Appendix II

Data Tables

Data Tables

This appendix provides tables for each of the 81 indicators that make up the Global Innovation Index 2017.

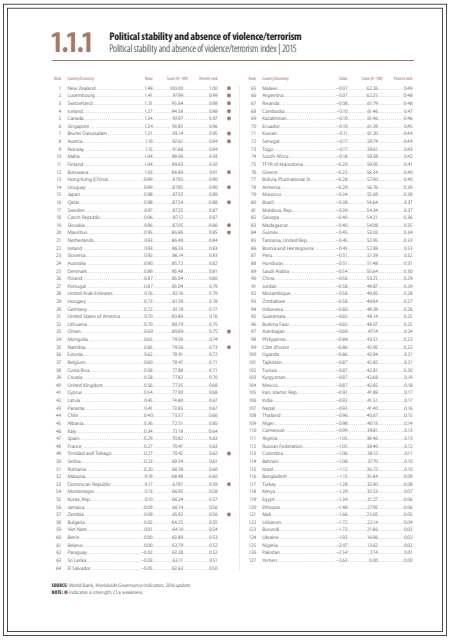
Structure

Each table is identified by indicator number, with the first digit representing the pillar, the second representing the sub-pillar, and the final digit representing the indicator within that particular sub-pillar. For example, Table 5.1.4 shows results for indicator 5.1.4, GERD financed by business enterprise, which is the fourth indicator of sub-pillar 5.1, knowledge workers, within pillar 5, Business sophistication.

The sub-heading text provides a detailed description of each indicator and includes information on the units of each variable, the scaling factor (if any), the question asked (for survey questions), and the most frequent year for which data were available.

For each indicator for each economy, the most recent value within the period 2007–16 was used (with the exceptions of four indicators, which are further explained in Appendix III). In instances where this base year does not correspond to the most frequent year reported in the sub-heading, the year of the value appears in parentheses after the economy name. These instances are noted in the Country/Economy Profiles after the indicator name with a clock symbol.

A total of 57 variables are hard data. A total of 19 variables are composite indicators and 5 are survey questions from the World Economic Forum's Executive Opinion Survey.



1.1.1 Political stability and absence of violence/terrorism
Political stability and absence of violence/terrorism index | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	New Zealand	1.46	100.00	1.00	●
2	Luxembourg	1.41	97.99	0.99	●
3	Switzerland	1.31	93.64	0.98	●
4	Ireland	1.27	94.58	0.98	●
5	Canada	1.24	93.97	0.97	●
6	Singapore	1.24	93.85	0.96	
7	Brunei Darussalam	1.21	93.14	0.95	●
8	Austria	1.16	92.42	0.94	●
9	Norway	1.15	91.68	0.94	
10	Malta	1.04	89.06	0.93	
11	Finland	1.04	89.03	0.92	
12	Botswana	1.03	88.80	0.91	●
13	Hong Kong (China)	0.99	87.93	0.90	
14	Uruguay	0.99	87.85	0.90	●
15	Japan	0.98	87.55	0.89	
16	Qatar	0.98	87.54	0.88	●
17	Sweden	0.97	87.25	0.87	
18	Czech Republic	0.96	87.12	0.87	
19	Slovakia	0.96	87.05	0.86	●
20	Mauritius	0.95	86.86	0.85	●
21	Netherlands	0.93	86.40	0.84	
22	Ireland	0.93	86.33	0.83	
23	Slovenia	0.92	86.14	0.83	
24	Australia	0.90	85.72	0.82	
25	Denmark	0.86	85.48	0.81	
26	Poland	0.87	85.04	0.80	
27	Portugal	0.87	85.04	0.79	
28	United Arab Emirates	0.76	82.16	0.78	
29	Hungary	0.73	81.59	0.78	
30	Germany	0.72	81.19	0.77	
31	United States of America	0.70	80.80	0.76	
32	Lithuania	0.70	80.79	0.75	
33	Oman	0.69	80.69	0.75	●
34	Mongolia	0.65	79.59	0.74	
35	Namibia	0.65	79.56	0.73	●
36	Estonia	0.62	78.91	0.72	
37	Belgium	0.60	78.47	0.71	
38	Costa Rica	0.58	77.88	0.71	
39	Croatia	0.58	77.82	0.70	
40	United Kingdom	0.56	77.35	0.69	
41	Cyprus	0.54	77.00	0.68	
42	Latvia	0.45	74.80	0.67	
43	Panama	0.41	73.85	0.67	
44	Chile	0.40	73.57	0.66	
45	Albania	0.36	72.51	0.66	
46	Italy	0.34	72.18	0.64	
47	Spain	0.29	70.82	0.63	
48	France	0.27	70.47	0.63	
49	Trinidad and Tobago	0.27	70.42	0.62	●
50	Serbia	0.23	69.34	0.61	
51	Romania	0.20	68.59	0.60	
52	Malaysia	0.19	68.48	0.60	
53	Dominican Republic	0.17	67.97	0.59	●
54	Montenegro	0.13	66.95	0.58	
55	Korea, Rep.	0.10	66.24	0.57	
56	Jamaica	0.09	66.14	0.56	
57	Zambia	0.08	65.92	0.56	●
58	Bulgaria	0.02	64.35	0.55	
59	Viet Nam	0.01	64.10	0.54	
60	Benin	0.00	63.89	0.53	
61	Belarus	0.00	63.79	0.52	
62	Paraguay	−0.02	63.28	0.52	
63	Sri Lanka	−0.03	63.11	0.51	
64	El Salvador	−0.05	62.63	0.50	
65	Malawi	−0.07	62.26	0.49	
66	Argentina	−0.07	62.25	0.49	
67	Rwanda	−0.08	61.79	0.48	
68	Cambodia	−0.10	61.46	0.47	
69	Kazakhstan	−0.10	61.46	0.46	
70	Ecuador	−0.10	61.39	0.45	
71	Kuwait	−0.11	61.20	0.44	
72	Senegal	−0.17	59.74	0.44	
73	Togo	−0.17	59.61	0.43	
74	South Africa	−0.18	59.58	0.42	
75	TFYR of Macedonia	−0.20	59.05	0.41	
76	Greece	−0.23	58.34	0.40	
77	Bolivia, Plurinational St.	−0.28	57.00	0.40	
78	Armenia	−0.29	56.76	0.39	
79	Morocco	−0.34	55.69	0.38	
80	Brazil	−0.36	54.64	0.37	
81	Moldova, Rep.	−0.39	54.34	0.37	
82	Georgia	−0.40	54.21	0.36	
83	Madagascar	−0.40	54.08	0.35	
84	Guinea	−0.45	53.03	0.34	
85	Tanzania, United Rep.	−0.45	52.92	0.33	
86	Bosnia and Herzegovina	−0.45	52.89	0.33	
87	Peru	−0.51	51.59	0.32	
88	Honduras	−0.51	51.48	0.31	
89	Saudi Arabia	−0.54	50.64	0.30	
90	China	−0.56	50.25	0.29	
91	Jordan	−0.58	49.87	0.29	
92	Mozambique	−0.58	49.80	0.28	
93	Zimbabwe	−0.58	49.64	0.27	
94	Indonesia	−0.60	49.39	0.26	
95	Guatemala	−0.65	48.14	0.25	
96	Burkina Faso	−0.65	48.07	0.25	
97	Azerbaijan	−0.69	47.14	0.24	
98	Philippines	−0.84	43.51	0.23	
99	Côte d'Ivoire	−0.86	42.95	0.22	
100	Uganda	−0.86	42.94	0.21	
101	Tajikistan	−0.87	42.82	0.21	
102	Tunisia	−0.87	42.81	0.20	
103	Kyrgyzstan	−0.87	42.68	0.19	
104	Mexico	−0.87	42.65	0.18	
105	Iran, Islamic Rep.	−0.91	41.89	0.17	
106	India	−0.92	41.51	0.17	
107	Nepal	−0.93	41.40	0.16	
108	Thailand	−0.96	40.67	0.15	
109	Niger	−0.98	40.13	0.14	
110	Cameroon	−0.99	39.81	0.13	
111	Algeria	−1.05	38.46	0.13	
112	Russian Federation	−1.05	38.40	0.12	
113	Colombia	−1.06	38.12	0.11	
114	Bahrain	−1.08	37.70	0.10	
115	Israel	−1.12	36.72	0.10	
116	Bangladesh	−1.15	35.84	0.09	
117	Turkey	−1.26	32.90	0.08	
118	Kenya	−1.26	32.53	0.07	
119	Egypt	−1.34	31.27	0.06	
120	Ethiopia	−1.48	27.95	0.06	
121	Mali	−1.66	23.65	0.05	
122	Lebanon	−1.73	22.14	0.04	
123	Burundi	−1.73	21.86	0.03	
124	Ukraine	−1.93	16.96	0.02	
125	Nigeria	−2.07	13.62	0.02	
126	Pakistan	−2.54	2.14	0.01	
127	Yemen	−2.63	0.00	0.00	

SOURCE: World Bank, *Worldwide Governance Indicators, 2016 update*
NOTE: ● indicates a strength, ○ a weakness

The source of each indicator is indicated at the bottom of the page; details for each can be found in Appendix III, Sources and Definitions.

Explanation of scores

The tables list the economies by their rank order, with the best performers at the top. After the rank comes the country/economy name, the original value of the specific indicator for that country (in the units specified in the sub-heading), the normalized score in the 0–100 range, and the percentage of economies with scores that fall below the normalized score (i.e., percent ranks). To the far right of each column, a solid circle indicates that an indicator is a strength for the country/economy in question, and a hollow circle indicates that it is a weakness (refer to Appendix I, Country/Economy Profiles, for details).

- Strengths (●) are all ranks of 1, 2, and 3, as well as all scores with percent ranks greater than the 10th highest percent rank among the 81 indicators in a specific economy.
- Weaknesses (○) are all scores with percent ranks lower than the 10th smallest percent rank among the 81 indicators in a specific economy.

For four hard data series (7.3.1, 7.3.2, 7.3.3, and 7.3.4), the raw data were provided under the condition that only the normalized scores be published and therefore the original value equals the normalized score. For indicators 1.3.1, 1.3.2, 1.3.3, 2.3.4, 3.3.2, 4.1.1, and 4.2.1, the range for both measures is the same—(0–100)—and therefore both measures are also identical.

Details on the computation methodology can be found in Appendix IV, Technical Notes.

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1.1.1 Political stability and absence of violence/terrorism

Political stability and absence of violence/terrorism index | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	New Zealand	1.49	100.00	1.00	●
2	Luxembourg	1.41	97.99	0.99	●
3	Switzerland	1.31	95.64	0.98	●
4	Iceland	1.27	94.58	0.98	●
5	Canada	1.24	93.97	0.97	●
6	Singapore	1.24	93.85	0.96	
7	Brunei Darussalam	1.21	93.14	0.95	●
8	Austria	1.19	92.61	0.94	●
9	Norway	1.15	91.68	0.94	
10	Malta	1.04	89.06	0.93	
11	Finland	1.04	89.03	0.92	
12	Botswana	1.03	88.80	0.91	●
13	Hong Kong (China)	0.99	87.93	0.90	
14	Uruguay	0.99	87.85	0.90	●
15	Japan	0.98	87.55	0.89	
16	Qatar	0.98	87.54	0.88	●
17	Sweden	0.97	87.25	0.87	
18	Czech Republic	0.96	87.12	0.87	
19	Slovakia	0.96	87.05	0.86	●
20	Mauritius	0.95	86.86	0.85	●
21	Netherlands	0.93	86.40	0.84	
22	Ireland	0.93	86.33	0.83	
23	Slovenia	0.92	86.14	0.83	
24	Australia	0.90	85.72	0.82	
25	Denmark	0.89	85.48	0.81	
26	Poland	0.87	85.04	0.80	
27	Portugal	0.87	85.04	0.79	
28	United Arab Emirates	0.76	82.16	0.79	
29	Hungary	0.73	81.59	0.78	
30	Germany	0.72	81.19	0.77	
31	United States of America	0.70	80.80	0.76	
32	Lithuania	0.70	80.79	0.75	
33	Oman	0.69	80.69	0.75	●
34	Mongolia	0.65	79.59	0.74	
35	Namibia	0.65	79.56	0.73	●
36	Estonia	0.62	78.91	0.72	
37	Belgium	0.60	78.47	0.71	
38	Costa Rica	0.58	77.88	0.71	
39	Croatia	0.58	77.82	0.70	
40	United Kingdom	0.56	77.35	0.69	
41	Cyprus	0.54	77.00	0.68	
42	Latvia	0.45	74.80	0.67	
43	Panama	0.41	73.85	0.67	
44	Chile	0.40	73.57	0.66	
45	Albania	0.36	72.51	0.65	
46	Italy	0.34	72.18	0.64	
47	Spain	0.29	70.82	0.63	
48	France	0.27	70.47	0.63	
49	Trinidad and Tobago	0.27	70.42	0.62	●
50	Serbia	0.23	69.34	0.61	
51	Romania	0.20	68.59	0.60	
52	Malaysia	0.19	68.48	0.60	
53	Dominican Republic	0.17	67.97	0.59	●
54	Montenegro	0.13	66.95	0.58	
55	Korea, Rep.	0.10	66.24	0.57	
56	Jamaica	0.09	66.14	0.56	
57	Zambia	0.09	65.92	0.56	●
58	Bulgaria	0.02	64.25	0.55	
59	Viet Nam	0.01	64.10	0.54	
60	Benin	0.00	63.89	0.53	
61	Belarus	0.00	63.79	0.52	
62	Paraguay	–0.02	63.28	0.52	
63	Sri Lanka	–0.03	63.11	0.51	
64	El Salvador	–0.05	62.63	0.50	
65	Malawi	–0.07	62.26	0.49	●
66	Argentina	–0.07	62.25	0.48	
67	Rwanda	–0.08	61.79	0.48	
68	Cambodia	–0.10	61.46	0.47	
69	Kazakhstan	–0.10	61.46	0.46	
70	Ecuador	–0.10	61.39	0.45	
71	Kuwait	–0.11	61.20	0.44	
72	Senegal	–0.17	59.74	0.44	
73	Togo	–0.17	59.61	0.43	●
74	South Africa	–0.18	59.58	0.42	
75	TFYR of Macedonia	–0.20	59.05	0.41	
76	Greece	–0.23	58.34	0.40	
77	Bolivia, Plurinational St.	–0.28	57.00	0.40	
78	Armenia	–0.29	56.76	0.39	
79	Morocco	–0.34	55.69	0.38	
80	Brazil	–0.38	54.64	0.37	
81	Moldova, Rep.	–0.39	54.34	0.37	
82	Georgia	–0.40	54.21	0.36	
83	Madagascar	–0.40	54.08	0.35	
84	Guinea	–0.45	53.03	0.34	●
85	Tanzania, United Rep.	–0.45	52.95	0.33	
86	Bosnia and Herzegovina	–0.45	52.89	0.33	
87	Peru	–0.51	51.59	0.32	
88	Honduras	–0.51	51.48	0.31	
89	Saudi Arabia	–0.54	50.64	0.30	
90	China	–0.56	50.25	0.29	
91	Jordan	–0.58	49.87	0.29	
92	Mozambique	–0.58	49.85	0.28	
93	Zimbabwe	–0.58	49.84	0.27	
94	Indonesia	–0.60	49.39	0.26	
95	Guatemala	–0.65	48.14	0.25	
96	Burkina Faso	–0.65	48.07	0.25	
97	Azerbaijan	–0.69	47.14	0.24	
98	Philippines	–0.84	43.51	0.23	
99	Côte d'Ivoire	–0.86	42.95	0.22	
100	Uganda	–0.86	42.94	0.21	
101	Tajikistan	–0.87	42.82	0.21	
102	Tunisia	–0.87	42.81	0.20	
103	Kyrgyzstan	–0.87	42.68	0.19	
104	Mexico	–0.87	42.65	0.18	○
105	Iran, Islamic Rep.	–0.91	41.89	0.17	
106	India	–0.92	41.51	0.17	
107	Nepal	–0.93	41.40	0.16	
108	Thailand	–0.96	40.67	0.15	○
109	Niger	–0.98	40.13	0.14	
110	Cameroon	–0.99	39.81	0.13	
111	Algeria	–1.05	38.46	0.13	
112	Russian Federation	–1.05	38.40	0.12	○
113	Colombia	–1.06	38.12	0.11	○
114	Bahrain	–1.08	37.70	0.10	
115	Israel	–1.12	36.72	0.10	○
116	Bangladesh	–1.15	35.84	0.09	
117	Turkey	–1.28	32.90	0.08	○
118	Kenya	–1.29	32.53	0.07	○
119	Egypt	–1.34	31.27	0.06	
120	Ethiopia	–1.48	27.95	0.06	
121	Mali	–1.66	23.65	0.05	
122	Lebanon	–1.72	22.14	0.04	○
123	Burundi	–1.73	21.86	0.03	
124	Ukraine	–1.93	16.96	0.02	○
125	Nigeria	–2.07	13.62	0.02	○
126	Pakistan	–2.54	2.14	0.01	○
127	Yemen	–2.63	0.00	0.00	○

SOURCE: World Bank, *Worldwide Governance Indicators, 2016 update*
NOTE: ● indicates a strength; ○ a weakness

1.1.2 Government effectiveness

Government effectiveness index | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Singapore	2.25	100.00	1.00	●
2	Switzerland	2.01	93.78	0.99	●
3	Hong Kong (China)	1.93	91.68	0.98	●
4	New Zealand	1.89	90.70	0.98	●
5	Norway	1.86	89.98	0.97	●
6	Denmark	1.85	89.65	0.96	●
7	Netherlands	1.84	89.46	0.95	
8	Finland	1.82	88.96	0.94	
9	Sweden	1.81	88.68	0.94	
10	Japan	1.79	88.16	0.93	
11	Canada	1.77	87.49	0.92	
12	Germany	1.74	86.84	0.91	
13	United Kingdom	1.74	86.81	0.90	
14	Luxembourg	1.72	86.45	0.90	
15	Australia	1.56	82.18	0.89	
16	United Arab Emirates	1.54	81.63	0.88	
17	Ireland	1.54	81.62	0.87	
18	Iceland	1.50	80.70	0.87	
19	Austria	1.47	80.00	0.86	
20	United States of America	1.46	79.70	0.85	
21	France	1.44	79.22	0.84	
22	Belgium	1.44	79.17	0.83	
23	Israel	1.38	77.47	0.83	
24	Portugal	1.23	73.81	0.82	
25	Lithuania	1.20	73.00	0.81	
26	Spain	1.18	72.39	0.80	
27	Latvia	1.10	70.35	0.79	
28	Estonia	1.09	70.18	0.79	
29	Chile	1.08	69.94	0.78	
30	Brunei Darussalam	1.05	69.19	0.77	●
31	Czech Republic	1.05	69.16	0.76	
32	Cyprus	1.04	68.77	0.75	
33	Mauritius	1.04	68.76	0.75	●
34	Korea, Rep.	1.03	68.51	0.74	
35	Qatar	1.00	67.72	0.73	
36	Slovenia	0.97	67.17	0.72	
37	Malaysia	0.96	66.92	0.71	
38	Malta	0.85	64.01	0.71	
39	Slovakia	0.84	63.73	0.70	
40	Poland	0.80	62.69	0.69	
41	Bahrain	0.57	56.89	0.68	
42	Uruguay	0.54	56.02	0.67	
43	Botswana	0.51	55.33	0.67	
44	Croatia	0.51	55.23	0.66	
45	Hungary	0.49	54.78	0.65	
46	Italy	0.45	53.81	0.64	
47	China	0.42	53.05	0.63	
48	Georgia	0.40	52.46	0.63	
49	Costa Rica	0.38	51.88	0.62	
50	Thailand	0.36	51.31	0.61	
51	Panama	0.30	49.79	0.60	
52	South Africa	0.27	48.96	0.60	
53	Namibia	0.26	48.77	0.59	
54	Greece	0.25	48.55	0.58	
55	Jamaica	0.25	48.47	0.57	
56	Trinidad and Tobago	0.24	48.24	0.56	●
57	Turkey	0.23	48.13	0.56	
58	Bulgaria	0.22	47.70	0.55	
59	Mexico	0.21	47.57	0.54	
60	Saudi Arabia	0.21	47.55	0.53	
61	Montenegro	0.16	46.29	0.52	
62	Jordan	0.14	45.64	0.52	
63	TFYR of Macedonia	0.13	45.39	0.51	
64	Serbia	0.11	45.08	0.50	
65	Philippines	0.11	44.90	0.49	
66	India	0.10	44.73	0.48	
67	Oman	0.09	44.55	0.48	
68	Viet Nam	0.08	44.13	0.47	
69	Albania	0.03	42.86	0.46	
70	Sri Lanka	0.01	42.37	0.45	
71	Kuwait	–0.02	41.52	0.44	
72	Colombia	–0.03	41.25	0.44	
73	Romania	–0.04	41.17	0.43	
74	Rwanda	–0.04	41.14	0.42	
75	Kazakhstan	–0.05	40.79	0.41	
76	Morocco	–0.06	40.60	0.40	
77	Argentina	–0.09	39.91	0.40	
78	Tunisia	–0.10	39.48	0.39	
79	Armenia	–0.14	38.67	0.38	
80	Russian Federation	–0.18	37.46	0.37	
81	Brazil	–0.19	37.29	0.37	
82	Iran, Islamic Rep.	–0.20	36.97	0.36	
83	Indonesia	–0.22	36.38	0.35	
84	Azerbaijan	–0.23	36.16	0.34	
85	El Salvador	–0.24	35.92	0.33	
86	Peru	–0.28	35.02	0.33	
87	Kenya	–0.29	34.83	0.32	
88	Dominican Republic	–0.34	33.31	0.31	
89	Mongolia	–0.40	31.78	0.30	
90	Senegal	–0.44	30.97	0.29	
91	Ecuador	–0.44	30.95	0.29	
92	Lebanon	–0.47	30.06	0.28	
93	Belarus	–0.48	29.92	0.27	
94	Uganda	–0.48	29.74	0.26	
95	Algeria	–0.51	29.15	0.25	
96	Ukraine	–0.51	28.95	0.25	
97	Bosnia and Herzegovina	–0.54	28.17	0.24	
98	Zambia	–0.55	27.91	0.23	
99	Burkina Faso	–0.59	27.09	0.22	
100	Tanzania, United Rep.	–0.60	26.77	0.21	
101	Niger	–0.61	26.55	0.21	
102	Benin	–0.62	26.28	0.20	
103	Moldova, Rep.	–0.63	25.94	0.19	
104	Ethiopia	–0.64	25.69	0.18	
105	Côte d'Ivoire	–0.65	25.43	0.17	
106	Bolivia, Plurinational St.	–0.66	25.26	0.17	
107	Pakistan	–0.66	25.16	0.16	
108	Malawi	–0.67	24.81	0.15	
109	Cambodia	–0.69	24.43	0.14	
110	Guatemala	–0.71	23.82	0.13	
111	Bangladesh	–0.73	23.45	0.13	
112	Mozambique	–0.74	23.10	0.12	
113	Egypt	–0.76	22.58	0.11	
114	Cameroon	–0.76	22.54	0.10	
115	Honduras	–0.82	21.12	0.10	○
116	Tajikistan	–0.82	21.10	0.09	
117	Kyrgyzstan	–0.90	18.99	0.08	
118	Mali	–0.91	18.74	0.07	
119	Paraguay	–0.95	17.87	0.06	○
120	Nigeria	–0.95	17.70	0.06	
121	Nepal	–1.04	15.35	0.05	○
122	Guinea	–1.14	12.98	0.04	
123	Burundi	–1.15	12.74	0.03	
124	Zimbabwe	–1.15	12.66	0.02	○
125	Togo	–1.18	11.86	0.02	○
126	Madagascar	–1.29	8.96	0.01	○
127	Yemen	–1.64	0.00	0.00	○

