaziland	2.3			
62	Uruguay	3.7				134	Timor-Leste	2.3			
63	Malta	3.7				135	Burundi	2.3			
64	Ukraine	3.7				136	El Salvador	2.3			
65	Azerbaijan	3.7				137	Nepal	2.2			
66	Mali	3.6				138	Lesotho	2.2			
67	Serbia	3.6				139	Sierra Leone	2.1			
68	Cambodia	3.6				140	Kyrgyz Republic	2.1			
69	Rwanda	3.6				141	Algeria	2.1			
70	Russian Federation	3.6				142	Paraguay	2.0			
71	Tanzania	3.6				143	Yemen	1.9			
72	Bosnia and Herzegovina	3.6				144	Haiti	1.9			

SOURCE: World Economic Forum, Executive Opinion Survey

12.03 Company spending on R&D

To what extent do companies in your country spend on R&D? [1 = do not spend on R&D; 7 = spend heavily on R&D] | 2011–12 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.3	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.3	7
1	Switzerland	5.9				73	Ecuador	3.1			
2	Japan	5.8				74	Thailand	3.1			
3	Finland	5.6				75	Vietnam	3.1			
4	Germany	5.5				76	Croatia	3.0			
5	Sweden	5.5				77	Benin	3.0			
6	Israel	5.4				78	Cameroon	3.0			
7	United States	5.3				79	Russian Federation	3.0			
8	Singapore	5.1				80	Honduras	3.0			
9	Denmark	4.9				81	Cyprus	3.0			
10	Taiwan, China	4.9				82	Sri Lanka	3.0			
11	Korea, Rep.	4.9				83	Albania	3.0			
12	United Kingdom	4.8				84	Mongolia	2.9			
13	Austria	4.8				85	Slovak Republic	2.9			
14	Netherlands	4.7				86	Namibia	2.9			
15	Luxembourg	4.7				87	Romania	2.9			
16	Malaysia	4.7				88	Poland	2.9			
17	Belgium	4.7				89	Uganda	2.9			
18	Qatar	4.6				90	Bosnia and Herzegovina	2.9			
19	France	4.6				91	Argentina	2.9			
20	Norway	4.3				92	Bulgaria	2.9			
21	Ireland	4.3				93	Madagascar	2.9			
22	United Arab Emirates	4.2				94	Kazakhstan	2.9			
23	Saudi Arabia	4.2				95	Jordan	2.8			
24	China	4.1				96	Mauritius	2.8			
25	Indonesia	3.9				97	Iran, Islamic Rep.	2.8			
26	Canada	3.9				98	Ghana	2.8			