SOURCE: World Bank, *Worldwide Governance Indicators, 2016 update*
NOTE: ● indicates a strength; ○ a weakness

1.2.1 Regulatory quality

Regulatory quality index | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Singapore	2.26	100.00	1.00	●
2	Hong Kong (China)	2.18	97.79	0.99	●
3	New Zealand	1.95	91.94	0.98	●
4	United Kingdom	1.86	89.58	0.98	●
5	Finland	1.83	88.89	0.97	●
6	Ireland	1.81	88.51	0.96	●
7	Sweden	1.81	88.37	0.95	
8	Australia	1.80	88.05	0.94	
9	Netherlands	1.77	87.36	0.94	
10	Switzerland	1.76	87.03	0.93	
11	Denmark	1.73	86.47	0.92	
12	Canada	1.71	85.75	0.91	
13	Luxembourg	1.67	84.93	0.90	
14	Germany	1.67	84.71	0.90	
15	Estonia	1.66	84.48	0.89	
16	Norway	1.63	83.90	0.88	
17	Austria	1.43	78.70	0.87	
18	Chile	1.35	76.72	0.87	●
19	United States of America	1.30	75.31	0.86	
20	Lithuania	1.28	74.87	0.85	●
21	Belgium	1.28	74.79	0.84	
22	Israel	1.27	74.61	0.83	
23	Iceland	1.27	74.57	0.83	
24	Japan	1.18	72.23	0.82	
25	Malta	1.17	72.17	0.81	
26	Korea, Rep.	1.16	71.69	0.80	
27	France	1.15	71.65	0.79	
28	United Arab Emirates	1.13	71.11	0.79	
29	Mauritius	1.09	69.97	0.78	●
30	Latvia	1.09	69.89	0.77	
31	Czech Republic	1.08	69.87	0.76	
32	Cyprus	1.06	69.25	0.75	
33	Poland	1.00	67.63	0.75	
34	Portugal	0.94	66.17	0.74	
35	Georgia	0.92	65.76	0.73	
36	Brunei Darussalam	0.84	63.67	0.72	
37	Bahrain	0.83	63.30	0.71	
38	Slovakia	0.79	62.27	0.71	
39	Spain	0.79	62.21	0.70	
40	Malaysia	0.77	61.87	0.69	
41	Hungary	0.77	61.78	0.68	
42	Italy	0.73	60.79	0.67	
43	Qatar	0.69	59.82	0.67	
44	Slovenia	0.62	58.00	0.66	
45	Romania	0.59	57.23	0.65	
46	Oman	0.58	57.01	0.64	
47	Bulgaria	0.55	56.26	0.63	
48	Peru	0.49	54.75	0.63	
49	Costa Rica	0.49	54.73	0.62	
50	Botswana	0.49	54.53	0.61	
51	Uruguay	0.45	53.69	0.60	
52	Colombia	0.45	53.67	0.60	
53	TFYR of Macedonia	0.45	53.55	0.59	
54	Mexico	0.40	52.35	0.58	
55	Greece	0.40	52.28	0.57	
56	Panama	0.37	51.71	0.56	
57	Croatia	0.36	51.43	0.56	
58	Turkey	0.33	50.57	0.55	
59	South Africa	0.30	49.89	0.54	
60	Thailand	0.30	49.77	0.53	
61	Armenia	0.25	48.49	0.52	
62	Rwanda	0.25	48.48	0.52	
63	Montenegro	0.23	47.88	0.51	
64	El Salvador	0.20	47.23	0.50	
65	Albania	0.20	47.20	0.49	
66	Trinidad and Tobago	0.15	45.84	0.48	
67	Serbia	0.14	45.60	0.48	
68	Jamaica	0.11	44.93	0.47	
69	Jordan	0.05	43.34	0.46	
70	Saudi Arabia	0.03	42.90	0.45	
71	Kazakhstan	–0.03	41.48	0.44	
72	Philippines	–0.04	41.18	0.44	
73	Dominican Republic	–0.04	41.17	0.43	
74	Sri Lanka	–0.05	40.79	0.42	
75	Moldova, Rep.	–0.05	40.76	0.41	
76	Namibia	–0.08	40.02	0.40	
77	Kuwait	–0.16	38.13	0.40	
78	Morocco	–0.17	37.71	0.39	
79	Senegal	–0.18	37.55	0.38	
80	Bosnia and Herzegovina	–0.18	37.50	0.37	
81	Guatemala	–0.20	36.90	0.37	
82	Indonesia	–0.21	36.74	0.36	
83	Brazil	–0.21	36.69	0.35	
84	Uganda	–0.24	35.93	0.34	
85	Azerbaijan	–0.25	35.61	0.33	
86	Paraguay	–0.27	35.29	0.33	
87	China	–0.27	35.25	0.32	
88	Lebanon	–0.28	35.03	0.31	
89	Kenya	–0.29	34.60	0.30	
90	Mongolia	–0.33	33.61	0.29	
91	Burkina Faso	–0.36	32.90	0.29	
92	Tanzania, United Rep.	–0.36	32.85	0.28	
93	India	–0.39	32.11	0.27	
94	Tunisia	–0.39	32.03	0.26	
95	Honduras	–0.40	31.96	0.25	
96	Zambia	–0.42	31.32	0.25	
97	Kyrgyzstan	–0.47	30.20	0.24	
98	Cambodia	–0.48	29.84	0.23	
99	Mozambique	–0.49	29.47	0.22	
100	Viet Nam	–0.50	29.43	0.21	
101	Côte d'Ivoire	–0.52	28.94	0.21	
102	Russian Federation	–0.52	28.76	0.20	○
103	Benin	–0.56	27.92	0.19	
104	Mali	–0.57	27.56	0.18	
105	Ukraine	–0.58	27.29	0.17	
106	Pakistan	–0.62	26.17	0.17	
107	Burundi	–0.71	23.98	0.16	
108	Niger	–0.73	23.56	0.15	
109	Madagascar	–0.76	22.75	0.14	
110	Nepal	–0.79	22.04	0.13	
111	Egypt	–0.80	21.75	0.13	
112	Malawi	–0.82	21.18	0.12	
113	Togo	–0.82	21.14	0.11	
114	Nigeria	–0.84	20.62	0.10	
115	Guinea	–0.86	20.03	0.10	
116	Cameroon	–0.91	18.96	0.09	
117	Bolivia, Plurinational St.	–0.91	18.94	0.08	
118	Bangladesh	–0.93	18.37	0.07	
119	Argentina	–0.96	17.66	0.06	○
120	Belarus	–1.00	16.49	0.06	○
121	Ethiopia	–1.00	16.42	0.05	
122	Tajikistan	–1.01	16.39	0.04	
123	Yemen	–1.10	13.96	0.03	
124	Ecuador	–1.14	12.92	0.02	○
125	Algeria	–1.17	12.20	0.02	○
126	Iran, Islamic Rep.	–1.28	9.37	0.01	○
127	Zimbabwe	–1.65	0.00	0.00	○

SOURCE: World Bank, *Worldwide Governance Indicators, 2016 update*
NOTE: ● indicates a strength; ○ a weakness

1.2.2 Rule of law

Rule of law index | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Finland	2.07	100.00	1.00	●
2	Sweden	2.04	99.15	0.99	●
3	Denmark	2.04	99.05	0.98	●
4	Norway	2.02	98.51	0.98	●
5	New Zealand	2.02	98.46	0.97	●
6	Switzerland	1.97	96.87	0.96	
7	Netherlands	1.93	95.94	0.95	
8	Singapore	1.88	94.39	0.94	
9	Luxembourg	1.86	93.89	0.94	
10	Austria	1.85	93.47	0.93	●
11	Canada	1.84	93.05	0.92	
12	Hong Kong (China)	1.83	92.95	0.91	
13	Australia	1.82	92.71	0.90	
14	United Kingdom	1.81	92.16	0.90	
15	Ireland	1.79	91.65	0.89	
16	Germany	1.78	91.49	0.88	
17	Iceland	1.67	88.35	0.87	
18	United States of America	1.60	86.27	0.87	
19	Japan	1.51	83.58	0.86	
20	Belgium	1.42	80.94	0.85	
21	France	1.41	80.51	0.84	
22	Chile	1.33	78.36	0.83	●
23	Estonia	1.33	78.23	0.83	
24	Israel	1.17	73.55	0.82	
25	Malta	1.15	73.12	0.81	
26	Portugal	1.14	72.84	0.80	
27	Czech Republic	1.12	72.24	0.79	
28	Cyprus	1.01	68.98	0.79	
29	Lithuania	0.98	68.18	0.78	
30	Korea, Rep.	0.95	67.31	0.77	
31	Slovenia	0.95	67.28	0.76	
32	Spain	0.90	65.62	0.75	
33	Qatar	0.88	65.26	0.75	
34	Mauritius	0.85	64.37	0.74	
35	Poland	0.80	62.69	0.73	
36	Latvia	0.79	62.38	0.72	
37	United Arab Emirates	0.71	60.10	0.71	
38	Uruguay	0.68	59.15	0.71	●
39	Botswana	0.63	57.90	0.70	
40	Malaysia	0.57	56.20	0.69	
41	Slovakia	0.48	53.55	0.68	
42	Costa Rica	0.48	53.41	0.67	
43	Oman	0.46	52.93	0.67	
44	Jordan	0.46	52.92	0.66	
45	Bahrain	0.46	52.87	0.65	
46	Brunei Darussalam	0.44	52.38	0.64	
47	Hungary	0.40	51.22	0.63	
48	Georgia	0.30	48.08	0.63	
49	Saudi Arabia	0.25	46.84	0.62	
50	Italy	0.25	46.77	0.61	
51	Greece	0.24	46.50	0.60	
52	Croatia	0.20	45.33	0.60	
53	Namibia	0.19	44.95	0.59	
54	Romania	0.15	43.90	0.58	
55	Rwanda	0.07	41.51	0.57	
56	Sri Lanka	0.07	41.42	0.56	
57	South Africa	0.06	41.05	0.56	
58	Kuwait	0.03	40.44	0.55	
59	Montenegro	0.03	40.37	0.54	
60	Tunisia	–0.05	37.88	0.53	
61	India	–0.06	37.76	0.52	
62	Turkey	–0.06	37.66	0.52	
63	Morocco	–0.08	37.17	0.51	
64	Serbia	–0.09	36.64	0.50	
65	Thailand	–0.11	36.32	0.49	
66	Panama	–0.12	35.95	0.48	
67	Bulgaria	–0.12	35.80	0.48	
68	Trinidad and Tobago	–0.14	35.22	0.47	
69	Senegal	–0.15	34.97	0.46	
70	TFYR of Macedonia	–0.17	34.35	0.45	
71	Brazil	–0.19	33.78	0.44	
72	Jamaica	–0.23	32.55	0.44	
73	Zambia	–0.25	32.03	0.43	
74	Viet Nam	–0.27	31.57	0.42	
75	Bosnia and Herzegovina	–0.29	30.91	0.41	
76	Colombia	–0.31	30.44	0.40	
77	Malawi	–0.33	29.70	0.40	
78	China	–0.34	29.57	0.39	
79	Uganda	–0.34	29.46	0.38	
80	Armenia	–0.34	29.39	0.37	
81	Philippines	–0.35	29.33	0.37	
82	Albania	–0.36	28.92	0.36	
83	Kazakhstan	–0.37	28.67	0.35	
84	Mongolia	–0.39	28.01	0.34	
85	Moldova, Rep.	–0.40	27.67	0.33	
86	Indonesia	–0.41	27.36	0.33	
87	Tanzania, United Rep.	–0.43	26.99	0.32	
88	Ethiopia	–0.44	26.70	0.31	
89	Dominican Republic	–0.46	26.08	0.30	
90	Mexico	–0.47	25.69	0.29	
91	Kenya	–0.49	25.09	0.29	
92	Egypt	–0.50	24.72	0.28	
93	Peru	–0.53	23.90	0.27	
94	Burkina Faso	–0.53	23.86	0.26	
95	Benin	–0.58	22.43	0.25	
96	El Salvador	–0.59	22.12	0.25	
97	Azerbaijan	–0.60	21.80	0.24	
98	Niger	–0.61	21.70	0.23	
99	Côte d'Ivoire	–0.62	21.34	0.22	
100	Madagascar	–0.69	19.13	0.21	
101	Paraguay	–0.69	19.11	0.21	
102	Bangladesh	–0.70	18.96	0.20	
103	Nepal	–0.70	18.93	0.19	
104	Russian Federation	–0.72	18.39	0.18	○
105	Mali	–0.76	17.33	0.17	
106	Lebanon	–0.79	16.45	0.17	
107	Belarus	–0.79	16.43	0.16	○
108	Pakistan	–0.79	16.38	0.15	
109	Togo	–0.80	16.05	0.14	
110	Ukraine	–0.80	16.01	0.13	
111	Argentina	–0.80	15.93	0.13	
112	Algeria	–0.83	15.13	0.12	
113	Mozambique	–0.87	14.10	0.11	
114	Cambodia	–0.92	12.53	0.10	
115	Honduras	–0.95	11.63	0.10	○
116	Iran, Islamic Rep.	–0.95	11.54	0.09	
117	Cameroon	–0.96	11.34	0.08	
118	Guatemala	–0.99	10.59	0.07	
119	Kyrgyzstan	–1.00	10.26	0.06	○
120	Tajikistan	–1.01	9.92	0.06	
121	Ecuador	–1.03	9.36	0.05	○
122	Nigeria	–1.04	8.89	0.04	○
123	Burundi	–1.12	6.65	0.03	
124	Bolivia, Plurinational St.	–1.15	5.76	0.02	○
125	Guinea	–1.17	5.16	0.02	○
126	Yemen	–1.24	3.25	0.01	
127	Zimbabwe	–1.35	0.00	0.00	○

SOURCE: World Bank, *Worldwide Governance Indicators, 2016 update*
NOTE: ● indicates a strength; ○ a weakness

1.2.3 Cost of redundancy dismissal

Sum of notice period and severance pay for redundancy dismissal (in salary weeks, averages for workers with 1, 5, and 10 years of tenure, with a minimum threshold of 8 weeks) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Austria	8.00	100.00	0.86	●
1	Bahrain	8.00	100.00	0.86	●
1	Brunei Darussalam	8.00	100.00	0.86	●
1	Cyprus	8.00	100.00	0.86	●
1	Denmark	8.00	100.00	0.86	●
1	Hong Kong (China)	8.00	100.00	0.86	●
1	Italy	8.00	100.00	0.86	●
1	Japan	8.00	100.00	0.86	●
1	Jordan	8.00	100.00	0.86	●
1	Kenya	8.00	100.00	0.86	●
1	Malta	8.00	100.00	0.86	●
1	New Zealand	8.00	100.00	0.86	●
1	Nigeria	8.00	100.00	0.86	●
1	Oman (2015)	8.00	100.00	0.86	●
1	Romania	8.00	100.00	0.86	●
1	Serbia	8.00	100.00	0.86	●
1	Singapore	8.00	100.00	0.86	●
1	United Arab Emirates	8.00	100.00	0.86	●
1	United States of America	8.00	100.00	0.86	●
20	Bulgaria	8.62	98.77	0.84	●
20	Georgia	8.62	98.77	0.84	●
22	Kazakhstan	8.67	98.68	0.81	●
22	Mongolia	8.67	98.68	0.81	●
22	Norway	8.67	98.68	0.81	
22	Uganda	8.67	98.68	0.81	●
26	Bosnia and Herzegovina	9.22	97.58	0.80	●
27	South Africa	9.33	97.36	0.78	●
27	Tanzania, United Rep.	9.33	97.36	0.78	●
27	United Kingdom	9.33	97.36	0.78	
30	Namibia	9.67	96.70	0.77	●
31	Canada	10.00	96.04	0.76	
32	Guinea	10.06	95.91	0.75	●
33	Finland	10.11	95.82	0.74	
33	Switzerland	10.11	95.82	0.74	
35	Burkina Faso	10.47	95.10	0.73	●
36	Mauritius	10.62	94.81	0.72	
37	Slovenia	10.68	94.70	0.71	
38	Armenia	11.00	94.06	0.71	
39	Montenegro	11.22	93.63	0.70	
40	Peru	11.43	93.21	0.69	●
41	Benin	11.63	92.82	0.68	●
42	France	11.84	92.39	0.67	
43	Australia	12.00	92.08	0.67	
44	Estonia	12.90	90.29	0.66	
45	Rwanda	12.95	90.19	0.65	
46	Iceland	13.00	90.10	0.64	
47	Latvia	13.00	90.10	0.62	
47	TFYR of Macedonia	13.00	90.10	0.62	
47	Ukraine	13.00	90.10	0.62	
50	Côte d'Ivoire	13.07	89.96	0.61	●
51	Togo	13.14	89.81	0.60	●
52	Hungary	13.41	89.28	0.60	
53	Mali	13.65	88.81	0.59	●
54	Jamaica	14.00	88.12	0.58	
55	Niger	14.01	88.10	0.57	
56	Ireland	14.33	87.46	0.56	○
57	Sweden	14.44	87.24	0.56	○
58	Madagascar	14.67	86.80	0.55	●
59	Senegal	14.81	86.52	0.54	
60	Croatia	15.11	85.92	0.52	
60	Lebanon	15.11	85.92	0.52	
62	Brazil	15.45	85.26	0.52	
63	Tajikistan	15.53	85.09	0.51	●
64	India	15.76	84.63	0.50	
65	Netherlands	15.85	84.46	0.49	○
66	Greece	15.89	84.38	0.48	
67	Burundi	15.89	84.38	0.48	
68	Colombia	16.67	82.84	0.47	
69	Malawi	16.67	82.84	0.46	
70	Portugal	17.00	82.18	0.45	○
71	Algeria	17.33	81.52	0.44	
71	Kyrgyzstan	17.33	81.52	0.44	
73	Russian Federation	17.33	81.52	0.43	
74	Spain	17.38	81.42	0.42	○
75	Panama	18.13	79.93	0.41	
76	Costa Rica	18.70	78.81	0.40	
77	Slovakia	18.78	78.66	0.40	
78	Poland	18.78	78.66	0.39	
79	Ethiopia	19.14	77.93	0.38	
80	Cambodia	19.37	77.49	0.37	
81	Belgium	19.67	76.90	0.37	○
82	Cameroon	19.86	76.51	0.36	
83	Czech Republic	20.22	75.80	0.35	○
84	Trinidad and Tobago	20.51	75.22	0.34	
85	Morocco	20.69	74.87	0.33	
86	Uruguay	20.80	74.65	0.33	
87	Albania	20.83	74.60	0.32	
88	Germany	21.56	73.16	0.31	○
89	Tunisia	21.57	73.13	0.30	
90	Azerbaijan	21.67	72.94	0.29	
90	Belarus	21.67	72.94	0.29	
92	Luxembourg	21.67	72.94	0.28	○
93	Botswana	21.69	72.89	0.27	
94	Mexico	22.00	72.28	0.26	
95	Moldova, Rep.	22.60	71.09	0.25	
96	El Salvador	22.86	70.58	0.25	
97	Iran, Islamic Rep.	23.11	70.08	0.24	
98	Qatar	23.22	69.86	0.23	
99	Saudi Arabia	23.74	68.84	0.22	
100	Lithuania	24.56	67.22	0.21	○
101	Viet Nam	24.56	67.22	0.21	
102	Zimbabwe	25.28	65.79	0.20	
103	Dominican Republic	26.18	64.00	0.19	
104	Guatemala	26.96	62.45	0.18	
105	Nepal	27.19	62.00	0.17	
105	Pakistan	27.19	62.00	0.17	
107	Chile	27.40	61.59	0.14	○
107	China	27.40	61.59	0.14	○
107	Korea, Rep.	27.40	61.59	0.14	○
110	Yemen	27.40	61.59	0.13	
111	Israel	27.44	61.50	0.12	○
111	Philippines	27.44	61.50	0.12	○
113	Kuwait	28.12	60.16	0.11	○
114	Paraguay	29.40	57.61	0.10	
115	Malaysia	29.44	57.54	0.10	○
116	Turkey	29.78	56.88	0.09	○
117	Argentina	30.33	55.78	0.07	○
117	Honduras	30.33	55.78	0.07	○
119	Bangladesh	31.00	54.46	0.06	
120	Ecuador	31.78	52.92	0.06	
121	Thailand	36.00	44.55	0.05	○
122	Egypt	36.83	42.90	0.04	○
123	Mozambique	37.51	41.57	0.03	○
124	Zambia	50.56	15.73	0.02	○
125	Indonesia	57.78	1.43	0.02	○
126	Bolivia, Plurinational St. (2014)	82.33	0.00	0.00	○
126	Sri Lanka	58.50	0.00	0.00	○

SOURCE: World Bank, *Ease of Doing Business Index 2017: Equal Opportunity for All*
NOTE: ● indicates a strength; ○ a weakness

1.3.1 Ease of starting a business

Ease of starting a business (distance to frontier) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	New Zealand	99.96	99.96	1.00	●
2	Canada	98.23	98.23	0.99	●
3	Hong Kong (China)	98.20	98.20	0.98	●
4	TFYR of Macedonia	98.14	98.14	0.98	●
5	Azerbaijan	97.74	97.74	0.97	●
6	Singapore	96.49	96.49	0.96	
7	Australia	96.47	96.47	0.95	●
8	Georgia	96.13	96.13	0.94	●
9	Armenia	96.07	96.07	0.94	●
10	Ireland	95.91	95.91	0.93	
11	Korea, Rep.	95.83	95.83	0.92	
12	Jamaica	95.61	95.61	0.91	●
13	Estonia	95.13	95.13	0.90	
14	Sweden	94.64	94.64	0.90	
15	United Kingdom	94.58	94.58	0.89	
16	Belgium	94.49	94.49	0.88	
17	Burundi	94.45	94.45	0.87	●
18	Ukraine	94.40	94.40	0.87	●
19	Norway	94.30	94.30	0.86	
20	Latvia	94.15	94.15	0.84	
20	Netherlands	94.15	94.15	0.84	
22	Denmark	94.07	94.07	0.83	
23	Russian Federation	93.57	93.57	0.83	
24	France	93.27	93.27	0.82	
25	Finland	93.13	93.13	0.81	
26	Lithuania	92.99	92.99	0.80	
27	Kyrgyzstan	92.95	92.95	0.79	●
28	Belarus	92.91	92.91	0.79	●
29	Oman	92.85	92.85	0.77	●
29	Portugal	92.85	92.85	0.77	
31	Iceland	92.64	92.64	0.76	
32	Mongolia	92.55	92.55	0.75	
33	Egypt	92.43	92.43	0.75	●
34	Morocco	92.34	92.34	0.74	●
35	Israel	92.28	92.28	0.73	
36	Panama	92.01	92.01	0.72	
37	Moldova, Rep.	91.96	91.96	0.71	
38	Kazakhstan	91.94	91.94	0.71	
39	Albania	91.73	91.73	0.70	●
40	Serbia	91.67	91.67	0.69	
41	Mauritius	91.65	91.65	0.68	
42	Slovenia	91.42	91.42	0.67	
43	Côte d'Ivoire	91.38	91.38	0.67	●
44	United States of America	91.23	91.23	0.66	
45	Cyprus	91.21	91.21	0.64	
45	United Arab Emirates	91.21	91.21	0.64	
47	Greece	90.70	90.70	0.63	
48	Benin	90.56	90.56	0.63	●
49	Montenegro	90.07	90.07	0.62	
50	Chile	89.84	89.84	0.61	
51	Uruguay	89.79	89.79	0.60	
52	Colombia	89.57	89.57	0.60	
53	Romania	89.48	89.48	0.59	
54	Italy	89.40	89.40	0.58	
55	Luxembourg	88.66	88.66	0.57	
56	Slovakia	88.62	88.62	0.56	
57	Trinidad and Tobago	88.59	88.59	0.56	●
58	Switzerland	88.39	88.39	0.55	○
59	Burkina Faso	88.06	88.06	0.54	●
60	Bahrain	87.82	87.82	0.53	
61	Sri Lanka	87.52	87.52	0.52	
62	Hungary	87.28	87.28	0.52	
63	Rwanda	87.17	87.17	0.51	
64	Thailand	87.01	87.01	0.50	
65	Turkey	86.98	86.98	0.49	
66	Czech Republic	86.86	86.86	0.48	
67	Bulgaria	86.82	86.82	0.48	
68	Brunei Darussalam	86.72	86.72	0.47	
69	Spain	86.61	86.61	0.45	○
69	Tajikistan	86.61	86.61	0.45	
71	Niger	86.16	86.16	0.44	
72	Japan	86.09	86.09	0.44	
73	Senegal	86.07	86.07	0.43	
74	Qatar	86.06	86.06	0.42	
75	Mexico	85.74	85.74	0.41	
76	Croatia	85.56	85.56	0.40	
77	Iran, Islamic Rep.	85.06	85.06	0.40	
78	Peru	85.01	85.01	0.38	
78	Tunisia	85.01	85.01	0.38	
80	Zambia	84.95	84.95	0.37	
81	Jordan	84.62	84.62	0.37	
82	Poland	84.22	84.22	0.36	○
83	Mali	84.12	84.12	0.35	
84	Nepal	83.77	83.77	0.34	
85	Austria	83.72	83.72	0.33	○
86	Malaysia	83.67	83.67	0.33	
87	Madagascar	83.48	83.48	0.32	
88	Germany	83.42	83.42	0.31	○
89	Dominican Republic	83.34	83.34	0.30	
90	Kenya	83.13	83.13	0.29	
91	Guatemala	82.31	82.31	0.29	
92	Viet Nam	81.76	81.76	0.28	
93	Bangladesh	81.74	81.74	0.27	
94	Togo	81.71	81.71	0.26	
95	Costa Rica	81.57	81.57	0.25	
96	China	81.02	81.02	0.25	
97	El Salvador	80.70	80.70	0.24	
98	South Africa	80.47	80.47	0.23	○
99	Malta	80.21	80.21	0.22	○
100	Guinea	80.20	80.20	0.21	
101	Mozambique	79.86	79.86	0.21	
102	Tanzania, United Rep.	79.14	79.14	0.20	
103	Nigeria	78.62	78.62	0.19	
104	Lebanon	78.45	78.45	0.18	
105	Pakistan	77.88	77.88	0.17	
106	Algeria	77.54	77.54	0.17	
107	Paraguay	77.53	77.53	0.16	
108	Saudi Arabia	77.09	77.09	0.15	○
109	Honduras	77.02	77.02	0.14	
110	Cameroon	76.99	76.99	0.13	
111	Malawi	76.73	76.73	0.13	
112	Indonesia	76.43	76.43	0.12	
113	Botswana	76.21	76.21	0.11	○
114	India	74.31	74.31	0.10	○
115	Argentina	73.56	73.56	0.10	○
116	Yemen	71.59	71.59	0.09	
117	Uganda	71.30	71.30	0.08	
118	Ecuador	70.61	70.61	0.07	
119	Namibia	68.87	68.87	0.06	○
120	Philippines	68.86	68.86	0.06	○
121	Kuwait	66.77	66.77	0.05	○
122	Bosnia and Herzegovina	65.09	65.09	0.04	○
123	Brazil	65.04	65.04	0.03	○
124	Bolivia, Plurinational St.	62.94	62.94	0.02	○
125	Ethiopia	55.96	55.96	0.02	○
126	Cambodia	54.93	54.93	0.01	○
127	Zimbabwe	49.13	49.13	0.00	○

SOURCE: World Bank, *Ease of Doing Business Index 2017: Equal Opportunity for All*
NOTE: ● indicates a strength; ○ a weakness

1.3.2 Ease of resolving insolvency

Ease of resolving insolvency (distance to frontier) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Finland	93.89	93.89	1.00	●
2	Japan	93.34	93.34	0.99	●
3	Germany	92.28	92.28	0.98	●
4	Korea, Rep.	89.22	89.22	0.98	●
5	United States of America	89.19	89.19	0.97	
6	Norway	89.06	89.06	0.96	●
7	Portugal	85.24	85.24	0.95	●
8	Denmark	84.86	84.86	0.94	
9	Belgium	84.32	84.32	0.94	●
10	Netherlands	84.00	84.00	0.93	
11	Slovenia	83.97	83.97	0.92	●
12	United Kingdom	82.04	82.04	0.91	
13	Iceland	81.70	81.70	0.90	
14	Canada	81.43	81.43	0.90	
15	Cyprus	81.38	81.38	0.89	
16	Ireland	80.01	80.01	0.88	
17	Spain	79.62	79.62	0.87	
18	Sweden	79.44	79.44	0.87	
19	Austria	78.93	78.93	0.86	
20	Australia	78.73	78.73	0.85	
21	Thailand	77.08	77.08	0.84	●
22	France	76.62	76.62	0.83	
23	Italy	76.59	76.59	0.83	
24	Czech Republic	76.42	76.42	0.82	
25	Poland	76.37	76.37	0.81	●
26	Hong Kong (China)	75.06	75.06	0.80	
27	Singapore	74.31	74.31	0.79	
28	Mexico	73.11	73.11	0.79	
29	Israel	72.75	72.75	0.78	
30	TFYR of Macedonia	72.38	72.38	0.77	●
31	Colombia	71.74	71.74	0.76	
32	New Zealand	71.43	71.43	0.75	
33	Slovakia	70.53	70.53	0.75	
34	Kazakhstan	69.17	69.17	0.74	●
35	Jamaica	69.15	69.15	0.73	●
36	Mauritius	69.06	69.06	0.72	
37	Montenegro	68.37	68.37	0.71	
38	Bosnia and Herzegovina	66.93	66.93	0.71	●
39	Estonia	65.46	65.46	0.70	
40	Albania	64.96	64.96	0.69	●
41	Latvia	63.95	63.95	0.68	
42	Switzerland	62.61	62.61	0.67	
43	Malaysia	62.49	62.49	0.67	
44	Serbia	59.66	59.66	0.66	
45	Bulgaria	59.38	59.38	0.65	
46	Romania	59.16	59.16	0.64	
47	South Africa	57.94	57.94	0.63	
48	Russian Federation	56.69	56.69	0.63	
49	Greece	56.66	56.66	0.62	
50	China	55.82	55.82	0.61	
51	Croatia	55.62	55.62	0.60	
52	Chile	55.51	55.51	0.60	
53	Philippines	55.24	55.24	0.59	
54	Brunei Darussalam	55.11	55.11	0.58	
55	Tunisia	54.53	54.53	0.57	
56	Moldova, Rep.	52.61	52.61	0.56	
57	Uruguay	52.26	52.26	0.56	
58	Hungary	51.25	51.25	0.55	
59	Botswana	50.53	50.53	0.54	
60	Mozambique	49.61	49.61	0.53	●
61	Lithuania	49.23	49.23	0.52	
62	Brazil	49.15	49.15	0.52	
63	Côte d'Ivoire	49.13	49.13	0.51	●
64	Belarus	49.08	49.08	0.50	
65	Trinidad and Tobago	48.74	48.74	0.49	
66	Cambodia	48.10	48.10	0.48	
67	Rwanda	47.85	47.85	0.48	
68	Algeria	47.67	47.67	0.47	
69	Sri Lanka	46.73	46.73	0.46	
70	Indonesia	46.46	46.46	0.45	
71	Armenia	46.06	46.06	0.44	
72	Peru	45.85	45.85	0.44	
73	El Salvador	45.83	45.83	0.43	
74	Luxembourg	45.40	45.40	0.42	
75	Zambia	45.36	45.36	0.41	
76	Malta	45.35	45.35	0.40	
77	Pakistan	45.01	45.01	0.40	
78	Azerbaijan	44.77	44.77	0.39	
79	Togo	44.69	44.69	0.38	
80	Bahrain	44.66	44.66	0.37	
81	Nepal	44.64	44.64	0.37	
82	Mongolia	43.59	43.59	0.36	
83	Kenya	43.39	43.39	0.35	
84	Oman	42.65	42.65	0.34	
85	Bolivia, Plurinational St.	42.28	42.28	0.33	
86	Namibia	41.96	41.96	0.33	
87	Argentina	41.87	41.87	0.32	
88	Mali	41.46	41.46	0.31	
89	Tanzania, United Rep.	41.04	41.04	0.30	
90	Senegal	40.74	40.74	0.29	
91	Paraguay	40.70	40.70	0.29	
92	United Arab Emirates	40.61	40.61	0.28	○
93	Niger	40.36	40.36	0.27	
94	Georgia	40.02	40.02	0.26	
95	Costa Rica	39.62	39.62	0.25	
96	Kuwait	39.58	39.58	0.25	
97	Egypt	39.51	39.51	0.24	
98	Uganda	39.40	39.40	0.23	
99	Burkina Faso	39.25	39.25	0.22	
100	Guinea	38.84	38.84	0.21	
101	Benin	38.72	38.72	0.21	
102	Qatar	38.23	38.23	0.20	
103	Ethiopia	37.60	37.60	0.19	
104	Cameroon	36.63	36.63	0.18	
105	Viet Nam	35.08	35.08	0.17	
106	Turkey	34.98	34.98	0.17	○
107	Madagascar	34.24	34.24	0.16	
108	Kyrgyzstan	34.08	34.08	0.15	
109	Morocco	33.89	33.89	0.14	○
110	Panama	33.36	33.36	0.13	
111	India	32.75	32.75	0.13	○
112	Honduras	31.66	31.66	0.12	
113	Nigeria	30.60	30.60	0.11	
114	Burundi	30.52	30.52	0.10	
115	Jordan	30.38	30.38	0.10	○
116	Lebanon	30.03	30.03	0.09	○
117	Tajikistan	28.70	28.70	0.08	
118	Zimbabwe	28.46	28.46	0.07	
119	Guatemala	27.52	27.52	0.06	
120	Ukraine	27.50	27.50	0.06	○
121	Bangladesh	27.02	27.02	0.05	
122	Yemen	26.65	26.65	0.04	
123	Iran, Islamic Rep.	25.25	25.25	0.03	○
124	Ecuador	25.17	25.17	0.02	○
125	Dominican Republic	23.55	23.55	0.02	○
126	Malawi	22.25	22.25	0.01	○
127	Saudi Arabia	0.00	0.00	0.00	○

SOURCE: World Bank, *Ease of Doing Business Index 2017: Equal Opportunity for All*
NOTE: ● indicates a strength; ○ a weakness

1.3.3 Ease of paying taxes

Ease of paying taxes (distance to frontier) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Qatar	99.44	99.44	0.99	●
1	United Arab Emirates	99.44	99.44	0.99	●
3	Hong Kong (China)	98.69	98.69	0.98	●
4	Bahrain	94.44	94.44	0.98	●
5	Ireland	94.40	94.40	0.97	●
6	Kuwait	92.48	92.48	0.96	●
7	Denmark	92.11	92.11	0.95	
8	Singapore	91.85	91.85	0.94	
9	TFYR of Macedonia	91.67	91.67	0.94	●
10	United Kingdom	90.74	90.74	0.93	
11	New Zealand	90.71	90.71	0.92	
12	Oman	90.60	90.60	0.91	●
13	Finland	90.23	90.23	0.90	
14	Latvia	89.79	89.79	0.90	●
15	Luxembourg	88.92	88.92	0.89	
16	Canada	88.86	88.86	0.88	
17	Switzerland	88.49	88.49	0.87	
18	Netherlands	88.07	88.07	0.87	
19	Estonia	88.04	88.04	0.86	
20	Georgia	87.43	87.43	0.85	●
21	Korea, Rep.	86.56	86.56	0.84	
22	Slovenia	86.55	86.55	0.83	
23	Australia	85.60	85.60	0.83	
24	Norway	85.53	85.53	0.82	
25	Lithuania	85.44	85.44	0.81	
26	Sweden	85.28	85.28	0.80	
27	Iceland	84.88	84.88	0.79	
28	Moldova, Rep.	84.76	84.76	0.79	●
29	Malta	84.59	84.59	0.78	
30	Cyprus	84.45	84.45	0.77	
31	Mongolia	84.19	84.19	0.76	
32	United States of America	83.85	83.85	0.75	
33	Spain	83.80	83.80	0.75	
34	Portugal	83.75	83.75	0.74	
35	Azerbaijan	83.52	83.52	0.73	●
36	Morocco	83.51	83.51	0.72	●
37	Austria	83.39	83.39	0.71	
38	Mauritius	82.96	82.96	0.70	
38	Russian Federation	82.96	82.96	0.70	
40	Poland	82.73	82.73	0.69	
41	Germany	82.10	82.10	0.68	
42	Croatia	81.74	81.74	0.67	
43	Romania	81.64	81.64	0.67	
44	South Africa	81.09	81.09	0.66	
45	Czech Republic	80.69	80.69	0.65	
46	Botswana	80.58	80.58	0.64	
47	Slovakia	80.57	80.57	0.63	
48	Montenegro	80.42	80.42	0.63	
49	Zambia	80.16	80.16	0.62	●
50	Rwanda	79.69	79.69	0.61	
51	Kazakhstan	79.54	79.54	0.60	
52	Malaysia	79.20	79.20	0.60	
53	Costa Rica	78.98	78.98	0.59	
54	France	78.72	78.72	0.58	
55	Greece	78.22	78.22	0.57	
56	Belgium	77.31	77.31	0.56	
57	Lebanon	77.17	77.17	0.56	
58	Saudi Arabia	77.04	77.04	0.55	
59	Japan	77.03	77.03	0.54	
60	Namibia	74.97	74.97	0.53	
61	Uganda	74.71	74.71	0.52	
62	Hungary	74.46	74.46	0.52	
63	Serbia	74.36	74.36	0.51	
64	Jordan	73.94	73.94	0.50	
65	Bulgaria	72.81	72.81	0.49	
66	Ukraine	72.72	72.72	0.48	
67	Armenia	72.49	72.49	0.48	
68	Brunei Darussalam	72.43	72.43	0.47	
69	Ethiopia	72.06	72.06	0.46	
70	Yemen	71.64	71.64	0.45	●
71	Guatemala	71.55	71.55	0.44	
72	Israel	71.00	71.00	0.44	○
73	Albania	70.96	70.96	0.43	
74	Belarus	70.40	70.40	0.42	
75	Iran, Islamic Rep.	69.79	69.79	0.41	
76	Malawi	69.58	69.58	0.40	
77	Indonesia	69.25	69.25	0.40	
78	Peru	69.04	69.04	0.39	
79	Tunisia	68.96	68.96	0.38	
80	Thailand	68.68	68.68	0.37	
81	Mozambique	67.11	67.11	0.37	
82	Uruguay	66.08	66.08	0.36	
83	Mexico	65.81	65.81	0.35	
84	Philippines	65.74	65.74	0.34	
85	Jamaica	65.18	65.18	0.33	
86	Madagascar	64.80	64.80	0.33	
87	Chile	63.85	63.85	0.32	
88	Burundi	62.20	62.20	0.31	
89	Cambodia	61.97	61.97	0.30	
90	Kenya	61.72	61.72	0.29	
91	Italy	61.65	61.65	0.29	○
92	Turkey	60.83	60.83	0.28	
93	Dominican Republic	60.70	60.70	0.27	
94	China	60.46	60.46	0.26	
95	Bosnia and Herzegovina	60.08	60.08	0.25	
96	Ecuador	59.25	59.25	0.25	
97	Colombia	58.91	58.91	0.24	
98	Tajikistan	58.79	58.79	0.23	
99	Nepal	58.05	58.05	0.22	
100	Mali	57.50	57.50	0.21	
101	Trinidad and Tobago	57.33	57.33	0.21	
102	Kyrgyzstan	56.43	56.43	0.20	
103	Burkina Faso	55.77	55.77	0.19	
104	Bangladesh	55.56	55.56	0.18	
105	Honduras	54.97	54.97	0.17	
106	Paraguay	54.64	54.64	0.17	
107	Tanzania, United Rep.	54.13	54.13	0.16	
108	Algeria	53.99	53.99	0.15	
109	Pakistan	53.40	53.40	0.14	
110	Sri Lanka	53.16	53.16	0.13	○
111	Egypt	51.96	51.96	0.13	
112	Zimbabwe	51.15	51.15	0.12	
113	Niger	50.19	50.19	0.11	
114	El Salvador	49.51	49.51	0.10	
115	Viet Nam	49.39	49.39	0.10	○
116	Togo	48.22	48.22	0.09	
117	Panama	48.09	48.09	0.08	
118	India	46.58	46.58	0.07	○
119	Benin	44.61	44.61	0.06	
120	Senegal	43.70	43.70	0.06	○
121	Côte d'Ivoire	43.35	43.35	0.05	○
122	Argentina	39.76	39.76	0.04	○
123	Cameroon	35.87	35.87	0.03	○
124	Brazil	33.03	33.03	0.02	○
125	Nigeria	28.09	28.09	0.02	○
126	Guinea	24.28	24.28	0.01	○
127	Bolivia, Plurinational St.	21.41	21.41	0.00	○