27	Iceland	3.9				99	Dominican Republic	2.8			
28	Czech Republic	3.9				100	Trinidad and Tobago	2.8			
29	Hong Kong SAR	3.8				101	Mali	2.8			
30	Australia	3.8				102	Nicaragua	2.8			
31	Kenya	3.7				103	Hungary	2.7			
32	Italy	3.6				104	Ukraine	2.7			
33	Brazil	3.6				105	Guinea	2.7			
34	Panama	3.6				106	El Salvador	2.7			
35	Puerto Rico	3.6				107	Jamaica	2.7			
36	New Zealand	3.5				108	Seychelles	2.7			
37	India	3.5				109	Burkina Faso	2.7			
38	Zambia	3.5				110	Paraguay	2.7			
39	South Africa	3.5				111	Armenia	2.7			
40	Liberia	3.5				112	Kuwait	2.7			
41	Costa Rica	3.5				113	Bahrain	2.7			
42	Estonia	3.4				114	Mauritania	2.6			
43	Portugal	3.4				115	Suriname	2.6			
44	Azerbaijan	3.4				116	Egypt	2.6			
45	Oman	3.4				117	Malawi	2.6			
46	Guyana	3.4				118	Peru	2.6			
47	Slovenia	3.4				119	Morocco	2.6			
48	Spain	3.3				120	Côte d'Ivoire	2.6			
49	Senegal	3.3				121	Nepal	2.6			
50	Malta	3.3				122	Lebanon	2.6			
51	Pakistan	3.3				123	Macedonia, FYR	2.5			
52	Cambodia	3.3				124	Zimbabwe	2.5			
53	Chad	3.3				125	Georgia	2.5			
54	Gambia, The	3.3				126	Lesotho	2.5			
55	Tanzania	3.3				127	Venezuela	2.5			
56	Turkey	3.2				128	Mozambique	2.5			
57	Uruguay	3.2				129	Greece	2.4			
58	Philippines	3.2				130	Bangladesh	2.4			
59	Mexico	3.2				131	Swaziland	2.3			
60	Brunei Darussalam	3.2				132	Serbia	2.3			
61	Chile	3.2				133	Cape Verde	2.3			
62	Botswana	3.2				134	Timor-Leste	2.3			
63	Montenegro	3.2				135	Burundi	2.2			
64	Lithuania	3.2				136	Gabon	2.2			
65	Tajikistan	3.2				137	Haiti	2.2			
66	Guatemala	3.1				138	Libya	2.2			
67	Latvia	3.1				139	Ethiopia	2.2			
68	Nigeria	3.1				140	Moldova	2.1			
69	Colombia	3.1				141	Kyrgyz Republic	1.9			
70	Rwanda	3.1				142	Sierra Leone	1.9			
71	Bolivia	3.1				143	Algeria	1.8			
72	Barbados	3.1				144	Yemen	1.7			