SOURCE: World Bank, *Ease of Doing Business Index 2017: Equal Opportunity for All*
NOTE: ● indicates a strength; ○ a weakness

2.1.1 Expenditure on education

Government expenditure on education (% of GDP) | 2013

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Botswana (2009)	9.63	100.00	1.00	●
2	Denmark	8.61	88.03	0.99	●
3	Zimbabwe (2014)	8.43	85.90	0.98	●
4	Namibia (2010)	8.35	84.96	0.97	●
5	Malta	8.29	84.27	0.97	●
6	Iceland	7.81	78.65	0.96	
7	Sweden	7.72	77.56	0.95	
8	Costa Rica (2015)	7.59	76.05	0.94	●
9	Moldova, Rep. (2014)	7.46	74.59	0.93	●
10	Norway	7.37	73.49	0.92	
11	Bolivia, Plurinational St. (2014)	7.29	72.49	0.91	●
12	Senegal (2014)	7.22	71.76	0.91	●
13	Finland	7.16	71.00	0.90	
14	Niger (2014)	6.72	65.81	0.89	●
15	Mozambique	6.48	63.05	0.88	●
16	Cyprus	6.44	62.58	0.87	
17	Belgium (2011)	6.38	61.86	0.86	
18	New Zealand (2014)	6.35	61.52	0.85	
19	Tunisia (2012)	6.25	60.36	0.84	●
20	South Africa (2014)	6.06	58.09	0.84	●
21	Brazil	6.00	57.40	0.83	●
22	Ukraine (2014)	5.95	56.85	0.82	
23	Honduras	5.87	55.96	0.81	●
24	Israel	5.86	55.76	0.80	
25	United Kingdom (2014)	5.75	54.51	0.79	
26	Viet Nam	5.65	53.35	0.78	●
27	Malawi (2015)	5.61	52.84	0.78	●
28	Netherlands	5.61	52.83	0.77	
29	Austria	5.56	52.33	0.76	
30	Argentina (2014)	5.55	52.12	0.75	●
31	Kyrgyzstan (2014)	5.53	51.94	0.74	●
32	France	5.51	51.63	0.73	
33	Slovenia	5.49	51.43	0.72	
34	Jamaica (2015)	5.44	50.91	0.72	●
35	Burundi	5.41	50.57	0.71	●
36	Ireland	5.34	49.70	0.70	
37	Togo (2015)	5.33	49.62	0.69	●
38	Portugal	5.28	48.96	0.68	
39	Kenya (2015)	5.28	48.94	0.67	
40	Canada (2011)	5.27	48.92	0.66	
41	Australia	5.27	48.88	0.66	
42	Morocco (2009)	5.26	48.76	0.65	
43	Tajikistan (2015)	5.23	48.43	0.64	●
44	Mexico (2012)	5.17	47.65	0.63	
45	Saudi Arabia (2008)	5.14	47.32	0.62	
46	Switzerland	5.07	46.49	0.61	
47	Rwanda	5.03	46.03	0.60	
48	Oman	5.01	45.81	0.59	
49	Malaysia (2015)	4.98	45.47	0.59	
50	Mauritius (2015)	4.96	45.28	0.58	
51	Paraguay (2012)	4.96	45.27	0.57	●
52	Belarus (2015)	4.95	45.11	0.56	
53	Germany	4.94	45.06	0.55	
54	United States of America	4.94	45.05	0.54	
55	Poland	4.94	45.02	0.53	
56	Ecuador (2015)	4.92	44.77	0.53	
57	Latvia	4.91	44.71	0.52	
58	Estonia	4.82	43.57	0.51	○
59	Turkey	4.77	43.06	0.50	
60	Chile (2014)	4.76	42.94	0.49	
61	Côte d'Ivoire (2014)	4.72	42.42	0.48	●
62	Korea, Rep. (2012)	4.62	41.23	0.47	
63	Lithuania	4.61	41.17	0.47	
64	Mongolia (2011)	4.61	41.13	0.46	
65	Croatia	4.59	40.87	0.45	
66	Yemen (2008)	4.56	40.56	0.44	●
67	Ethiopia	4.50	39.83	0.43	
68	Colombia (2015)	4.49	39.75	0.42	
69	Uruguay (2011)	4.36	38.15	0.41	
70	Algeria (2008)	4.34	37.94	0.41	
71	Spain	4.30	37.56	0.40	○
72	Benin (2015)	4.26	37.05	0.39	
73	Hungary	4.23	36.67	0.38	
74	Serbia (2014)	4.18	36.10	0.37	
75	Italy	4.17	35.92	0.36	○
76	Luxembourg (2012)	4.14	35.64	0.35	
77	Thailand	4.13	35.49	0.34	
78	Czech Republic	4.11	35.30	0.34	○
79	Slovakia	4.11	35.22	0.33	○
80	Bulgaria	4.07	34.83	0.32	○
81	Peru (2015)	3.92	33.05	0.31	
82	Burkina Faso (2015)	3.91	32.94	0.30	
83	Russian Federation (2012)	3.86	32.34	0.29	
84	India	3.84	32.13	0.28	
85	Japan (2014)	3.77	31.31	0.28	○
86	Egypt (2008)	3.76	31.19	0.27	
87	Nepal (2015)	3.75	31.03	0.26	
88	Brunei Darussalam (2016)	3.69	30.40	0.25	
89	Mali (2014)	3.64	29.74	0.24	
90	Qatar (2014)	3.55	28.70	0.23	
91	Albania	3.54	28.57	0.22	
92	Tanzania, United Rep. (2014)	3.48	27.91	0.22	
93	El Salvador (2014)	3.45	27.53	0.21	
94	Indonesia (2014)	3.29	25.66	0.20	
95	Hong Kong (China) (2015)	3.26	25.37	0.19	○
96	Guinea (2014)	3.21	24.74	0.18	
97	Panama (2011)	3.19	24.47	0.17	
98	Cameroon	3.03	22.60	0.16	
99	Guatemala (2015)	2.95	21.73	0.16	
100	Romania (2012)	2.95	21.64	0.15	○
101	Iran, Islamic Rep. (2015)	2.92	21.33	0.14	
102	Singapore	2.91	21.24	0.13	○
103	Armenia (2015)	2.80	19.97	0.12	○
104	Kazakhstan (2015)	2.79	19.80	0.11	○
105	Pakistan (2015)	2.66	18.29	0.10	
106	Philippines (2009)	2.65	18.20	0.09	○
107	Bahrain (2012)	2.64	18.11	0.09	○
108	Azerbaijan (2014)	2.63	17.99	0.08	○
109	Lebanon	2.57	17.26	0.07	○
110	Sri Lanka (2015)	2.18	12.69	0.06	○
111	Bangladesh (2015)	2.18	12.65	0.05	
112	Madagascar	2.08	11.49	0.04	
113	Dominican Republic (2007)	2.05	11.15	0.03	○
114	Georgia (2012)	1.98	10.35	0.03	○
115	Cambodia (2014)	1.90	9.39	0.02	○
116	Uganda (2014)	1.70	7.09	0.01	○
117	Zambia (2008)	1.10	0.00	0.00	○
n/a	Bosnia and Herzegovina	n/a	n/a	n/a	
n/a	China	n/a	n/a	n/a	
n/a	Greece	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*

NOTE: ● indicates a strength; ○ a weakness

2.1.2 Government expenditure on education per pupil, secondary

Government expenditure per pupil, secondary (% of GDP per capita) | 2013

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Niger (2014)	72.56	100.00	1.00	●
2	Mozambique	52.02	69.62	0.99	●
3	Botswana (2007)	41.95	54.72	0.98	●
4	Malta	40.60	52.73	0.97	●
5	Moldova, Rep. (2015)	39.31	50.81	0.96	●
6	Rwanda	38.98	50.34	0.95	●
7	Cyprus	37.92	48.76	0.94	●
8	Belgium (2011)	37.58	48.25	0.93	●
9	Morocco (2012)	36.13	46.11	0.92	●
10	Zimbabwe	35.13	44.63	0.91	●
11	Finland (2011)	34.70	44.00	0.90	
12	Mauritius (2015)	31.16	38.76	0.90	●
13	Burundi	30.96	38.47	0.89	●
14	Portugal	30.34	37.55	0.88	●
15	Denmark	28.23	34.42	0.87	
16	Senegal (2011)	27.56	33.44	0.86	●
17	Austria	27.52	33.38	0.85	
18	Côte d'Ivoire (2014)	27.41	33.22	0.84	●
19	Jamaica (2015)	27.15	32.83	0.83	●
20	France	26.83	32.36	0.82	
21	Costa Rica (2015)	26.70	32.17	0.81	
22	Ukraine (2014)	26.25	31.50	0.80	
23	Switzerland (2012)	26.08	31.25	0.79	
24	Ireland (2012)	25.98	31.10	0.78	
25	Slovenia	25.92	31.02	0.77	
26	Norway (2011)	25.79	30.81	0.76	
27	Ethiopia (2012)	25.68	30.66	0.75	●
28	Latvia	25.51	30.40	0.74	
29	Japan (2014)	25.12	29.83	0.73	
30	Malawi (2015)	25.08	29.77	0.72	●
31	Kenya (2012)	24.87	29.45	0.71	
32	Sweden	24.64	29.12	0.70	
33	Netherlands	24.40	28.76	0.70	
34	Tunisia (2008)	24.36	28.70	0.69	●
35	Germany	23.69	27.72	0.68	
36	Czech Republic	23.67	27.68	0.67	
37	Korea, Rep.	23.37	27.24	0.66	
38	Italy	23.32	27.16	0.65	
39	United Kingdom (2014)	23.14	26.89	0.64	○
40	Estonia	23.10	26.84	0.63	
41	United States of America	22.66	26.20	0.62	
42	Spain	22.47	25.91	0.61	
43	Argentina (2014)	22.22	25.54	0.60	
44	Bulgaria	22.15	25.44	0.59	
45	Poland	22.14	25.43	0.58	
46	Mali (2014)	22.06	25.31	0.57	●
47	New Zealand (2014)	21.97	25.18	0.56	
48	Brazil	21.63	24.67	0.55	
49	Oman	21.48	24.44	0.54	
50	South Africa (2012)	20.89	23.57	0.53	
51	Hong Kong (China) (2015)	20.35	22.78	0.52	
52	Brunei Darussalam (2016)	20.13	22.45	0.51	
53	Slovakia	19.71	21.83	0.50	
54	Cameroon (2012)	19.70	21.81	0.50	●
55	Luxembourg	19.40	21.36	0.49	
56	Kazakhstan (2015)	19.16	21.01	0.48	
57	Bolivia, Plurinational St. (2014)	18.43	19.93	0.47	
58	Malaysia (2015)	18.39	19.87	0.46	
59	Iceland	18.35	19.81	0.45	○
60	Canada (2011)	18.33	19.78	0.44	○
61	Saudi Arabia (2007)	18.23	19.64	0.43	
62	Honduras	18.15	19.51	0.42	
63	Thailand	17.83	19.05	0.41	
64	Lithuania	17.83	19.05	0.40	
65	Kuwait (2014)	17.62	18.74	0.39	
66	Australia	16.90	17.67	0.38	○
67	India	16.81	17.54	0.37	
68	Singapore (2010)	16.68	17.35	0.36	○
69	Mexico	16.57	17.19	0.35	
70	Paraguay (2012)	16.55	17.16	0.34	
71	Jordan (2011)	16.47	17.04	0.33	
72	Hungary	16.21	16.65	0.32	
73	Burkina Faso (2015)	16.20	16.63	0.31	
74	Israel	16.13	16.53	0.30	○
75	Colombia (2015)	16.00	16.34	0.30	
76	Namibia (2008)	15.95	16.27	0.29	
77	Togo (2011)	15.64	15.81	0.28	
78	Mongolia (2010)	15.37	15.40	0.27	
79	Pakistan (2015)	15.24	15.22	0.26	
80	Chile (2014)	15.21	15.17	0.25	○
81	Iran, Islamic Rep. (2015)	15.12	15.04	0.24	
82	Armenia (2014)	15.00	14.86	0.23	
83	Dominican Republic (2015)	14.98	14.83	0.22	
84	Turkey	14.77	14.52	0.21	
85	Georgia (2008)	14.24	13.74	0.20	
86	Peru (2015)	14.12	13.56	0.19	
87	Romania	13.43	12.54	0.18	○
88	Serbia (2011)	13.06	11.99	0.17	○
89	Yemen (2011)	12.61	11.33	0.16	
90	Tanzania, United Rep. (2010)	12.31	10.88	0.15	
91	Guinea (2014)	12.03	10.47	0.14	
92	Benin (2015)	11.42	9.56	0.13	
93	Nepal (2015)	11.07	9.05	0.12	
94	Uganda (2014)	10.73	8.55	0.11	
95	Qatar (2009)	10.50	8.20	0.10	○
96	El Salvador (2014)	10.38	8.02	0.10	
97	Indonesia (2014)	9.93	7.36	0.09	○
98	Panama (2011)	9.21	6.29	0.08	
99	Philippines (2008)	9.13	6.18	0.07	○
100	Bangladesh (2015)	8.43	5.14	0.06	
101	Madagascar (2012)	8.39	5.08	0.05	
102	Sri Lanka	6.28	1.97	0.04	○
103	Lebanon	6.04	1.61	0.03	○
104	Albania	5.87	1.35	0.02	○
105	Guatemala (2014)	5.59	0.94	0.01	○
106	Ecuador (2015)	4.95	0.00	0.00	○
n/a	Algeria	n/a	n/a	n/a	
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Bahrain	n/a	n/a	n/a	
n/a	Belarus	n/a	n/a	n/a	
n/a	Bosnia and Herzegovina	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	China	n/a	n/a	n/a	
n/a	Croatia	n/a	n/a	n/a	
n/a	Egypt	n/a	n/a	n/a	
n/a	Greece	n/a	n/a	n/a	
n/a	Kyrgyzstan	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Russian Federation	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	Uruguay	n/a	n/a	n/a	
n/a	Viet Nam	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*

NOTE: ● indicates a strength; ○ a weakness

2.1.3 School life expectancy

School life expectancy, primary to tertiary education (years) | 2014

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Australia	20.47	100.00	1.00	●
2	Belgium	19.91	96.30	0.99	●
3	Iceland (2013)	19.63	94.48	0.98	●
4	Finland (2015)	19.34	92.56	0.97	●
5	New Zealand	19.23	91.81	0.96	●
6	Denmark	19.19	91.55	0.96	●
7	Ireland	19.00	90.29	0.95	●
8	Sweden	18.22	85.18	0.94	
9	Netherlands (2012)	18.12	84.48	0.93	
10	United Kingdom	17.94	83.29	0.92	
11	Spain (2015)	17.88	82.95	0.91	●
12	Greece	17.78	82.26	0.90	●
13	Norway (2015)	17.68	81.61	0.89	
14	Slovenia	17.35	79.41	0.89	●
15	Germany (2015)	17.29	79.00	0.88	
16	Argentina	17.29	79.00	0.87	●
17	Czech Republic	16.81	75.88	0.86	
18	Korea, Rep. (2013)	16.59	74.40	0.85	
19	Portugal	16.57	74.24	0.84	
20	United States of America	16.54	74.06	0.83	
21	Lithuania	16.52	73.96	0.82	●
22	Chile (2015)	16.48	73.67	0.82	
23	Italy	16.42	73.27	0.81	
24	Turkey (2013)	16.39	73.06	0.80	
25	Poland (2013)	16.37	72.98	0.79	
26	Estonia (2015)	16.35	72.83	0.78	
27	France	16.27	72.26	0.77	
28	Saudi Arabia	16.11	71.25	0.76	●
29	Latvia	16.05	70.87	0.75	
30	Switzerland	16.04	70.78	0.75	
31	Austria (2015)	16.04	70.78	0.74	
32	Thailand (2015)	16.03	70.71	0.73	
33	Israel	16.00	70.50	0.72	
34	Belarus (2015)	15.70	68.51	0.71	
35	Albania (2015)	15.52	67.37	0.70	●
36	Uruguay (2010)	15.51	67.29	0.69	
37	Georgia (2015)	15.44	66.80	0.68	
38	Hungary (2015)	15.37	66.35	0.68	
39	Japan	15.36	66.28	0.67	
40	Ukraine	15.31	65.93	0.66	
41	Brazil	15.27	65.71	0.65	
42	Croatia	15.26	65.62	0.64	
43	Costa Rica (2015)	15.22	65.35	0.63	
44	Montenegro (2010)	15.13	64.79	0.62	
45	Ecuador (2013)	15.11	64.60	0.61	●
46	Malta (2015)	15.05	64.22	0.61	
47	Mongolia (2015)	15.01	63.98	0.60	
48	Kazakhstan (2016)	15.01	63.96	0.59	
49	Slovakia	14.96	63.68	0.58	
50	Russian Federation	14.95	63.60	0.57	
51	Bulgaria (2015)	14.94	63.51	0.56	
52	Romania (2015)	14.93	63.48	0.55	
53	Iran, Islamic Rep. (2015)	14.93	63.43	0.54	
54	Mauritius (2015)	14.89	63.19	0.54	
55	Tunisia (2015)	14.75	62.29	0.53	
56	Brunei Darussalam (2015)	14.74	62.20	0.52	
57	Cyprus (2015)	14.57	61.07	0.51	
58	Serbia (2015)	14.55	60.95	0.50	
59	Colombia (2015)	14.41	60.02	0.49	
60	Algeria (2011)	14.36	59.67	0.48	●
61	Oman (2015)	14.14	58.20	0.47	
62	China (2015)	14.13	58.14	0.46	
63	Sri Lanka (2013)	13.99	57.22	0.46	
64	Luxembourg (2012)	13.86	56.41	0.45	
65	Peru (2010)	13.39	53.26	0.44	
66	Mexico	13.30	52.69	0.43	
67	Armenia (2015)	13.19	51.97	0.42	
68	Kuwait (2013)	13.17	51.86	0.41	
69	El Salvador	13.17	51.83	0.40	
70	Dominican Republic	13.17	51.83	0.39	
71	Egypt	13.10	51.36	0.39	
72	Kyrgyzstan	13.09	51.29	0.38	
73	Qatar (2011)	13.08	51.21	0.37	
74	Malaysia (2015)	12.93	50.25	0.36	
75	Indonesia	12.87	49.84	0.35	
76	TFYR of Macedonia	12.80	49.41	0.34	
77	Panama (2013)	12.80	49.38	0.33	
78	Singapore (2009)	12.79	49.35	0.32	○
79	South Africa (2012)	12.78	49.24	0.32	
80	Jordan (2012)	12.76	49.15	0.31	
81	Philippines (2013)	12.75	49.06	0.30	
82	Paraguay (2010)	12.32	46.21	0.29	
83	Nepal (2015)	12.19	45.37	0.28	
84	Cameroon (2015)	12.15	45.12	0.27	
85	Benin (2013)	12.14	45.01	0.26	
86	Morocco (2012)	12.05	44.47	0.25	
87	Botswana (2007)	12.05	44.47	0.25	
88	Togo (2011)	11.97	43.89	0.24	
89	India	11.88	43.35	0.23	
90	Moldova, Rep. (2015)	11.63	41.70	0.22	
91	Tajikistan (2013)	11.26	39.24	0.21	
92	Honduras	11.24	39.08	0.20	
93	Lebanon (2015)	11.13	38.37	0.19	
94	Kenya (2009)	11.07	38.00	0.18	
95	Rwanda (2013)	11.03	37.73	0.18	
96	Malawi (2011)	10.72	35.68	0.17	
97	Guatemala (2013)	10.72	35.67	0.16	
98	Burundi (2013)	10.65	35.19	0.15	
99	Cambodia (2008)	10.52	34.32	0.14	
100	Madagascar	10.50	34.24	0.13	
101	Zimbabwe (2013)	10.31	32.99	0.12	
102	Uganda (2011)	10.01	30.99	0.11	
103	Bangladesh (2011)	9.86	29.98	0.11	
104	Mozambique	9.57	28.07	0.10	
105	Côte d'Ivoire (2015)	9.20	25.61	0.09	
106	Yemen (2011)	8.99	24.24	0.08	
107	Senegal (2015)	8.98	24.21	0.07	○
108	Guinea	8.82	23.09	0.06	
109	Nigeria (2011)	8.63	21.86	0.05	
110	Ethiopia (2012)	8.44	20.62	0.04	
111	Tanzania, United Rep. (2013)	8.36	20.07	0.04	
112	Pakistan (2015)	8.24	19.32	0.03	○
113	Mali (2011)	7.72	15.86	0.02	○
114	Burkina Faso (2013)	7.69	15.69	0.01	○
115	Niger (2012)	5.32	0.00	0.00	○
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Bahrain	n/a	n/a	n/a	
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Bosnia and Herzegovina	n/a	n/a	n/a	
n/a	Canada	n/a	n/a	n/a	
n/a	Hong Kong (China)	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	Viet Nam	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*

NOTE: ● indicates a strength; ○ a weakness

2.1.4 Assessment in reading, mathematics, and science

PISA average scales in reading, mathematics, and science | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Singapore	551.62	100.00	1.00	●
2	Hong Kong (China)	532.63	91.19	0.99	●
3	Japan	528.93	89.48	0.97	●
4	Estonia	524.29	87.32	0.96	●
5	Canada	523.34	86.88	0.94	
6	Finland	522.72	86.60	0.93	
7	Korea, Rep.	519.12	84.93	0.91	
8	China	514.34	82.71	0.90	
9	Slovenia	509.33	80.39	0.89	●
10	Ireland	509.04	80.25	0.87	
11	Germany	508.07	79.80	0.86	
12	Netherlands	507.93	79.74	0.84	
13	Switzerland	506.32	78.99	0.83	
14	New Zealand	505.93	78.81	0.81	
15	Norway	504.47	78.13	0.80	
16	Denmark	504.28	78.04	0.79	
17	Poland	503.87	77.85	0.77	
18	Belgium	502.50	77.22	0.76	
19	Australia	502.26	77.11	0.74	
20	Viet Nam	501.98	76.98	0.73	
21	United Kingdom	499.89	76.01	0.71	
22	Portugal	496.95	74.65	0.70	
23	Sweden	495.83	74.13	0.69	
24	France	495.73	74.08	0.67	
25	Austria	492.22	72.45	0.66	
26	Russian Federation	491.77	72.24	0.64	
27	Spain	491.40	72.07	0.63	
28	Czech Republic	490.80	71.79	0.61	
29	United States of America	487.60	70.31	0.60	
30	Latvia	486.76	69.92	0.59	
31	Italy	485.01	69.11	0.57	
32	Luxembourg	483.34	68.33	0.56	
33	Iceland	480.93	67.21	0.54	
34	Croatia	475.43	64.66	0.53	
35	Lithuania	475.40	64.65	0.51	
36	Hungary	474.37	64.17	0.50	
37	United Arab Emirates	474.28	64.13	0.49	
38	Israel	471.73	62.95	0.47	○
39	Argentina	468.94	61.65	0.46	
40	Malta	463.36	59.07	0.44	
41	Slovakia	462.84	58.83	0.43	
42	Greece	458.50	56.81	0.41	
43	Serbia (2012)	446.60	51.29	0.40	
44	Chile	442.73	49.50	0.39	
45	Bulgaria	439.56	48.03	0.37	○
46	Cyprus	437.51	47.08	0.36	
47	Romania	437.49	47.07	0.34	
48	Uruguay	429.98	43.58	0.33	
49	Turkey	424.76	41.16	0.31	
50	Trinidad and Tobago	423.04	40.37	0.30	
51	Moldova, Rep.	421.30	39.56	0.29	
52	Montenegro	418.71	38.36	0.27	○
53	Kazakhstan (2012)	416.41	37.29	0.26	
54	Costa Rica	415.78	37.00	0.24	
55	Mexico	415.67	36.95	0.23	○
56	Thailand	415.31	36.78	0.21	
57	Albania	415.21	36.74	0.20	
58	Malaysia (2012)	412.74	35.59	0.19	○
59	Colombia	410.09	34.36	0.17	○
60	Qatar	407.30	33.07	0.16	○
61	Georgia	405.42	32.19	0.14	
62	Jordan	399.01	29.22	0.13	○
63	Indonesia	395.49	27.59	0.11	
64	Brazil	395.03	27.38	0.10	○
65	Peru	393.60	26.71	0.09	○
66	Lebanon	376.43	18.75	0.07	○
67	Tunisia	371.43	16.43	0.06	○
68	TFYR of Macedonia	368.91	15.26	0.04	○
69	Algeria	361.74	11.94	0.03	
70	Dominican Republic	339.03	1.40	0.01	○
71	India (2010)	336.00	0.00	0.00	○
n/a	Armenia	n/a	n/a	n/a	
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Bahrain	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Belarus	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Bosnia and Herzegovina	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Ecuador	n/a	n/a	n/a	
n/a	Egypt	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Kenya	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Kyrgyzstan	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Mauritius	n/a	n/a	n/a	
n/a	Mongolia	n/a	n/a	n/a	
n/a	Morocco	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Panama	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Philippines	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Senegal	n/a	n/a	n/a	
n/a	South Africa	n/a	n/a	n/a	
n/a	Sri Lanka	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	
n/a	Ukraine	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: OECD Programme for International Student Assessment (PISA)
NOTE: ● indicates a strength; ○ a weakness

2.1.5 Pupil-teacher ratio, secondary

Pupil-teacher ratio, secondary | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Kazakhstan (2016)	6.79	100.00	1.00	●
2	Ukraine	6.97	99.49	0.99	●
3	Kuwait	7.20	98.81	0.98	●
4	Georgia	7.25	98.68	0.97	●
5	Lebanon (2014)	7.74	97.24	0.96	●
6	Malta (2014)	7.82	97.00	0.95	
7	Croatia (2014)	8.02	96.44	0.95	●
8	Lithuania (2014)	8.08	96.26	0.94	●
9	Estonia (2013)	8.10	96.20	0.93	
10	Latvia (2014)	8.21	95.86	0.92	●
11	Greece (2014)	8.31	95.60	0.91	●
12	Belarus	8.36	95.43	0.90	●
13	Serbia	8.45	95.18	0.89	●
14	Russian Federation (2012)	8.76	94.26	0.88	●
15	Brunei Darussalam	8.84	94.05	0.87	●
16	Luxembourg (2014)	9.12	93.23	0.86	
17	Switzerland (2012)	9.33	92.62	0.85	
18	Moldova, Rep.	9.34	92.58	0.85	●
19	Belgium (2014)	9.42	92.34	0.84	
20	Poland (2013)	9.53	92.02	0.83	●
21	TFYR of Macedonia (2014)	9.56	91.93	0.82	●
22	Austria	9.58	91.90	0.81	
23	Bahrain	9.86	91.06	0.80	●
24	Portugal (2014)	9.89	90.97	0.79	
25	Slovenia (2013)	10.07	90.47	0.78	
26	Bosnia and Herzegovina	10.15	90.24	0.77	●
27	Hungary	10.29	89.82	0.76	
28	Benin	10.32	89.72	0.75	●
29	Cyprus	10.35	89.63	0.75	
30	Qatar	10.69	88.66	0.74	
31	Saudi Arabia (2014)	10.96	87.86	0.73	
32	Slovakia (2014)	11.11	87.42	0.72	
33	United Arab Emirates	11.22	87.10	0.71	
34	Denmark (2014)	11.29	86.91	0.70	
35	Uruguay (2010)	11.32	86.82	0.69	
36	Italy (2013)	11.38	86.66	0.68	
37	Czech Republic (2013)	11.55	86.15	0.67	
38	Japan (2012)	11.68	85.78	0.66	
39	Spain	11.98	84.89	0.65	
40	Malaysia	12.02	84.79	0.65	
41	Romania	12.10	84.56	0.64	
42	Germany	12.13	84.45	0.63	
43	Argentina (2008)	12.24	84.15	0.62	
44	Sweden (2013)	12.30	83.97	0.61	○
45	Kyrgyzstan (2014)	12.40	83.66	0.60	
46	Israel (2014)	12.44	83.55	0.59	
47	Guatemala (2014)	12.66	82.90	0.58	
48	Finland (2014)	12.76	82.63	0.57	○
49	Mauritius	12.88	82.29	0.56	
50	France (2013)	12.94	82.10	0.55	○
51	Hong Kong (China)	12.96	82.05	0.55	
52	Bulgaria (2014)	13.23	81.26	0.54	
53	Albania	13.51	80.45	0.53	
54	Tunisia (2011)	13.62	80.11	0.52	
55	China	13.82	79.55	0.51	
56	Botswana (2007)	13.82	79.54	0.50	
57	Costa Rica	13.95	79.16	0.49	
58	New Zealand (2014)	13.96	79.13	0.48	○
59	Peru	14.09	78.75	0.47	
60	Egypt (2014)	14.36	77.96	0.46	
61	Mongolia (2010)	14.49	77.58	0.45	
62	Netherlands (2014)	14.60	77.28	0.45	○
63	United States of America (2014)	14.79	76.72	0.44	○
64	Singapore (2009)	14.91	76.37	0.43	○
65	Tajikistan (2011)	15.44	74.83	0.42	
66	Indonesia (2014)	15.47	74.73	0.41	
67	Panama (2013)	15.52	74.59	0.40	
68	Korea, Rep. (2013)	15.61	74.32	0.39	
69	United Kingdom (2014)	15.83	73.69	0.38	○
70	Honduras	16.10	72.90	0.37	
71	Mexico (2014)	16.12	72.83	0.36	
72	Jamaica	16.43	71.94	0.35	
73	Brazil (2014)	16.69	71.18	0.35	
74	Iran, Islamic Rep.	17.02	70.23	0.34	
75	Sri Lanka (2012)	17.28	69.46	0.33	
76	Bolivia, Plurinational St. (2007)	18.17	66.89	0.32	
77	Paraguay (2012)	18.40	66.19	0.31	
78	Mali	19.19	63.89	0.30	
79	Nigeria (2013)	19.32	63.52	0.29	
80	Cameroon	19.87	61.93	0.28	
81	Turkey (2013)	20.13	61.16	0.27	
82	Senegal	20.37	60.46	0.26	
83	Chile (2013)	21.00	58.63	0.25	○
84	Pakistan	21.13	58.26	0.25	
85	Rwanda (2014)	21.65	56.74	0.24	
86	Uganda (2014)	21.75	56.44	0.23	
87	Dominican Republic	22.09	55.45	0.22	
88	Ecuador (2016)	22.35	54.71	0.21	
89	Zimbabwe (2013)	22.48	54.31	0.20	
90	Madagascar (2014)	23.12	52.47	0.19	
91	El Salvador (2011)	24.35	48.89	0.18	
92	Namibia (2007)	24.62	48.08	0.17	
93	South Africa (2009)	25.05	46.85	0.16	○
94	Burkina Faso	25.20	46.41	0.15	
95	Colombia	25.58	45.30	0.15	○
96	Togo (2011)	26.25	43.36	0.14	
97	Tanzania, United Rep. (2012)	26.39	42.93	0.13	
98	Côte d'Ivoire	26.61	42.29	0.12	
99	Philippines (2013)	26.99	41.19	0.11	○
100	Niger	27.96	38.37	0.10	
101	Thailand	28.15	37.80	0.09	○
102	Nepal (2016)	28.90	35.62	0.08	
103	Cambodia (2007)	28.92	35.56	0.07	
104	India (2014)	31.77	27.26	0.06	○
105	Guinea (2011)	33.14	23.29	0.05	
106	Bangladesh (2013)	35.20	17.27	0.05	○
107	Burundi	35.79	15.56	0.04	
108	Mozambique	39.69	4.22	0.03	○
109	Ethiopia (2012)	40.35	2.28	0.02	
110	Malawi	40.91	0.67	0.01	○
111	Kenya (2012)	41.13	0.00	0.00	○
n/a	Algeria	n/a	n/a	n/a	
n/a	Armenia	n/a	n/a	n/a	
n/a	Australia	n/a	n/a	n/a	
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Canada	n/a	n/a	n/a	
n/a	Iceland	n/a	n/a	n/a	
n/a	Ireland	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Morocco	n/a	n/a	n/a	
n/a	Norway	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Viet Nam	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*

NOTE: ● indicates a strength; ○ a weakness

2.2.1 Tertiary enrolment

School enrolment, tertiary (% gross) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Greece (2014)	113.87	100.00	1.00	●
2	Korea, Rep. (2013)	95.35	83.62	0.99	●
3	Australia (2014)	90.31	79.16	0.98	●
4	Spain	89.67	78.60	0.98	●
5	Chile	88.58	77.63	0.97	●
6	Belarus	87.94	77.07	0.96	●
7	Finland	87.29	76.49	0.95	
8	Turkey (2014)	86.31	75.62	0.94	●
9	United States of America	85.80	75.17	0.93	
10	Slovenia (2014)	82.93	72.63	0.93	●
11	Argentina (2014)	82.92	72.62	0.92	●
12	Ukraine (2014)	82.31	72.08	0.91	●
13	Austria	81.54	71.41	0.90	
14	Denmark (2014)	81.52	71.39	0.89	
15	Iceland (2013)	81.26	71.16	0.88	
16	New Zealand (2014)	80.88	70.83	0.88	
17	Russian Federation (2014)	78.65	68.85	0.87	●
18	Netherlands (2012)	78.50	68.72	0.86	
19	Ireland (2014)	77.63	67.95	0.85	
20	Norway	76.70	67.12	0.84	
21	Bulgaria	73.93	64.68	0.83	●
22	Belgium (2014)	73.32	64.14	0.83	
23	Iran, Islamic Rep.	71.88	62.86	0.82	●
24	Poland (2013)	71.16	62.23	0.81	●
25	Singapore (2013)	69.81	61.03	0.80	
26	Estonia	69.55	60.80	0.79	
27	Croatia (2014)	69.54	60.80	0.78	
28	Mongolia	68.57	59.93	0.78	
29	Lithuania (2014)	68.53	59.90	0.77	
30	Hong Kong (China)	68.48	59.85	0.76	
31	Germany	68.27	59.67	0.75	
32	Latvia (2014)	67.04	58.58	0.74	
33	Israel (2014)	66.18	57.82	0.73	
34	Czech Republic (2014)	66.02	57.68	0.73	
35	Portugal (2014)	65.61	57.32	0.72	
36	France (2014)	64.39	56.24	0.71	
37	Japan (2014)	63.36	55.33	0.70	
38	Uruguay (2010)	63.13	55.13	0.69	
39	Italy (2014)	63.10	55.09	0.68	
40	Saudi Arabia	63.07	55.07	0.68	
41	Sweden (2014)	62.35	54.44	0.67	
42	Cyprus	60.10	52.45	0.66	
43	Serbia	58.29	50.84	0.65	
44	Albania	58.11	50.69	0.64	
45	Switzerland (2014)	57.23	49.91	0.63	
46	United Kingdom (2014)	56.48	49.24	0.63	○
47	Colombia	55.59	48.46	0.62	
48	Montenegro (2010)	55.34	48.24	0.61	
49	Costa Rica	53.63	46.72	0.60	
50	Romania	53.22	46.36	0.59	
51	Slovakia (2014)	52.92	46.10	0.58	
52	Hungary	50.86	44.28	0.58	
53	Brazil (2014)	49.28	42.88	0.57	
54	Thailand	48.86	42.50	0.56	
55	Dominican Republic (2014)	47.52	41.32	0.55	
56	Malta	46.97	40.84	0.54	
57	Kazakhstan (2016)	46.26	40.21	0.53	
58	Kyrgyzstan (2014)	45.92	39.90	0.53	
59	Jordan	44.87	38.98	0.52	
60	Armenia	44.31	38.48	0.51	
61	Georgia	43.42	37.69	0.50	
62	China	43.39	37.67	0.49	
63	Moldova, Rep.	41.21	35.74	0.48	
64	Peru (2010)	40.51	35.12	0.48	
65	Ecuador (2013)	40.48	35.09	0.47	
66	TFYR of Macedonia (2014)	39.59	34.31	0.46	
67	Panama (2013)	38.74	33.55	0.45	
68	Lebanon	38.48	33.33	0.44	
69	Bahrain	37.38	32.35	0.43	
70	Algeria	36.92	31.95	0.43	
71	Mauritius	36.67	31.72	0.42	
72	Egypt	36.23	31.33	0.41	
73	Philippines (2014)	35.75	30.91	0.40	
74	Paraguay (2010)	35.08	30.32	0.39	
75	Tunisia	34.61	29.90	0.38	
76	Oman	31.92	27.53	0.38	
77	Indonesia (2014)	31.10	26.80	0.37	
78	Brunei Darussalam	30.84	26.57	0.36	
79	Mexico (2014)	29.94	25.77	0.35	
80	Tajikistan (2016)	28.89	24.85	0.34	
81	El Salvador (2014)	28.85	24.81	0.33	
82	Viet Nam	28.84	24.80	0.33	
83	Morocco	28.14	24.18	0.32	
84	Botswana (2014)	27.51	23.63	0.31	
85	Jamaica	27.22	23.37	0.30	
86	Kuwait (2013)	27.03	23.20	0.29	
87	Malaysia	26.07	22.35	0.28	○
88	India (2014)	25.54	21.88	0.28	
89	Azerbaijan	25.48	21.83	0.27	
90	Honduras (2014)	21.18	18.03	0.26	
91	Sri Lanka	19.80	16.80	0.25	
92	Luxembourg (2012)	19.41	16.46	0.24	○
93	South Africa (2014)	19.38	16.43	0.23	○
94	Guatemala (2013)	18.33	15.50	0.23	
95	Cameroon	17.48	14.75	0.22	
96	Qatar	17.22	14.52	0.21	
97	Benin (2013)	15.36	12.88	0.20	
98	Nepal	14.94	12.51	0.19	
99	Bangladesh (2014)	13.44	11.18	0.18	
100	Cambodia	13.09	10.87	0.18	
101	Guinea (2014)	10.85	8.89	0.17	
102	Togo	10.63	8.69	0.16	
103	Senegal	10.39	8.48	0.15	
104	Nigeria (2011)	10.07	8.20	0.14	
105	Yemen (2011)	9.97	8.12	0.13	
106	Pakistan	9.93	8.07	0.13	
107	Namibia (2008)	9.33	7.55	0.12	
108	Côte d'Ivoire	9.16	7.39	0.11	
109	Zimbabwe	8.43	6.75	0.10	
110	Ethiopia (2014)	8.13	6.48	0.09	
111	Rwanda (2013)	7.53	5.95	0.08	
112	Mali (2012)	6.87	5.37	0.08	
113	Mozambique (2014)	5.97	4.58	0.07	
114	Burkina Faso (2013)	4.78	3.52	0.06	○
115	Madagascar (2014)	4.78	3.52	0.05	
116	Uganda (2011)	4.48	3.26	0.04	○
117	Burundi (2013)	4.41	3.19	0.03	
118	Kenya (2009)	4.05	2.87	0.03	○
119	Tanzania, United Rep. (2013)	3.65	2.52	0.02	○
120	Niger (2012)	1.71	0.81	0.01	○
121	Malawi (2011)	0.80	0.00	0.00	○
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Bosnia and Herzegovina	n/a	n/a	n/a	
n/a	Canada	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*

NOTE: ● indicates a strength; ○ a weakness

2.2.2 Graduates in science and engineering

Tertiary graduates in science, engineering, manufacturing, and construction (% of total tertiary graduates) | 2013

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Oman (2014)	48.69	100.00	1.00	●
2	Iran, Islamic Rep. (2014)	46.56	95.35	0.99	●
3	Tunisia (2014)	44.09	89.99	0.98	●
4	Morocco (2010)	34.91	70.06	0.97	●
5	Hong Kong (China) (2006)	34.67	69.54	0.96	
6	Brunei Darussalam (2014)	33.96	68.01	0.95	●
7	Malaysia	33.26	66.49	0.94	●
8	Korea, Rep. (2011)	31.92	63.57	0.93	
9	Zimbabwe	29.39	58.08	0.92	●
10	India	29.11	57.48	0.91	●
11	Greece (2012)	28.66	56.50	0.90	●
12	Belarus (2014)	28.62	56.40	0.89	●
13	Russian Federation (2009)	28.11	55.30	0.88	●
14	Tajikistan (2014)	28.07	55.22	0.87	●
15	Austria	27.87	54.77	0.86	
16	Finland	27.86	54.75	0.85	
17	Algeria (2014)	27.60	54.19	0.84	●
18	Qatar (2014)	27.56	54.11	0.83	
19	Mexico (2012)	26.88	52.64	0.82	●
20	Saudi Arabia (2014)	26.85	52.57	0.81	●
21	Kuwait	26.74	52.32	0.80	●
22	Serbia (2014)	26.21	51.17	0.79	
23	Portugal	26.09	50.92	0.78	
24	Moldova, Rep.	25.73	50.13	0.77	●
25	Sweden	25.71	50.08	0.76	
26	Kazakhstan (2014)	25.71	50.08	0.75	●
27	Philippines (2014)	25.53	49.70	0.74	●
28	Ukraine (2014)	25.52	49.67	0.73	
29	Romania	25.49	49.62	0.72	
30	United Kingdom	25.18	48.94	0.71	
31	Slovenia (2012)	24.74	47.98	0.70	
32	France	24.47	47.41	0.69	
33	Croatia (2012)	23.85	46.05	0.68	
34	Ireland (2012)	23.76	45.87	0.67	
35	Lebanon (2011)	23.35	44.96	0.66	
36	Czech Republic	23.22	44.68	0.65	
37	Mauritius (2014)	22.93	44.06	0.64	
38	Colombia (2014)	22.74	43.65	0.63	
39	Rwanda (2012)	22.45	43.01	0.62	
40	Viet Nam (2014)	22.40	42.90	0.61	
41	El Salvador	22.23	42.53	0.60	●
42	Spain (2012)	22.21	42.49	0.59	
43	Lithuania	22.20	42.47	0.58	
44	Estonia (2012)	22.12	42.30	0.57	
45	Switzerland	22.05	42.15	0.56	○
46	Azerbaijan (2014)	22.02	42.08	0.55	
47	Indonesia (2009)	21.68	41.35	0.54	
48	TFYR of Macedonia	21.23	40.35	0.53	
49	Cameroon (2010)	21.02	39.91	0.52	●
50	Turkey (2012)	20.89	39.61	0.51	
51	Slovakia	20.51	38.80	0.50	
52	United Arab Emirates (2014)	20.43	38.61	0.50	
53	Denmark	20.37	38.50	0.49	○
54	Madagascar	20.28	38.29	0.48	
55	Italy (2012)	20.18	38.08	0.47	
56	Bulgaria	20.13	37.97	0.46	
57	Norway	19.97	37.62	0.45	○
58	Sri Lanka (2014)	19.95	37.58	0.44	
59	Japan	19.93	37.55	0.43	○
60	Bahrain (2014)	19.48	36.56	0.42	
61	Mongolia (2014)	19.48	36.56	0.41	
62	Chile (2012)	19.18	35.91	0.40	
63	Malta (2012)	19.12	35.77	0.39	○
64	South Africa	19.00	35.52	0.38	
65	Cyprus	18.96	35.44	0.37	
66	New Zealand (2012)	18.79	35.06	0.36	○
67	Kyrgyzstan	18.28	33.96	0.35	
68	Latvia	17.90	33.14	0.34	○
69	Burkina Faso	17.55	32.38	0.33	
70	Botswana (2014)	17.49	32.25	0.32	
71	Poland	17.42	32.09	0.31	○
72	Hungary (2012)	16.84	30.82	0.30	
73	Albania (2014)	16.79	30.73	0.29	
74	Guatemala (2007)	16.76	30.66	0.28	
75	Georgia (2014)	16.69	30.51	0.27	
76	Belgium (2012)	16.44	29.97	0.26	○
77	Luxembourg	16.25	29.55	0.25	○
78	Jordan (2011)	16.12	29.27	0.24	○
79	Australia (2011)	15.93	28.85	0.23	○
80	Panama	15.86	28.69	0.22	
81	Iceland (2010)	15.64	28.21	0.21	○
82	Bangladesh (2012)	15.62	28.18	0.20	
83	Uruguay (2010)	15.60	28.14	0.19	○
84	Bosnia and Herzegovina (2014)	15.38	27.65	0.18	
85	United States of America	14.88	26.58	0.17	○
86	Ecuador	14.87	26.55	0.16	
87	Dominican Republic (2014)	14.42	25.58	0.15	
88	Netherlands (2012)	14.42	25.57	0.14	○
89	Argentina	14.14	24.97	0.13	
90	Armenia (2014)	14.14	24.96	0.12	○
91	Costa Rica (2014)	13.12	22.75	0.11	○
92	Benin (2011)	12.67	21.78	0.10	
93	Cambodia (2008)	12.49	21.39	0.09	
94	Honduras (2014)	12.37	21.12	0.08	○
95	Nepal (2014)	12.08	20.48	0.07	
96	Brazil (2012)	11.96	20.23	0.06	○
97	Egypt	11.79	19.87	0.05	○
98	Ethiopia (2008)	11.22	18.62	0.04	
99	Mozambique (2014)	8.13	11.92	0.03	○
100	Burundi	6.37	8.09	0.02	
101	Niger (2008)	4.28	3.55	0.01	
102	Namibia (2008)	2.64	0.00	0.00	○
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Canada	n/a	n/a	n/a	
n/a	China	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Germany	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Israel	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Kenya	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Peru	n/a	n/a	n/a	
n/a	Senegal	n/a	n/a	n/a	
n/a	Singapore	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Thailand	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*