SOURCE: World Economic Forum, Executive Opinion Survey

12.04 University-industry collaboration in R&D

To what extent do business and universities collaborate on research and development (R&D) in your country? [1 = do not collaborate at all; 7 = collaborate extensively] | 2011–12 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.7	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.7	7
1	Switzerland	5.9				73	Namibia	3.5			
2	United Kingdom	5.8				74	Liberia	3.5			
3	United States	5.6				75	Malawi	3.5			
4	Finland	5.6				76	Trinidad and Tobago	3.5			
5	Singapore	5.6				77	Jamaica	3.5			
6	Belgium	5.5				78	Mozambique	3.5			
7	Sweden	5.4				79	Philippines	3.5			
8	Israel	5.4				80	Croatia	3.5			
9	Qatar	5.4				81	Pakistan	3.4			
10	Netherlands	5.3				82	Azerbaijan	3.4			
11	Germany	5.2				83	Tajikistan	3.4			
12	Taiwan, China	5.2				84	Ecuador	3.4			
13	Australia	5.1				85	Russian Federation	3.4			
14	Ireland	5.1				86	Senegal	3.4			
15	Canada	5.1				87	Iran, Islamic Rep.	3.4			
16	Japan	5.0				88	Bolivia	3.3			
17	Luxembourg	5.0				89	Dominican Republic	3.3			
18	Malaysia	5.0				90	Kazakhstan	3.3			
19	Norway	5.0				91	Mauritius	3.3			
20	Iceland	4.9				92	El Salvador	3.3			
21	Denmark	4.9				93	Jordan	3.3			
22	Austria	4.9				94	Guyana	3.3			
23	New Zealand	4.9				95	Lebanon	3.3			
24	Hong Kong SAR	4.8				96	Honduras	3.2			
25	Korea, Rep.	4.7				97	Vietnam	3.2			
26	United Arab Emirates	4.6				98	Cameroon	3.2			
27	Portugal	4.6				99	Serbia	3.2			
28	Czech Republic	4.5				100	Slovak Republic	3.2			
29	Lithuania	4.5				101	Mongolia	3.2			
30	South Africa	4.5				102	Madagascar	3.2			
31	Saudi Arabia	4.5				103	Ethiopia	3.2			
32	Puerto Rico	4.5				104	Burkina Faso	3.2			
33	France	4.4				105	Macedonia, FYR	3.2			
34	Estonia	4.4				106	Suriname	3.2			
35	China	4.4				107	Ghana	3.2			
36	Costa Rica	4.4				108	Nicaragua	3.1			
37	Hungary	4.3				109	Cape Verde	3.1			
38	Barbados	4.3				110	Peru	3.1			
39	Chile	4.2				111	Mali	3.1			
40	Indonesia	4.2				112	Zimbabwe	3.1			
41	Kenya	4.2				113	Romania	3.1			
42	Mexico	4.1				114	Benin	3.0			
43	Panama	4.1				115	Bahrain	3.0			
44	Brazil	4.1				116	Morocco	3.0			
45	Spain	4.1				117	Bulgaria	3.0			
46	Thailand	4.0				118	Sri Lanka	3.0			
47	Colombia	4.0				119	Chad	3.0			
48	Bosnia and Herzegovina	3.9				120	Kuwait	3.0			
49	Slovenia	3.9				121	Seychelles	3.0			
50	Brunei Darussalam	3.9				122	Armenia	2.9			
51	India	3.8				123	Greece	2.9			
52	Rwanda	3.8				124	Moldova	2.8			
53	Guatemala	3.8				125	Timor-Leste	2.8			
54	Oman	3.8				126	Paraguay	2.7			
55	Zambia	3.8				127	Nepal	2.7			
56	Tanzania	3.8				128	Egypt	2.7			
57	Argentina	3.8				129	Mauritania	2.6			
58	Gambia, The	3.8				130	Swaziland	2.6			
59	Latvia	3.7				131	Bangladesh	2.6			
60	Montenegro	3.7				132	Lesotho	2.5			
61	Uruguay	3.7				133	Libya	2.5			
62	Cyprus	3.7				134	Georgia	2.5			
63	Botswana	3.7				135	Guinea	2.4			
64	Malta	3.7				136	Côte d'Ivoire	2.4			
65	Italy	3.6				137	Sierra Leone	2.3			
66	Venezuela	3.6				138	Albania	2.3			
67	Poland	3.6				139	Burundi	2.2			
68	Uganda	3.6				140	Gabon	2.2			
69	Ukraine	3.6				141	Kyrgyz Republic	2.0			
70	Turkey	3.6				142	Haiti	2.0			
71	Cambodia	3.5				143	Yemen	1.9			
72	Nigeria	3.5				144	Algeria	1.9			