NOTE: ● indicates a strength; ○ a weakness

2.2.3 Tertiary-level inbound mobility

Tertiary-level inbound mobility ratio (%) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Luxembourg (2012)	40.56	100.00	0.97	●
1	Qatar	37.71	100.00	0.97	●
1	Singapore (2013)	19.17	100.00	0.97	●
1	United Arab Emirates	46.90	100.00	0.97	●
5	New Zealand (2014)	18.74	97.80	0.96	●
6	Australia (2014)	18.30	95.50	0.95	●
7	United Kingdom (2014)	18.22	95.07	0.94	
8	Cyprus	17.56	91.61	0.93	
9	Switzerland (2014)	17.11	89.24	0.92	
10	Austria	15.89	82.89	0.92	●
11	Senegal	15.79	82.38	0.91	●
12	Bahrain	13.87	72.35	0.90	●
13	Jordan	12.91	67.32	0.89	●
14	Belgium (2014)	11.19	58.35	0.88	
15	Uganda (2011)	10.73	55.94	0.87	●
16	Hong Kong (China)	10.70	55.77	0.86	
17	Namibia (2008)	10.17	52.99	0.85	●
18	Denmark (2014)	9.93	51.76	0.84	
19	Lebanon	9.85	51.35	0.83	●
20	France (2014)	9.84	51.28	0.82	
21	Czech Republic (2014)	9.83	51.22	0.81	
22	Benin (2010)	7.92	41.24	0.80	●
23	Germany	7.68	40.00	0.79	
24	Finland	7.65	39.83	0.78	
25	Bosnia and Herzegovina	7.47	38.90	0.77	●
26	Malaysia	7.37	38.36	0.76	
27	Netherlands (2012)	7.25	37.72	0.75	
28	Hungary	7.05	36.71	0.75	
29	Ireland (2014)	7.00	36.42	0.74	
30	Iceland (2013)	6.54	34.03	0.73	
31	Malta	6.21	32.32	0.72	
32	Sweden (2014)	5.91	30.71	0.71	
33	Slovakia (2014)	5.61	29.19	0.70	
34	Niger (2012)	5.43	28.21	0.69	●
35	Estonia	5.18	26.91	0.68	
36	Latvia (2014)	4.99	25.94	0.67	
37	Brunei Darussalam	4.87	25.29	0.66	
38	Saudi Arabia	4.78	24.85	0.65	
39	Italy (2014)	4.72	24.52	0.64	
40	United States of America	4.65	24.13	0.63	
41	Kyrgyzstan (2014)	4.51	23.40	0.62	
42	Romania	4.26	22.11	0.61	
43	Yemen (2011)	4.26	22.11	0.60	●
44	Bulgaria	4.25	22.04	0.59	
45	Greece (2013)	4.19	21.73	0.58	
46	South Africa (2014)	4.18	21.71	0.58	
47	Armenia	4.14	21.49	0.57	
48	Serbia	4.13	21.41	0.56	
49	Portugal (2014)	4.11	21.33	0.55	
50	Mauritius	4.02	20.88	0.54	
51	Georgia	3.75	19.42	0.53	
52	Norway	3.55	18.40	0.52	○
53	Japan (2014)	3.44	17.81	0.51	
54	Belarus	3.33	17.25	0.50	
55	Ukraine	3.24	16.80	0.49	
56	Russian Federation (2014)	3.05	15.79	0.48	
57	Burkina Faso (2013)	2.90	15.01	0.47	
58	Spain (2013)	2.86	14.81	0.46	○
59	TFYR of Macedonia (2014)	2.84	14.68	0.45	
60	Oman	2.81	14.55	0.44	
61	Israel (2014)	2.78	14.37	0.43	○
62	Slovenia (2014)	2.75	14.21	0.42	
63	Moldova, Rep.	2.50	12.91	0.42	
64	Lithuania (2013)	2.45	12.67	0.41	
65	Dominican Republic (2014)	2.34	12.09	0.40	
66	Thailand	2.10	10.85	0.39	
67	Azerbaijan	2.05	10.58	0.38	
68	Kazakhstan (2016)	2.01	10.36	0.37	
69	Tunisia	2.00	10.29	0.36	
70	Egypt (2014)	1.88	9.68	0.35	
71	Morocco (2014)	1.80	9.27	0.34	
72	Côte d'Ivoire	1.80	9.25	0.33	
73	Madagascar (2014)	1.77	9.10	0.32	
74	Albania	1.69	8.66	0.31	
75	Korea, Rep. (2013)	1.66	8.54	0.30	○
76	Botswana (2014)	1.63	8.38	0.29	
77	Poland (2013)	1.46	7.48	0.28	○
78	Togo (2007)	1.41	7.23	0.27	
79	Malawi (2010)	1.14	5.79	0.26	
80	Cameroon (2012)	1.13	5.77	0.25	
81	Burundi (2013)	1.00	5.07	0.25	
82	Rwanda (2013)	0.96	4.85	0.24	
83	Guinea (2012)	0.92	4.66	0.23	
84	Turkey (2014)	0.88	4.46	0.22	
85	Honduras (2014)	0.69	3.48	0.21	
86	Mongolia	0.69	3.48	0.20	
87	Tajikistan (2016)	0.63	3.16	0.19	
88	Algeria	0.62	3.08	0.18	
89	Ecuador (2012)	0.59	2.94	0.17	
90	Mali (2011)	0.53	2.61	0.16	
91	Zimbabwe	0.47	2.29	0.15	
92	El Salvador (2014)	0.40	1.94	0.14	
93	Croatia (2014)	0.38	1.87	0.13	○
94	Mozambique (2014)	0.37	1.79	0.12	
95	Sri Lanka	0.32	1.53	0.11	○
96	Chile	0.31	1.48	0.10	○
97	Iran, Islamic Rep.	0.29	1.35	0.09	
98	China	0.28	1.34	0.08	○
99	Mexico (2013)	0.24	1.12	0.08	○
100	Brazil (2014)	0.24	1.09	0.07	○
101	Colombia	0.18	0.82	0.06	○
102	India (2014)	0.13	0.53	0.05	○
103	Viet Nam	0.12	0.46	0.04	○
104	Indonesia (2012)	0.12	0.46	0.03	○
105	Philippines (2008)	0.10	0.38	0.02	○
106	Bangladesh (2009)	0.10	0.38	0.01	○
107	Nepal (2011)	0.03	0.00	0.00	○
n/a	Argentina	n/a	n/a	n/a	
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Canada	n/a	n/a	n/a	
n/a	Costa Rica	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Kenya	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Panama	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Peru	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Uruguay	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*
NOTE: ● indicates a strength; ○ a weakness

2.3.1 Researchers

Researchers, full-time equivalence (FTE) (per million population) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Israel (2012)	8,255.40	100.00	1.00	●
2	Denmark	7,483.58	90.64	0.99	●
3	Korea, Rep.	7,087.35	85.83	0.98	●
4	Sweden	7,021.88	85.04	0.97	●
5	Finland	6,816.77	82.55	0.96	
6	Singapore (2014)	6,658.50	80.63	0.95	
7	Norway	5,915.60	71.62	0.94	
8	Iceland	5,902.53	71.46	0.93	
9	Japan	5,230.72	63.31	0.92	
10	Luxembourg	5,058.28	61.21	0.91	
11	Austria	4,955.03	59.96	0.90	
12	Belgium	4,875.34	59.00	0.89	
13	Ireland	4,575.20	55.35	0.88	
14	Netherlands	4,548.14	55.03	0.87	
15	Australia (2010)	4,530.73	54.81	0.86	
16	Canada (2013)	4,518.51	54.67	0.85	
17	Switzerland (2012)	4,481.07	54.21	0.84	
18	United Kingdom	4,470.78	54.09	0.83	
19	Germany	4,431.08	53.61	0.82	
20	United States of America (2014)	4,231.99	51.19	0.81	
21	France (2014)	4,168.78	50.42	0.80	
22	New Zealand (2013)	4,008.71	48.48	0.79	
23	Portugal	3,824.19	46.24	0.78	
24	Slovenia	3,820.99	46.20	0.77	
25	Czech Republic	3,611.91	43.67	0.76	
26	Hong Kong (China) (2014)	3,297.56	39.85	0.75	
27	Greece	3,201.27	38.69	0.74	
28	Estonia	3,189.19	38.54	0.73	
29	Russian Federation	3,131.11	37.84	0.72	
30	Lithuania	2,822.40	34.09	0.71	
31	Slovakia	2,654.78	32.06	0.70	
32	Spain	2,654.65	32.06	0.69	
33	Hungary	2,568.84	31.01	0.68	
34	Poland	2,139.10	25.80	0.67	
35	Serbia	2,071.22	24.98	0.66	
36	Italy	2,018.09	24.33	0.65	
37	Malaysia (2014)	2,017.42	24.32	0.64	
38	United Arab Emirates	2,003.39	24.15	0.63	
39	Bulgaria	1,989.43	23.99	0.62	
40	Malta	1,951.42	23.52	0.61	
41	Latvia	1,833.54	22.09	0.60	
42	Tunisia	1,787.26	21.53	0.59	
43	Croatia	1,501.54	18.07	0.58	
44	Argentina (2014)	1,202.07	14.43	0.57	
45	China	1,176.58	14.12	0.56	
46	Turkey (2014)	1,156.51	13.88	0.55	
47	Morocco (2014)	1,032.54	12.38	0.54	
48	Cyprus	1,013.77	12.15	0.53	
49	Ukraine	1,006.00	12.05	0.52	
50	Romania	894.81	10.71	0.51	
51	Thailand	874.29	10.46	0.50	
52	TFYR of Macedonia	858.81	10.27	0.49	
53	Montenegro	835.76	9.99	0.48	
54	Kazakhstan (2013)	734.05	8.76	0.47	
55	Brazil (2010)	698.10	8.32	0.46	
56	Iran, Islamic Rep. (2012)	691.41	8.24	0.45	
57	Egypt	679.81	8.10	0.44	
58	Viet Nam (2013)	674.81	8.04	0.43	
59	Moldova, Rep.	662.10	7.88	0.42	
60	Qatar (2012)	597.06	7.09	0.41	
61	Georgia (2014)	585.41	6.95	0.40	
62	Costa Rica (2014)	572.98	6.80	0.39	
63	Uruguay	524.25	6.21	0.38	
64	Chile	455.50	5.38	0.37	
65	South Africa (2013)	437.06	5.15	0.36	
66	Ecuador (2014)	400.72	4.71	0.35	
67	Bahrain (2014)	361.99	4.24	0.34	
68	Senegal (2010)	361.12	4.23	0.33	
69	Bosnia and Herzegovina	328.70	3.84	0.32	
70	Jordan	307.98	3.59	0.31	
71	Pakistan	294.36	3.42	0.30	
72	Mexico (2013)	241.80	2.78	0.29	
73	Kenya (2010)	230.73	2.65	0.28	
74	Oman	201.97	2.30	0.27	
75	Philippines (2013)	189.41	2.15	0.26	
76	Paraguay	184.06	2.08	0.25	
77	Mauritius (2012)	181.11	2.05	0.24	
78	Botswana (2013)	175.51	1.98	0.23	
79	Bolivia, Plurinational St. (2010)	165.95	1.86	0.22	
80	Albania (2008)	157.34	1.76	0.21	
81	India (2010)	156.64	1.75	0.20	
82	Namibia (2014)	141.41	1.57	0.19	
83	Kuwait (2012)	128.38	1.41	0.18	
84	Colombia (2014)	114.89	1.24	0.17	○
85	Sri Lanka (2013)	110.91	1.20	0.16	
86	Zimbabwe (2012)	89.61	0.94	0.15	
87	Indonesia (2009)	89.53	0.94	0.14	
88	Madagascar (2011)	51.02	0.47	0.13	
89	Malawi (2010)	49.57	0.45	0.12	
90	Burkina Faso (2010)	47.50	0.43	0.11	
91	Ethiopia (2013)	45.12	0.40	0.10	
92	Mozambique	41.53	0.35	0.09	
93	Zambia (2008)	40.87	0.35	0.08	
94	Panama (2013)	39.41	0.33	0.07	○
95	Nigeria (2007)	38.58	0.32	0.06	
96	Togo (2014)	38.17	0.31	0.05	
97	Uganda (2010)	38.09	0.31	0.04	○
98	Mali (2010)	29.17	0.20	0.03	○
99	Guatemala (2012)	26.74	0.18	0.02	○
100	Tanzania, United Rep. (2013)	18.49	0.08	0.01	○
101	Rwanda (2009)	12.29	0.00	0.00	○
n/a	Algeria	n/a	n/a	n/a	
n/a	Armenia	n/a	n/a	n/a	
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Belarus	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Kyrgyzstan	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Mongolia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Peru	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*
NOTE: ● indicates a strength; ○ a weakness

2.3.2 Gross expenditure on R&D (GERD)

GERD: Gross expenditure on R&D (% of GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Israel	4.30	100.00	1.00	●
2	Korea, Rep.	4.23	98.40	0.99	●
3	Japan	3.49	81.17	0.98	●
4	Sweden	3.28	76.24	0.97	●
5	Austria	3.10	71.91	0.96	●
6	Denmark	3.02	70.12	0.95	
7	Switzerland (2012)	2.97	68.87	0.94	
8	Finland	2.93	68.01	0.94	
9	Germany	2.88	66.89	0.93	
10	United States of America	2.80	65.04	0.92	
11	Belgium	2.46	57.06	0.91	●
12	France	2.23	51.63	0.90	
13	Iceland	2.22	51.34	0.89	
14	Slovenia	2.21	51.30	0.88	
15	Singapore (2014)	2.20	50.91	0.87	
16	Australia (2013)	2.20	50.89	0.86	
17	China	2.09	48.51	0.85	
18	Netherlands	2.01	46.52	0.84	
19	Czech Republic	1.98	45.91	0.83	
20	Norway	1.93	44.59	0.83	
21	United Kingdom	1.71	39.50	0.82	
22	Canada (2014)	1.61	37.29	0.81	
23	Ireland (2014)	1.55	35.71	0.80	
24	Estonia	1.48	34.18	0.79	
25	Hungary	1.39	32.07	0.78	
26	Italy	1.34	30.87	0.77	
27	Luxembourg	1.29	29.70	0.76	
28	Portugal	1.28	29.43	0.75	
29	Malaysia (2014)	1.26	29.11	0.74	
30	Spain	1.22	28.08	0.73	
31	Slovakia	1.19	27.36	0.72	
32	Brazil (2014)	1.17	26.91	0.72	●
33	New Zealand (2013)	1.15	26.59	0.71	
34	Russian Federation	1.13	26.06	0.70	
35	Lithuania	1.04	23.93	0.69	
36	Poland	1.01	23.20	0.68	
37	Turkey (2014)	1.01	23.14	0.67	
38	Bulgaria	0.98	22.54	0.66	
39	Greece	0.96	21.97	0.65	
40	Serbia	0.88	20.20	0.64	
41	United Arab Emirates	0.87	19.85	0.63	
42	Croatia	0.85	19.57	0.62	
43	India (2011)	0.83	19.05	0.61	
44	Saudi Arabia (2013)	0.82	18.73	0.61	
45	Kenya (2010)	0.79	17.99	0.60	
46	Malta (2014)	0.76	17.44	0.59	
47	Hong Kong (China) (2014)	0.74	16.93	0.58	
48	South Africa (2013)	0.73	16.59	0.57	
49	Egypt	0.72	16.51	0.56	
50	Morocco (2010)	0.71	16.32	0.55	
51	Tunisia (2014)	0.65	14.92	0.54	
52	Thailand	0.63	14.24	0.53	
53	Latvia	0.62	14.23	0.52	
54	Ukraine	0.62	14.06	0.51	
55	Argentina (2014)	0.61	13.95	0.50	
56	Ethiopia (2013)	0.60	13.76	0.50	
57	Costa Rica (2014)	0.58	13.28	0.49	
58	Mali (2010)	0.58	13.27	0.48	
59	Mexico	0.55	12.51	0.47	
60	Botswana (2013)	0.54	12.27	0.46	
61	Senegal (2010)	0.54	12.27	0.45	
62	Tanzania, United Rep. (2013)	0.53	12.00	0.44	
63	Belarus	0.52	11.71	0.43	
64	Romania	0.49	11.03	0.42	
65	Uganda (2010)	0.48	10.75	0.41	
66	Qatar (2012)	0.47	10.61	0.40	
67	Cyprus	0.46	10.42	0.39	
68	Ecuador (2014)	0.45	10.06	0.39	
69	TFYR of Macedonia	0.44	9.99	0.38	
70	Jordan (2008)	0.43	9.79	0.37	
71	Chile	0.39	8.67	0.36	
72	Montenegro	0.38	8.51	0.35	
73	Viet Nam (2013)	0.37	8.37	0.34	
74	Moldova, Rep.	0.37	8.29	0.33	
75	Mozambique	0.34	7.58	0.32	
76	Namibia (2014)	0.34	7.55	0.31	
77	Uruguay (2014)	0.34	7.48	0.30	
78	Iran, Islamic Rep. (2012)	0.33	7.23	0.29	
79	Nepal (2010)	0.30	6.70	0.28	
80	Kuwait (2013)	0.30	6.69	0.28	
81	Zambia (2008)	0.28	6.14	0.27	
82	Togo (2014)	0.27	5.99	0.26	
83	Armenia	0.25	5.48	0.25	
84	Pakistan	0.25	5.40	0.24	
85	Oman	0.24	5.37	0.23	
86	Colombia	0.24	5.29	0.22	○
87	Azerbaijan	0.22	4.84	0.21	
88	Bosnia and Herzegovina	0.22	4.82	0.20	
89	Nigeria (2007)	0.22	4.76	0.19	
90	Burkina Faso (2009)	0.20	4.32	0.18	
91	Mauritius (2012)	0.18	3.88	0.17	○
92	Kazakhstan (2013)	0.17	3.53	0.17	
93	Bolivia, Plurinational St. (2009)	0.16	3.31	0.16	
94	Mongolia	0.15	3.26	0.15	
95	Albania (2008)	0.15	3.25	0.14	
96	Philippines (2013)	0.14	2.87	0.13	
97	Peru	0.13	2.75	0.12	○
98	Paraguay	0.13	2.61	0.11	
99	Burundi (2011)	0.12	2.48	0.10	
100	Kyrgyzstan	0.12	2.47	0.09	
101	Tajikistan (2013)	0.12	2.40	0.08	
102	Sri Lanka (2013)	0.10	2.00	0.07	○
103	Bahrain (2014)	0.10	1.98	0.06	○
104	Georgia (2014)	0.10	1.95	0.06	○
105	Indonesia (2013)	0.08	1.63	0.05	○
106	El Salvador (2014)	0.08	1.62	0.04	○
107	Trinidad and Tobago (2014)	0.08	1.47	0.03	○
108	Panama (2013)	0.06	1.12	0.02	○
109	Guatemala (2012)	0.04	0.69	0.01	○
110	Madagascar (2014)	0.02	0.00	0.00	○
n/a	Algeria	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*
NOTE: ● indicates a strength; ○ a weakness