SOURCE: World Economic Forum, Executive Opinion Survey

12.05 Government procurement of advanced technology products

Do government procurement decisions foster technological innovation in your country? [1 = no, not at all; 7 = yes, extremely effectively] | 2011–12 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.6	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.6	7
1	Qatar	5.8				73	Tanzania	3.5			
2	Singapore	5.3				74	Mauritius	3.5			
3	United Arab Emirates	5.0				75	Costa Rica	3.5			
4	Malaysia	4.9				76	Kenya	3.5			
5	Saudi Arabia	4.8				77	Guinea	3.5			
6	Israel	4.6				78	Guyana	3.5			
7	Sri Lanka	4.6				79	Bolivia	3.5			
8	Luxembourg	4.6				80	Ireland	3.5			
9	Taiwan, China	4.6				81	Bulgaria	3.4			
10	Rwanda	4.5				82	Mauritania	3.4			
11	Panama	4.5				83	India	3.4			
12	Sweden	4.5				84	Mozambique	3.4			
13	Gambia, The	4.5				85	Latvia	3.4			
14	Finland	4.5				86	Côte d'Ivoire	3.4			
15	United States	4.4				87	Ghana	3.4			
16	China	4.4				88	Burkina Faso	3.4			
17	Oman	4.4				89	Spain	3.3			
18	Brunei Darussalam	4.4				90	Namibia	3.3			
19	Azerbaijan	4.4				91	Malawi	3.3			
20	Bahrain	4.4				92	Timor-Leste	3.3			
21	Germany	4.3				93	Dominican Republic	3.3			
22	Switzerland	4.3				94	Bosnia and Herzegovina	3.3			
23	Netherlands	4.2				95	Egypt	3.3			
24	Cambodia	4.1				96	Lithuania	3.2			
25	Belgium	4.1				97	Ukraine	3.2			
26	Tajikistan	4.1				98	Thailand	3.2			
27	Liberia	4.1				99	Peru	3.2			
28	Norway	4.1				100	Mongolia	3.2			
29	Indonesia	4.0				101	Poland	3.2			
30	Iceland	4.0				102	Macedonia, FYR	3.2			
31	Hong Kong SAR	4.0				103	Sierra Leone	3.2			
32	Turkey	4.0				104	Honduras	3.1			
33	Korea, Rep.	4.0				105	South Africa	3.1			
34	Barbados	4.0				106	Slovenia	3.1			
35	Estonia	4.0				107	Philippines	3.1			
36	Portugal	4.0				108	Armenia	3.1			
37	Chile	3.9				109	Pakistan	3.1			
38	Seychelles	3.9				110	Hungary	3.1			
39	Vietnam	3.9				111	Madagascar	3.1			
40	Montenegro	3.9				112	Chad	3.1			
41	Zambia	3.9				113	El Salvador	3.1			
42	Cape Verde	3.9				114	Romania	3.1			
43	Cameroon	3.9				115	Serbia	3.1			
44	Malta	3.9				116	Nicaragua	3.1			
45	United Kingdom	3.9				117	Gabon	3.0			
46	Albania	3.9				118	Libya	3.0			
47	Canada	3.8				119	Guatemala	3.0			
48	Japan	3.8				120	Jamaica	3.0			
49	France	3.8				121	Italy	2.9			
50	Austria	3.8				122	Czech Republic	2.9			
51	Senegal	3.8				123	Kuwait	2.9			
52	Colombia	3.8				124	Russian Federation	2.9			
53	Brazil	3.8				125	Paraguay	2.9			
54	Mali	3.7				126	Suriname	2.8			
55	Cyprus	3.7				127	Slovak Republic	2.8			
56	Puerto Rico	3.7				128	Trinidad and Tobago	2.8			
57	New Zealand	3.7				129	Croatia	2.7			
58	Australia	3.7				130	Greece	2.7			
59	Ecuador	3.7				131	Argentina	2.6			
60	Georgia	3.7				132	Nepal	2.6			
61	Ethiopia	3.7				133	Lesotho	2.6			
62	Benin	3.7				134	Bangladesh	2.6			
63	Denmark	3.7				135	Zimbabwe	2.6			
64	Nigeria	3.6				136	Moldova	2.6			
65	Botswana	3.6				137	Swaziland	2.5			
66	Iran, Islamic Rep.	3.6				138	Kyrgyz Republic	2.4			
67	Mexico	3.6				139	Burundi	2.4			
68	Uganda	3.6				140	Haiti	2.3			
69	Jordan	3.6				141	Lebanon	2.3			
70	Uruguay	3.6				142	Algeria	2.2			
71	Kazakhstan	3.6				143	Yemen	2.1			
72	Morocco	3.6				144	Venezuela	2.0			

SOURCE: World Economic Forum, Executive Opinion Survey

12.06 Availability of scientists and engineers

To what extent are scientists and engineers available in your country? [1 = not at all; 7 = widely available] | 2011–12 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 4.1	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 4.1	7
1	Finland	6.2				73	Armenia	4.0			
2	Japan	5.7				74	Guinea	4.0			
3	Puerto Rico	5.7				75	Luxembourg	4.0			
4	Sweden	5.4				76	Montenegro	3.9			
5	United States	5.4				77	Kuwait	3.9			
6	Canada	5.4				78	Serbia	3.9			
7	Taiwan, China	5.3				79	Slovak Republic	3.9			
8	Qatar	5.3				80	Argentina	3.9			
9	Israel	5.2				81	Bangladesh	3.8			
10	Greece	5.2				82	Romania	3.8			
11	Jordan	5.2				83	Tajikistan	3.8			
12	United Kingdom	5.1				84	Slovenia	3.8			
13	Singapore	5.1				85	Rwanda	3.8			
14	Switzerland	5.1				86	Croatia	3.8			
15	United Arab Emirates	5.0				87	Ghana	3.8			
16	India	5.0				88	Guatemala	3.8			
17	Iceland	5.0				89	Uganda	3.8			
18	Spain	5.0				90	Russian Federation	3.8			
19	Belgium	5.0				91	Philippines	3.7			
20	Malaysia	4.9				92	Chad	3.7			
21	Ireland	4.9				93	Oman	3.7			
22	France	4.9				94	Colombia	3.7			
23	Korea, Rep.	4.9				95	Brunei Darussalam	3.6			
24	Netherlands	4.8				96	Ecuador	3.6			
25	Ukraine	4.8				97	Liberia	3.6			
26	Saudi Arabia	4.8				98	Bulgaria	3.6			
27	Costa Rica	4.7				99	Panama	3.6			
28	Denmark	4.7				100	Malawi	3.6			
29	Chile	4.7				101	Jamaica	3.6			
30	Austria	4.7				102	Burundi	3.6			
31	Portugal	4.7				103	Guyana	3.6			
32	Sri Lanka	4.6				104	Kazakhstan	3.6			
33	Côte d'Ivoire	4.6				105	Tanzania	3.6			
34	Iran, Islamic Rep.	4.6				106	Macedonia, FYR	3.5			
35	Senegal	4.6				107	Burkina Faso	3.5			
36	Hong Kong SAR	4.6				108	Bolivia	3.5			
37	Lebanon	4.5				109	Cambodia	3.5			
38	Morocco	4.5				110	Latvia	3.5			
39	Benin	4.5				111	Suriname	3.5			
40	Germany	4.5				112	Botswana	3.5			
41	Turkey	4.5				113	Brazil	3.5			
42	Norway	4.5				114	Mauritania	3.5			
43	Czech Republic	4.5				115	Gambia, The	3.4			
44	Azerbaijan	4.5				116	Mauritius	3.4			
45	Italy	4.5				117	Uruguay	3.4			
46	China	4.4				118	Libya	3.4			
47	Madagascar	4.4				119	Honduras	3.4			
48	Bosnia and Herzegovina	4.4				120	Peru	3.4			
49	Cameroon	4.4				121	Zimbabwe	3.4			
50	Hungary	4.4				122	South Africa	3.4			
51	Indonesia	4.3				123	Albania	3.3			
52	Cyprus	4.3				124	Georgia	3.3			
53	Australia	4.3				125	Dominican Republic	3.3			
54	Barbados	4.3				126	Venezuela	3.3			
55	New Zealand	4.3				127	Cape Verde	3.3			
56	Trinidad and Tobago	4.3				128	Nepal	3.2			
57	Thailand	4.3				129	Seychelles	3.2			
58	Poland	4.2				130	Nicaragua	3.2			
59	Lithuania	4.2				131	Moldova	3.2			
60	Pakistan	4.2				132	Ethiopia	3.1			
61	Egypt	4.2				133	Gabon	3.1			
62	Bahrain	4.2				134	Paraguay	3.0			
63	Mongolia	4.1				135	Kyrgyz Republic	3.0			
64	Zambia	4.1				136	Haiti	2.9			
65	Mali	4.1				137	Mozambique	2.8			
66	Kenya	4.1				138	Namibia	2.8			
67	Malta	4.1				139	El Salvador	2.8			
68	Nigeria	4.1				140	Yemen	2.7			
69	Estonia	4.0				141	Sierra Leone	2.6			
70	Vietnam	4.0				142	Lesotho	2.6			
71	Mexico	4.0				143	Timor-Leste	2.6			
72	Algeria	4.0				144	Swaziland	2.6			

SOURCE: World Economic Forum, Executive Opinion Survey

12.07 PCT patent applications

Number of applications filed under the Patent Cooperation Treaty (PCT) per million population | 2008–09 average