2.3.3 Global R&D companies, average expenditure top 3

Average expenditure of the top 3 global companies by R&D, mn $US | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United States of America	11,774.73	100.00	1.00	●
2	Germany	8,986.88	97.12	0.99	●
3	Switzerland	6,880.31	94.27	0.98	●
4	Japan	6,236.99	93.22	0.98	●
5	Korea, Rep.	5,969.54	92.75	0.97	
6	China	4,251.64	89.13	0.96	
7	United Kingdom	3,826.19	88.01	0.95	
8	France	3,510.28	87.09	0.94	●
9	Italy	2,756.74	84.51	0.94	●
10	Netherlands	2,382.30	82.96	0.93	
11	Sweden	2,177.94	82.00	0.92	
12	Ireland	1,999.59	81.09	0.91	
13	Spain	1,118.38	74.90	0.90	●
14	India	1,024.65	73.96	0.90	●
15	Finland	980.14	73.49	0.89	
16	Canada	955.01	73.21	0.88	
17	Denmark	880.30	72.34	0.87	
18	Israel	658.14	69.25	0.87	
19	Australia	621.34	68.63	0.86	
20	Belgium	517.07	66.68	0.85	
21	Brazil	489.77	66.10	0.84	●
22	Singapore	403.62	64.04	0.83	
23	Saudi Arabia	330.37	61.91	0.83	●
24	Norway	186.62	55.84	0.82	
25	Russian Federation	182.99	55.63	0.81	
26	Luxembourg	155.41	53.90	0.80	
27	Austria	126.49	51.72	0.79	
28	Slovenia	122.34	51.37	0.79	
29	Turkey	119.93	51.16	0.78	
30	Hungary	118.71	51.05	0.77	
31	South Africa	103.40	49.59	0.76	
32	New Zealand	75.80	46.31	0.75	
33	Colombia	73.29	45.96	0.75	
34	Iceland	62.16	44.23	0.74	
35	Argentina	58.77	43.64	0.73	●
36	Thailand	53.99	42.75	0.72	
37	Mexico	52.85	42.52	0.71	
38	Greece	39.45	39.47	0.71	
39	Portugal	34.15	37.97	0.70	
40	Czech Republic	32.58	37.49	0.69	
41	Malta	32.44	37.44	0.68	
42	Malaysia	26.88	35.50	0.67	
43	Albania	0.00	0.00	0.00	○
43	Algeria	0.00	0.00	0.00	○
43	Armenia	0.00	0.00	0.00	○
43	Azerbaijan	0.00	0.00	0.00	○
43	Bahrain	0.00	0.00	0.00	○
43	Bangladesh	0.00	0.00	0.00	○
43	Belarus	0.00	0.00	0.00	○
43	Benin	0.00	0.00	0.00	○
43	Bolivia, Plurinational St.	0.00	0.00	0.00	○
43	Bosnia and Herzegovina	0.00	0.00	0.00	○
43	Botswana	0.00	0.00	0.00	○
43	Brunei Darussalam	0.00	0.00	0.00	○
43	Bulgaria	0.00	0.00	0.00	○
43	Burkina Faso	0.00	0.00	0.00	○
43	Burundi	0.00	0.00	0.00	○
43	Cambodia	0.00	0.00	0.00	○
43	Cameroon	0.00	0.00	0.00	○
43	Chile	0.00	0.00	0.00	○
43	Costa Rica	0.00	0.00	0.00	○
43	Côte d'Ivoire	0.00	0.00	0.00	○
43	Croatia	0.00	0.00	0.00	○
43	Cyprus	0.00	0.00	0.00	○
43	Dominican Republic	0.00	0.00	0.00	○
43	Ecuador	0.00	0.00	0.00	○
43	Egypt	0.00	0.00	0.00	○
43	El Salvador	0.00	0.00	0.00	○
43	Estonia	0.00	0.00	0.00	○
43	Ethiopia	0.00	0.00	0.00	○
43	Georgia	0.00	0.00	0.00	○
43	Guatemala	0.00	0.00	0.00	○
43	Guinea	0.00	0.00	0.00	○
43	Honduras	0.00	0.00	0.00	○
43	Hong Kong (China)	0.00	0.00	0.00	○
43	Indonesia	0.00	0.00	0.00	○
43	Iran, Islamic Rep.	0.00	0.00	0.00	○
43	Jamaica	0.00	0.00	0.00	○
43	Jordan	0.00	0.00	0.00	○
43	Kazakhstan	0.00	0.00	0.00	○
43	Kenya	0.00	0.00	0.00	○
43	Kuwait	0.00	0.00	0.00	○
43	Kyrgyzstan	0.00	0.00	0.00	○
43	Latvia	0.00	0.00	0.00	○
43	Lebanon	0.00	0.00	0.00	○
43	Lithuania	0.00	0.00	0.00	○
43	Madagascar	0.00	0.00	0.00	○
43	Malawi	0.00	0.00	0.00	○
43	Mali	0.00	0.00	0.00	○
43	Mauritius	0.00	0.00	0.00	○
43	Moldova, Rep.	0.00	0.00	0.00	○
43	Mongolia	0.00	0.00	0.00	○
43	Montenegro	0.00	0.00	0.00	○
43	Morocco	0.00	0.00	0.00	○
43	Mozambique	0.00	0.00	0.00	○
43	Namibia	0.00	0.00	0.00	○
43	Nepal	0.00	0.00	0.00	○
43	Niger	0.00	0.00	0.00	○
43	Nigeria	0.00	0.00	0.00	○
43	Oman	0.00	0.00	0.00	○
43	Pakistan	0.00	0.00	0.00	○
43	Panama	0.00	0.00	0.00	○
43	Paraguay	0.00	0.00	0.00	○
43	Peru	0.00	0.00	0.00	○
43	Philippines	0.00	0.00	0.00	○
43	Poland	0.00	0.00	0.00	○
43	Qatar	0.00	0.00	0.00	○
43	Romania	0.00	0.00	0.00	○
43	Rwanda	0.00	0.00	0.00	○
43	Senegal	0.00	0.00	0.00	○
43	Serbia	0.00	0.00	0.00	○
43	Slovakia	0.00	0.00	0.00	○
43	Sri Lanka	0.00	0.00	0.00	○
43	Tajikistan	0.00	0.00	0.00	○
43	Tanzania, United Rep.	0.00	0.00	0.00	○
43	TFYR of Macedonia	0.00	0.00	0.00	○
43	Togo	0.00	0.00	0.00	○
43	Trinidad and Tobago	0.00	0.00	0.00	○
43	Tunisia	0.00	0.00	0.00	○
43	Uganda	0.00	0.00	0.00	○
43	Ukraine	0.00	0.00	0.00	○
43	United Arab Emirates	0.00	0.00	0.00	○
43	Uruguay	0.00	0.00	0.00	○
43	Viet Nam	0.00	0.00	0.00	○
43	Yemen	0.00	0.00	0.00	○
43	Zambia	0.00	0.00	0.00	○
43	Zimbabwe	0.00	0.00	0.00	○

SOURCE: EU JRC Industrial R&D Investment Scoreboard 2016

NOTE: ● indicates a strength; ○ a weakness

2.3.4 QS university ranking average score top 3 universities

Average score of the top 3 universities at the QS world university ranking | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United States of America	99.00	99.00	1.00	●
2	United Kingdom	96.53	96.53	0.99	●
3	Switzerland	84.37	84.37	0.98	●
4	China	82.23	82.23	0.98	●
5	Canada	81.97	81.97	0.97	●
6	Hong Kong (China)	81.77	81.77	0.96	
7	Australia	81.57	81.57	0.95	●
8	Japan	79.73	79.73	0.94	
9	Korea, Rep.	75.67	75.67	0.94	
10	France	71.40	71.40	0.93	●
11	Germany	70.77	70.77	0.92	
12	Singapore	70.33	70.33	0.91	
13	Netherlands	69.70	69.70	0.90	
14	Sweden	65.00	65.00	0.90	
15	Denmark	63.83	63.83	0.89	
16	Belgium	59.63	59.63	0.88	
17	Finland	54.83	54.83	0.87	
18	New Zealand	54.67	54.67	0.87	
19	Ireland	51.17	51.17	0.86	
20	Norway	49.80	49.80	0.85	
21	India	49.00	49.00	0.84	●
22	Israel	48.43	48.43	0.83	
23	Spain	48.20	48.20	0.83	
24	Brazil	47.43	47.43	0.82	●
25	Russian Federation	46.50	46.50	0.81	
26	Austria	46.33	46.33	0.80	
27	Italy	46.27	46.27	0.79	
28	Argentina	46.00	46.00	0.79	●
29	Malaysia	44.43	44.43	0.78	
30	Saudi Arabia	43.10	43.10	0.77	●
31	Chile	42.50	42.50	0.76	
32	Mexico	41.57	41.57	0.75	
33	South Africa	37.03	37.03	0.75	
34	Colombia	35.87	35.87	0.74	
35	Kazakhstan	35.13	35.13	0.73	●
36	Portugal	33.97	33.97	0.72	
37	Thailand	33.37	33.37	0.71	
38	Indonesia	29.77	29.77	0.71	●
39	Lebanon	29.27	29.27	0.70	
40	United Arab Emirates	28.93	28.93	0.69	
41	Turkey	28.00	28.00	0.68	
42	Czech Republic	27.57	27.57	0.67	
43	Ukraine	27.40	27.40	0.67	
44	Poland	26.90	26.90	0.66	
45	Iran, Islamic Rep.	25.93	25.93	0.65	●
46	Greece	24.80	24.80	0.64	
47	Philippines	24.40	24.40	0.63	
48	Egypt	22.87	22.87	0.63	●
49	Hungary	20.77	20.77	0.62	
50	Lithuania	20.07	20.07	0.61	
51	Pakistan	18.97	18.97	0.60	●
52	Costa Rica	18.10	18.10	0.60	
53	Estonia	17.93	17.93	0.59	
54	Peru	16.60	16.60	0.58	
55	Belarus	16.37	16.37	0.57	
56	Azerbaijan	14.67	14.67	0.56	
57	Bahrain	13.73	13.73	0.56	
58	Jordan	13.27	13.27	0.55	
59	Romania	12.77	12.77	0.54	
60	Uruguay	12.60	12.60	0.53	
61	Slovenia	11.63	11.63	0.52	
62	Ecuador	11.10	11.10	0.52	
63	Qatar	10.20	10.20	0.51	
64	Oman	9.07	9.07	0.50	
65	Croatia	6.43	6.43	0.49	
66	Bulgaria	6.23	6.23	0.48	
67	Latvia	6.10	6.10	0.48	
68	Slovakia	6.07	6.07	0.47	
69	Bangladesh	5.60	5.60	0.46	
70	Kuwait	5.33	5.33	0.45	
71	Serbia	5.07	5.07	0.44	
72	Sri Lanka	4.90	4.90	0.44	
73	Kenya	4.30	4.30	0.43	
74	Uganda	3.07	3.07	0.42	
75	Albania	0.00	0.00	0.00	○
75	Algeria	0.00	0.00	0.00	○
75	Armenia	0.00	0.00	0.00	○
75	Benin	0.00	0.00	0.00	○
75	Bolivia, Plurinational St.	0.00	0.00	0.00	○
75	Bosnia and Herzegovina	0.00	0.00	0.00	○
75	Botswana	0.00	0.00	0.00	○
75	Brunei Darussalam	0.00	0.00	0.00	○
75	Burkina Faso	0.00	0.00	0.00	○
75	Burundi	0.00	0.00	0.00	○
75	Cambodia	0.00	0.00	0.00	○
75	Cameroon	0.00	0.00	0.00	○
75	Côte d'Ivoire	0.00	0.00	0.00	○
75	Cyprus	0.00	0.00	0.00	○
75	Dominican Republic	0.00	0.00	0.00	○
75	El Salvador	0.00	0.00	0.00	○
75	Ethiopia	0.00	0.00	0.00	○
75	Georgia	0.00	0.00	0.00	○
75	Guatemala	0.00	0.00	0.00	○
75	Guinea	0.00	0.00	0.00	○
75	Honduras	0.00	0.00	0.00	○
75	Iceland	0.00	0.00	0.00	○
75	Jamaica	0.00	0.00	0.00	○
75	Kyrgyzstan	0.00	0.00	0.00	○
75	Luxembourg	0.00	0.00	0.00	○
75	Madagascar	0.00	0.00	0.00	○
75	Malawi	0.00	0.00	0.00	○
75	Mali	0.00	0.00	0.00	○
75	Malta	0.00	0.00	0.00	○
75	Mauritius	0.00	0.00	0.00	○
75	Moldova, Rep.	0.00	0.00	0.00	○
75	Mongolia	0.00	0.00	0.00	○
75	Montenegro	0.00	0.00	0.00	○
75	Morocco	0.00	0.00	0.00	○
75	Mozambique	0.00	0.00	0.00	○
75	Namibia	0.00	0.00	0.00	○
75	Nepal	0.00	0.00	0.00	○
75	Niger	0.00	0.00	0.00	○
75	Nigeria	0.00	0.00	0.00	○
75	Panama	0.00	0.00	0.00	○
75	Paraguay	0.00	0.00	0.00	○
75	Rwanda	0.00	0.00	0.00	○
75	Senegal	0.00	0.00	0.00	○
75	Tajikistan	0.00	0.00	0.00	○
75	Tanzania, United Rep.	0.00	0.00	0.00	○
75	TFYR of Macedonia	0.00	0.00	0.00	○
75	Togo	0.00	0.00	0.00	○
75	Trinidad and Tobago	0.00	0.00	0.00	○
75	Tunisia	0.00	0.00	0.00	○
75	Viet Nam	0.00	0.00	0.00	○
75	Yemen	0.00	0.00	0.00	○
75	Zambia	0.00	0.00	0.00	○
75	Zimbabwe	0.00	0.00	0.00	○

SOURCE: QS Quacquarelli Symonds Ltd, QS World University Ranking 2016/2017, Top Universities
NOTE: ● indicates a strength; ○ a weakness

3.1.1 ICT access

ICT access index | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Luxembourg	9.54	95.40	1.00	●
2	Iceland	9.42	94.20	0.99	●
3	United Kingdom	9.24	92.40	0.98	●
4	Hong Kong (China)	9.16	91.60	0.98	
5	Germany	9.09	90.90	0.97	●
6	Malta	9.04	90.40	0.96	●
7	Netherlands	9.02	90.20	0.95	
8	Korea, Rep.	8.99	89.90	0.94	
9	Switzerland	8.95	89.50	0.94	
10	Japan	8.80	88.00	0.93	
11	France	8.70	87.00	0.91	
11	Singapore	8.70	87.00	0.91	
13	Sweden	8.69	86.90	0.90	
14	Denmark	8.52	85.20	0.90	
15	Austria	8.35	83.50	0.89	
16	Belgium	8.34	83.40	0.88	
17	New Zealand	8.32	83.20	0.87	
18	Israel	8.28	82.80	0.86	
19	United States of America	8.27	82.70	0.86	
20	Australia	8.23	82.30	0.85	
21	Norway	8.21	82.10	0.84	
22	Ireland	8.19	81.90	0.83	
23	United Arab Emirates	8.14	81.40	0.82	
24	Estonia	8.02	80.20	0.82	
25	Canada	7.99	79.90	0.81	
26	Portugal	7.93	79.30	0.79	
26	Slovenia	7.93	79.30	0.79	
28	Spain	7.92	79.20	0.78	
29	Bahrain	7.91	79.10	0.77	
29	Qatar	7.91	79.10	0.77	
31	Greece	7.85	78.50	0.76	
32	Belarus	7.80	78.00	0.75	
33	Finland	7.69	76.90	0.74	
33	Italy	7.69	76.90	0.74	
35	Hungary	7.62	76.20	0.73	
36	Croatia	7.58	75.80	0.72	
37	Kazakhstan	7.56	75.60	0.71	
38	Czech Republic	7.46	74.60	0.70	
39	Kuwait	7.40	74.00	0.70	
40	Latvia	7.38	73.80	0.69	
41	Oman	7.37	73.70	0.68	●
42	Saudi Arabia	7.29	72.90	0.67	
43	Uruguay	7.25	72.50	0.66	
44	Russian Federation	7.23	72.30	0.66	
45	Serbia	7.22	72.20	0.64	
45	Slovakia	7.22	72.20	0.64	
47	Brunei Darussalam	7.21	72.10	0.63	
48	Poland	7.09	70.90	0.62	
49	Lithuania	7.08	70.80	0.62	
50	Trinidad and Tobago	7.03	70.30	0.61	●
51	Cyprus	7.02	70.20	0.60	
52	Romania	6.90	69.00	0.59	
53	Bulgaria	6.86	68.60	0.58	
53	Mauritius	6.86	68.60	0.58	
55	Montenegro	6.85	68.50	0.57	
56	Chile	6.81	68.10	0.56	
57	Azerbaijan	6.78	67.80	0.55	
58	Argentina	6.77	67.70	0.54	
59	Malaysia	6.75	67.50	0.54	
60	TFYR of Macedonia	6.68	66.80	0.53	
61	Moldova, Rep.	6.64	66.40	0.52	
62	Armenia	6.57	65.70	0.50	
62	Lebanon	6.57	65.70	0.50	
64	Ukraine	6.48	64.80	0.50	
65	Costa Rica	6.44	64.40	0.49	
66	Brazil	6.42	64.20	0.48	
67	Georgia	6.29	62.90	0.47	
68	Iran, Islamic Rep.	6.26	62.60	0.46	
69	Turkey	6.20	62.00	0.46	
70	Jordan	6.10	61.00	0.45	
71	Morocco	6.07	60.70	0.44	
72	Panama	5.99	59.90	0.43	
73	Colombia	5.83	58.30	0.42	
74	Bosnia and Herzegovina	5.78	57.80	0.42	
75	Thailand	5.50	55.00	0.41	
76	South Africa	5.46	54.60	0.40	
77	China	5.45	54.50	0.39	
78	Egypt	5.30	53.00	0.38	
79	Tunisia	5.29	52.90	0.38	
80	Mongolia	5.12	51.20	0.37	
81	Mexico	5.08	50.80	0.36	
82	Algeria	5.03	50.30	0.35	
83	El Salvador	4.95	49.50	0.34	
84	Ecuador	4.90	49.00	0.34	
85	Jamaica	4.83	48.30	0.33	
86	Peru	4.80	48.00	0.32	
87	Albania	4.73	47.30	0.31	
88	Indonesia	4.71	47.10	0.30	
89	Philippines	4.70	47.00	0.30	
90	Viet Nam	4.60	46.00	0.29	
91	Paraguay	4.59	45.90	0.28	
92	Sri Lanka	4.51	45.10	0.27	
93	Guatemala	4.47	44.70	0.26	
94	Dominican Republic	4.38	43.80	0.26	
95	Bolivia, Plurinational St.	4.37	43.70	0.25	
96	Botswana	4.33	43.30	0.24	
97	Kyrgyzstan	4.25	42.50	0.22	
97	Namibia	4.25	42.50	0.22	
99	Cambodia	4.21	42.10	0.22	
100	Honduras	4.17	41.70	0.21	
101	Côte d'Ivoire	3.79	37.90	0.20	
102	Senegal	3.59	35.90	0.19	
103	Kenya	3.54	35.40	0.18	
104	Pakistan	3.39	33.90	0.18	
105	Zimbabwe	3.35	33.50	0.17	
106	India	3.32	33.20	0.16	
107	Mali	3.30	33.00	0.15	
108	Nepal	3.16	31.60	0.14	
109	Bangladesh	3.06	30.60	0.14	
110	Nigeria	2.96	29.60	0.13	
111	Mozambique	2.90	29.00	0.12	
112	Burkina Faso	2.87	28.70	0.11	
113	Benin	2.86	28.60	0.10	
114	Zambia	2.84	28.40	0.10	
115	Cameroon	2.77	27.70	0.09	
116	Yemen	2.66	26.60	0.08	
117	Rwanda	2.65	26.50	0.06	○
117	Tanzania, United Rep.	2.65	26.50	0.06	
119	Togo	2.59	25.90	0.06	
120	Guinea	2.57	25.70	0.05	
121	Madagascar	2.39	23.90	0.04	
122	Uganda	2.37	23.70	0.03	○
123	Burundi	2.14	21.40	0.02	
124	Ethiopia	2.11	21.10	0.02	○
125	Niger	2.04	20.40	0.01	○
126	Malawi	2.03	20.30	0.00	○
n/a	Tajikistan	n/a	n/a	n/a	

SOURCE: International Telecommunication Union, *Measuring the Information Society 2016*, ICT Development Index 2016
NOTE: ● indicates a strength; ○ a weakness