RANK	COUNTRY/ECONOMY	VALUE		RANK	COUNTRY/ECONOMY	VALUE	
1	Sweden	311.0		73	Egypt	0.6	
2	Switzerland	287.2		74	Jordan	0.5	
3	Finland	277.1		75	Libya	0.5	
4	Israel	235.5		76	Guatemala	0.5	
5	Japan	210.7		77	Dominican Republic	0.5	
6	Denmark	210.5		78	Panama	0.4	
7	Germany	203.6		79	Azerbaijan	0.4	
8	Netherlands	203.3		80	Oman	0.4	
9	Korea, Rep.	161.1		81	El Salvador	0.4	
10	Austria	144.6		82	Kuwait	0.4	
11	Norway	143.6		83	Philippines	0.3	
12	United States	137.9		84	Namibia	0.3	
13	Singapore	123.2		85	Mauritius	0.3	
14	France	110.2		86	Cameroon	0.2	
15	Luxembourg	105.3		87	Lesotho	0.2	
16	Belgium	102.4		88	Peru	0.2	
17	Iceland	96.8		89	Mongolia	0.2	
18	United Kingdom	93.0		90	Swaziland	0.2	
19	Ireland	90.5		91	Algeria	0.2	
20	Australia	83.5		92	Suriname	0.2	
21	Canada	77.6		93	Gabon	0.2	
22	New Zealand	75.8		94	Ecuador	0.2	
23	Slovenia	66.0		95	Kenya	0.1	
24	Italy	51.7		96	Venezuela	0.1	
25	Spain	35.4		97	Vietnam	0.1	
26	Estonia	34.5		98	Zimbabwe	0.1	
27	Hungary	22.1		99	Paraguay	0.1	
28	Czech Republic	18.4		100	Iran, Islamic Rep.	0.1	
29	Malta	12.9		101	Indonesia	0.1	
30	Latvia	12.5		102	Kyrgyz Republic	0.1	
31	Portugal	12.2		103	Zambia	0.0	
32	Barbados	11.5		104	Chad	0.0	
33	Croatia	10.0		105	Sierra Leone	0.0	
34	Malaysia	9.6		106	Yemen	0.0	
35	Greece	9.4		107	Bolivia	0.0	
36	Cyprus	9.4		108	Senegal	0.0	
37	South Africa	6.8		109	Ghana	0.0	
38	China	6.5		110	Burkina Faso	0.0	
39	Lithuania	6.2		111	Benin	0.0	
40	Slovak Republic	6.1		112	Haiti	0.0	
41	Seychelles	5.8		113	Nepal	0.0	
42	Turkey	5.8		114	Pakistan	0.0	
43	Poland	5.8		115	Bangladesh	0.0	
44	Russian Federation	5.4		116	Nigeria	0.0	
45	United Arab Emirates	4.5		117	Tanzania	0.0	
46	Chile	3.8		118	Uganda	0.0	
47	Bulgaria	3.6		119	Albania	0.0	
48	Brazil	2.8		119	Botswana	0.0	
49	Saudi Arabia	2.2		119	Burundi	0.0	
50	Bosnia and Herzegovina	2.1		119	Cambodia	0.0	
51	Ukraine	2.1		119	Cape Verde	0.0	
52	Bahrain	2.1		119	Côte d'Ivoire	0.0	
53	Uruguay	2.1		119	Ethiopia	0.0	
54	Trinidad and Tobago	2.0		119	Gambia, The	0.0	
55	Brunei Darussalam	1.9		119	Guinea	0.0	
56	Romania	1.9		119	Guyana	0.0	
57	Costa Rica	1.7		119	Honduras	0.0	
58	Mexico	1.6		119	Liberia	0.0	
59	Macedonia, FYR	1.5		119	Madagascar	0.0	
60	Georgia	1.5		119	Malawi	0.0	
61	Armenia	1.4		119	Mali	0.0	
62	Qatar	1.3		119	Mauritania	0.0	
63	India	1.2		119	Montenegro	0.0	
64	Colombia	1.1		119	Mozambique	0.0	
65	Kazakhstan	1.1		119	Nicaragua	0.0	
66	Argentina	1.1		119	Rwanda	0.0	
67	Lebanon	1.1		119	Serbia	0.0	
68	Sri Lanka	0.7		119	Tajikistan	0.0	
69	Moldova	0.7		119	Timor-Leste	0.0	
70	Jamaica	0.7		n/a	Hong Kong SAR	n/a	
71	Morocco	0.7		n/a	Puerto Rico	n/a	
72	Thailand	0.6		n/a	Taiwan, China	n/a	

SOURCE: Organisation for Economic Co-operation and Development (OECD), *Patent Database*, June 2012; United Nations, Department of Economic and Social Affairs, Population Division, 2011; *World Population Prospects: The 2010 Revision*, CD-ROM Edition; authors' calculations