3.1.2 ICT use

ICT use index | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Denmark	8.91	89.10	1.00	●
2	Switzerland	8.67	86.70	0.99	●
3	Korea, Rep.	8.57	85.70	0.98	●
4	Norway	8.48	84.80	0.98	●
5	Iceland	8.44	84.40	0.97	
6	Sweden	8.36	83.60	0.96	
7	Finland	8.18	81.80	0.95	
8	Japan	8.14	81.40	0.94	
9	United Kingdom	8.09	80.90	0.94	
10	Luxembourg	8.05	80.50	0.93	
11	New Zealand	8.03	80.30	0.92	
12	Hong Kong (China)	7.94	79.40	0.91	
13	Estonia	7.87	78.70	0.90	
14	Netherlands	7.77	77.70	0.90	
15	Australia	7.70	77.00	0.89	
16	France	7.61	76.10	0.88	
17	United States of America	7.57	75.70	0.87	
18	Singapore	7.54	75.40	0.86	
19	Germany	7.49	74.90	0.86	
20	Bahrain	7.48	74.80	0.85	●
21	Ireland	7.38	73.80	0.84	
22	Belgium	7.10	71.00	0.83	
23	Spain	6.93	69.30	0.82	
24	Canada	6.85	68.50	0.82	
25	United Arab Emirates	6.82	68.20	0.81	
26	Malta	6.75	67.50	0.80	
27	Austria	6.67	66.70	0.79	
28	Czech Republic	6.55	65.50	0.78	
29	Lithuania	6.40	64.00	0.78	
30	Slovakia	6.38	63.80	0.77	
31	Qatar	6.32	63.20	0.75	
31	Saudi Arabia	6.32	63.20	0.75	
33	Latvia	6.27	62.70	0.74	
34	Italy	6.25	62.50	0.74	
35	Uruguay	6.20	62.00	0.73	●
36	Kuwait	6.15	61.50	0.72	●
37	Croatia	6.13	61.30	0.71	
38	Israel	6.02	60.20	0.70	
39	Belarus	5.88	58.80	0.70	
40	Russian Federation	5.87	58.70	0.69	
41	Malaysia	5.86	58.60	0.68	
42	Bulgaria	5.84	58.40	0.67	
43	Costa Rica	5.80	58.00	0.66	
44	Slovenia	5.71	57.10	0.66	
45	Azerbaijan	5.70	57.00	0.65	
46	Portugal	5.67	56.70	0.64	
47	Brazil	5.60	56.00	0.63	
48	Lebanon	5.51	55.10	0.62	
49	Serbia	5.50	55.00	0.62	
50	Cyprus	5.46	54.60	0.60	
50	Greece	5.46	54.60	0.60	
52	Argentina	5.45	54.50	0.59	
53	Oman	5.39	53.90	0.58	
54	Poland	5.35	53.50	0.58	
55	Hungary	5.28	52.80	0.57	
56	TFYR of Macedonia	5.17	51.70	0.56	
57	Kazakhstan	5.15	51.50	0.55	
58	Romania	5.08	50.80	0.54	
59	Chile	4.91	49.10	0.54	
60	Montenegro	4.61	46.10	0.53	
61	China	4.58	45.80	0.52	
62	Trinidad and Tobago	4.53	45.30	0.51	
63	Thailand	4.33	43.30	0.50	
64	Moldova, Rep.	4.26	42.60	0.50	
65	Mexico	4.24	42.40	0.49	
66	Bosnia and Herzegovina	4.21	42.10	0.48	
67	Turkey	4.18	41.80	0.47	
68	Georgia	4.00	40.00	0.46	
68	South Africa	4.00	40.00	0.46	
70	Tunisia	3.95	39.50	0.45	
71	Albania	3.88	38.80	0.44	
72	Armenia	3.85	38.50	0.42	
72	Colombia	3.85	38.50	0.42	
74	Mauritius	3.78	37.80	0.42	
75	Mongolia	3.64	36.40	0.41	
76	Jamaica	3.55	35.50	0.40	
77	Viet Nam	3.51	35.10	0.39	
78	Dominican Republic	3.41	34.10	0.38	
79	Morocco	3.40	34.00	0.38	
80	Ecuador	3.31	33.10	0.37	
81	Botswana	3.26	32.60	0.36	
82	Panama	3.24	32.40	0.35	
83	Jordan	3.20	32.00	0.34	
84	Egypt	3.14	31.40	0.34	
85	Brunei Darussalam	2.97	29.70	0.33	
86	Paraguay	2.96	29.60	0.32	
87	Peru	2.94	29.40	0.31	
88	Philippines	2.93	29.30	0.30	
89	Algeria	2.92	29.20	0.30	
90	Namibia	2.91	29.10	0.29	
91	Iran, Islamic Rep.	2.74	27.40	0.28	
92	Bolivia, Plurinational St.	2.72	27.20	0.27	
93	Ukraine	2.57	25.70	0.26	
94	Nigeria	2.28	22.80	0.26	
95	Kyrgyzstan	2.25	22.50	0.25	
96	Indonesia	2.19	21.90	0.24	
97	Cambodia	2.09	20.90	0.23	
98	Côte d'Ivoire	2.08	20.80	0.22	
99	Kenya	2.05	20.50	0.22	
100	Zimbabwe	1.91	19.10	0.21	
101	El Salvador	1.87	18.70	0.20	
102	Sri Lanka	1.70	17.00	0.19	
103	Senegal	1.64	16.40	0.18	
104	Rwanda	1.47	14.70	0.18	
105	Guatemala	1.40	14.00	0.17	
106	Honduras	1.38	13.80	0.16	
107	Nepal	1.35	13.50	0.15	
108	Uganda	1.27	12.70	0.14	
109	India	1.25	12.50	0.14	
110	Zambia	1.17	11.70	0.13	
111	Yemen	1.12	11.20	0.12	
112	Pakistan	1.09	10.90	0.11	
113	Bangladesh	1.06	10.60	0.10	
114	Mali	0.97	9.70	0.10	
115	Burkina Faso	0.90	9.00	0.09	
116	Malawi	0.86	8.60	0.08	
117	Cameroon	0.84	8.40	0.07	
118	Ethiopia	0.82	8.20	0.06	
119	Guinea	0.62	6.20	0.05	
119	Mozambique	0.62	6.20	0.05	
121	Togo	0.49	4.90	0.04	
122	Madagascar	0.44	4.40	0.03	○
123	Burundi	0.42	4.20	0.02	
124	Benin	0.40	4.00	0.02	○
125	Tanzania, United Rep.	0.30	3.00	0.01	○
126	Niger	0.14	1.40	0.00	○
n/a	Tajikistan	n/a	n/a	n/a	

SOURCE: International Telecommunication Union, *Measuring the Information Society 2016*, ICT Development Index 2016

NOTE: ● indicates a strength; ○ a weakness

3.1.3 Government's online service

Government's online service index | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United Kingdom	1.00	100.00	1.00	●
2	Australia	0.98	97.83	0.99	●
3	Singapore	0.97	97.10	0.98	●
4	Canada	0.96	95.65	0.98	●
5	Finland	0.94	94.20	0.94	
5	France	0.94	94.20	0.94	●
5	Korea, Rep.	0.94	94.20	0.94	
5	New Zealand	0.94	94.20	0.94	
9	Netherlands	0.93	92.75	0.93	
9	United States of America	0.93	92.75	0.93	
11	Austria	0.91	91.30	0.91	●
11	Spain	0.91	91.30	0.91	●
13	Estonia	0.89	89.13	0.90	
13	United Arab Emirates	0.89	89.13	0.90	
15	Japan	0.88	87.68	0.88	
15	Sweden	0.88	87.68	0.88	
17	Italy	0.87	86.96	0.87	●
18	Israel	0.86	86.23	0.86	
19	Mexico	0.85	84.78	0.85	●
19	Slovenia	0.85	84.78	0.85	
21	Germany	0.84	84.06	0.84	
22	Bahrain	0.83	82.61	0.82	●
22	Lithuania	0.83	82.61	0.82	●
24	Serbia	0.82	81.88	0.82	●
25	Norway	0.80	80.44	0.81	
26	Malta	0.80	79.71	0.80	
27	Colombia	0.79	78.99	0.79	
28	Chile	0.78	77.54	0.77	
28	Denmark	0.78	77.54	0.77	
28	Uruguay	0.78	77.54	0.77	●
31	China	0.77	76.81	0.75	
31	Kazakhstan	0.77	76.81	0.75	●
33	Croatia	0.75	74.64	0.73	
33	India	0.75	74.64	0.73	
33	Portugal	0.75	74.64	0.73	
36	Morocco	0.74	73.91	0.72	
37	Brazil	0.73	73.19	0.70	●
37	Russian Federation	0.73	73.19	0.70	
39	Ireland	0.72	72.46	0.70	
40	Luxembourg	0.72	71.74	0.67	
40	Malaysia	0.72	71.74	0.67	
40	Tunisia	0.72	71.74	0.67	
43	Argentina	0.71	71.01	0.66	
43	Belgium	0.71	71.01	0.66	
45	Mauritius	0.70	70.29	0.64	
45	Poland	0.70	70.29	0.64	
47	Azerbaijan	0.68	68.12	0.62	
47	Montenegro	0.68	68.12	0.62	
49	Qatar	0.67	67.39	0.61	
49	Saudi Arabia	0.67	67.39	0.61	
51	Guatemala	0.67	66.67	0.59	
51	Philippines	0.67	66.67	0.59	
53	Kuwait	0.65	65.22	0.58	
53	Sri Lanka	0.65	65.22	0.58	
55	Costa Rica	0.64	63.77	0.56	
55	Georgia	0.64	63.77	0.56	
57	Ecuador	0.63	63.04	0.54	
57	Hungary	0.63	63.04	0.54	
57	Peru	0.63	63.04	0.54	
60	Bangladesh	0.62	62.32	0.52	●
60	Iceland	0.62	62.32	0.52	
62	Latvia	0.61	60.87	0.50	
62	TFYR of Macedonia	0.61	60.87	0.50	
64	Paraguay	0.60	60.15	0.48	
64	Switzerland	0.60	60.15	0.48	○
64	Turkey	0.60	60.15	0.48	
67	Albania	0.59	59.42	0.46	
67	Moldova, Rep.	0.59	59.42	0.46	
67	Oman	0.59	59.42	0.46	
70	Ukraine	0.59	58.70	0.45	
71	Greece	0.58	57.97	0.44	
72	Tanzania, United Rep.	0.57	57.25	0.42	
72	Viet Nam	0.57	57.25	0.42	
74	Bulgaria	0.57	56.52	0.42	
75	Kenya	0.56	55.80	0.40	
75	South Africa	0.56	55.80	0.40	
77	Thailand	0.55	55.07	0.39	
78	Cyprus	0.54	53.62	0.38	
79	Ethiopia	0.53	52.90	0.37	
79	Trinidad and Tobago	0.53	52.90	0.37	
81	Lebanon	0.51	51.45	0.35	
81	Mongolia	0.51	51.45	0.35	
83	Brunei Darussalam	0.51	50.73	0.34	
83	Dominican Republic	0.51	50.73	0.34	
85	Uganda	0.50	50.00	0.33	
86	Bolivia, Plurinational St.	0.49	49.28	0.32	
87	Belarus	0.49	48.55	0.30	
87	El Salvador	0.49	48.55	0.30	
89	Czech Republic	0.48	47.83	0.30	○
90	Egypt	0.47	47.10	0.29	
91	Jordan	0.46	45.65	0.26	
91	Romania	0.46	45.65	0.26	○
91	Rwanda	0.46	45.65	0.26	
94	Bosnia and Herzegovina	0.45	44.93	0.26	
95	Slovakia	0.44	44.20	0.25	○
96	Armenia	0.43	42.75	0.23	
96	Kyrgyzstan	0.43	42.75	0.23	
98	Nigeria	0.41	41.30	0.22	
99	Nepal	0.40	39.86	0.22	
100	Senegal	0.38	37.68	0.21	
101	Zambia	0.37	36.96	0.20	
102	Indonesia	0.36	36.23	0.19	
103	Jamaica	0.36	35.51	0.18	
104	Iran, Islamic Rep.	0.33	33.33	0.17	
104	Panama	0.33	33.33	0.17	
106	Pakistan	0.33	32.61	0.16	
107	Togo	0.32	31.88	0.15	
108	Honduras	0.31	31.16	0.14	
109	Botswana	0.28	28.26	0.13	
109	Namibia	0.28	28.26	0.13	
111	Zimbabwe	0.26	26.09	0.12	
112	Madagascar	0.22	22.46	0.11	
113	Cameroon	0.22	21.74	0.10	
113	Malawi	0.22	21.74	0.10	
115	Mozambique	0.20	20.29	0.09	
116	Burkina Faso	0.19	18.84	0.07	
116	Côte d'Ivoire	0.19	18.84	0.07	○
118	Burundi	0.15	15.22	0.06	
119	Benin	0.14	14.49	0.05	○
119	Yemen	0.14	14.49	0.05	
121	Tajikistan	0.12	12.32	0.04	
122	Mali	0.09	9.42	0.03	○
123	Guinea	0.09	8.70	0.02	
124	Niger	0.07	7.25	0.02	
125	Algeria	0.07	6.52	0.01	○
126	Cambodia	0.05	5.07	0.00	○
n/a	Hong Kong (China)	n/a	n/a	n/a	

SOURCE: United Nations Public Administration Network, *e-Government Survey 2016*
NOTE: ● indicates a strength; ○ a weakness

3.1.4 Online e-participation

E-Participation Index | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United Kingdom	1.00	100.00	1.00	●
2	Australia	0.98	98.31	0.98	●
2	Japan	0.98	98.31	0.98	●
4	Korea, Rep.	0.97	96.61	0.98	●
5	Netherlands	0.95	94.92	0.96	●
5	New Zealand	0.95	94.92	0.96	
7	Spain	0.93	93.22	0.95	●
8	Canada	0.92	91.53	0.92	
8	Finland	0.92	91.53	0.92	
8	Italy	0.92	91.53	0.92	●
8	Singapore	0.92	91.53	0.92	
12	France	0.90	89.83	0.90	
12	United States of America	0.90	89.83	0.90	
14	Austria	0.88	88.14	0.88	
14	Mexico	0.88	88.14	0.88	●
14	Poland	0.88	88.14	0.88	●
17	Israel	0.83	83.05	0.84	
17	Lithuania	0.83	83.05	0.84	●
17	Montenegro	0.83	83.05	0.84	●
17	Morocco	0.83	83.05	0.84	●
17	Serbia	0.83	83.05	0.84	●
22	China	0.81	81.36	0.82	
22	Denmark	0.81	81.36	0.82	
22	Estonia	0.81	81.36	0.82	
25	Croatia	0.78	77.97	0.80	●
25	Malta	0.78	77.97	0.80	
27	Colombia	0.76	76.27	0.76	
27	Germany	0.76	76.27	0.76	
27	India	0.76	76.27	0.76	
27	Norway	0.76	76.27	0.76	
27	Sweden	0.76	76.27	0.76	
32	Bahrain	0.75	74.58	0.72	
32	Chile	0.75	74.58	0.72	
32	Russian Federation	0.75	74.58	0.72	
32	Ukraine	0.75	74.58	0.72	
32	United Arab Emirates	0.75	74.58	0.72	
37	Brazil	0.73	72.88	0.70	●
37	Slovenia	0.73	72.88	0.70	
39	Ireland	0.71	71.19	0.67	
39	Mongolia	0.71	71.19	0.67	
39	Saudi Arabia	0.71	71.19	0.67	
39	Uruguay	0.71	71.19	0.67	
43	Bulgaria	0.69	69.49	0.64	
43	Luxembourg	0.69	69.49	0.64	
43	Tunisia	0.69	69.49	0.64	
43	Viet Nam	0.69	69.49	0.64	
47	Azerbaijan	0.68	67.80	0.62	
47	Malaysia	0.68	67.80	0.62	
49	Iceland	0.66	66.10	0.58	
49	Mauritius	0.66	66.10	0.58	
49	Moldova, Rep.	0.66	66.10	0.58	
49	Portugal	0.66	66.10	0.58	
49	Sri Lanka	0.66	66.10	0.58	
54	Albania	0.64	64.41	0.54	
54	Belgium	0.64	64.41	0.54	○
54	Costa Rica	0.64	64.41	0.54	
54	Kuwait	0.64	64.41	0.54	
54	Qatar	0.64	64.41	0.54	
59	Argentina	0.63	62.71	0.51	
59	Guatemala	0.63	62.71	0.51	
59	Romania	0.63	62.71	0.51	
59	Turkey	0.63	62.71	0.51	
63	Greece	0.61	61.02	0.50	
63	TFYR of Macedonia	0.61	61.02	0.50	
65	Kazakhstan	0.59	59.32	0.46	
65	Kyrgyzstan	0.59	59.32	0.46	
65	Philippines	0.59	59.32	0.46	
65	Tanzania, United Rep.	0.59	59.32	0.46	
65	Thailand	0.59	59.32	0.46	
70	Bolivia, Plurinational St.	0.58	57.63	0.42	
70	Ecuador	0.58	57.63	0.42	
70	Paraguay	0.58	57.63	0.42	
70	Switzerland	0.58	57.63	0.42	○
74	Belarus	0.56	55.93	0.38	
74	Czech Republic	0.56	55.93	0.38	○
74	El Salvador	0.56	55.93	0.38	
74	Georgia	0.56	55.93	0.38	
74	Oman	0.56	55.93	0.38	
74	South Africa	0.56	55.93	0.38	
80	Peru	0.54	54.24	0.36	
80	Slovakia	0.54	54.24	0.36	
82	Armenia	0.53	52.54	0.32	
82	Bangladesh	0.53	52.54	0.32	
82	Cyprus	0.53	52.54	0.32	
82	Kenya	0.53	52.54	0.32	
82	Latvia	0.53	52.54	0.32	○
87	Bosnia and Herzegovina	0.51	50.85	0.30	
87	Nepal	0.51	50.85	0.30	
89	Dominican Republic	0.49	49.15	0.26	
89	Ethiopia	0.49	49.15	0.26	
89	Hungary	0.49	49.15	0.26	○
89	Lebanon	0.49	49.15	0.26	
89	Rwanda	0.49	49.15	0.26	
89	Uganda	0.49	49.15	0.26	
95	Jordan	0.46	45.76	0.25	
96	Trinidad and Tobago	0.44	44.07	0.24	
97	Egypt	0.41	40.68	0.23	
98	Honduras	0.39	38.98	0.21	
98	Senegal	0.39	38.98	0.21	
98	Togo	0.39	38.98	0.21	
101	Brunei Darussalam	0.37	37.29	0.18	
101	Indonesia	0.37	37.29	0.18	
101	Pakistan	0.37	37.29	0.18	
101	Panama	0.37	37.29	0.18	
105	Nigeria	0.36	35.59	0.16	
105	Zambia	0.36	35.59	0.16	
107	Botswana	0.29	28.81	0.14	
107	Malawi	0.29	28.81	0.14	
107	Zimbabwe	0.29	28.81	0.14	
110	Jamaica	0.27	27.12	0.13	○
111	Burkina Faso	0.24	23.73	0.11	
111	Namibia	0.24	23.73	0.11	
113	Iran, Islamic Rep.	0.20	20.34	0.08	○
113	Madagascar	0.20	20.34	0.08	
113	Mozambique	0.20	20.34	0.08	
113	Tajikistan	0.20	20.34	0.08	
117	Benin	0.17	16.95	0.06	
117	Cameroon	0.17	16.95	0.06	
119	Burundi	0.15	15.25	0.05	
119	Côte d'Ivoire	0.15	15.25	0.05	○
121	Yemen	0.14	13.56	0.04	
122	Algeria	0.12	11.86	0.03	
123	Guinea	0.08	8.48	0.02	○
123	Niger	0.08	8.48	0.02	
125	Cambodia	0.07	6.78	0.00	○
125	Mali	0.07	6.78	0.00	○
n/a	Hong Kong (China)	n/a	n/a	n/a	

SOURCE: United Nations Public Administration Network, *e-Government Survey 2016*
NOTE: ● indicates a strength; ○ a weakness

3.2.1 Electricity output

Electricity output (kWh per capita) | 2014

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Iceland	56,966.67	100.00	0.99	●
1	Norway	27,803.66	100.00	0.99	●
3	Bahrain	20,038.97	72.06	0.98	●
4	Qatar	17,830.41	64.11	0.97	●
5	Canada	17,594.07	63.26	0.97	●
6	Kuwait	17,370.67	62.45	0.96	●
7	Sweden	16,520.68	59.39	0.95	
8	United States of America	13,342.40	47.96	0.94	
9	Finland	12,494.72	44.90	0.93	
10	United Arab Emirates	12,098.90	43.48	0.92	●
11	Korea, Rep.	10,756.72	38.65	0.92	
12	Brunei Darussalam	10,728.57	38.55	0.91	●
13	Australia	10,388.17	37.32	0.90	
14	Saudi Arabia	10,094.08	36.27	0.89	●
15	New Zealand	9,821.33	35.28	0.88	
16	Singapore	9,027.42	32.43	0.87	
17	France	8,470.55	30.42	0.86	
18	Paraguay	8,440.00	30.31	0.86	●
19	Switzerland	7,975.42	28.64	0.85	
20	Japan	7,948.11	28.54	0.84	
21	Germany	7,915.44	28.42	0.83	
22	Estonia	7,891.67	28.34	0.82	
23	Israel	7,849.70	28.19	0.81	
24	Czech Republic	7,823.01	28.09	0.81	
25	Russian Federation	7,386.55	26.52	0.80	
26	Trinidad and Tobago	7,326.67	26.31	0.79	●
27	Austria	7,206.53	25.87	0.78	
28	Slovenia	7,153.14	25.68	0.77	
29	Oman	6,869.81	24.66	0.76	●
30	Bulgaria	6,499.58	23.33	0.75	
31	Netherlands	6,497.52	23.32	0.75	
32	Ireland	6,102.15	21.90	0.74	
33	Kazakhstan	6,076.81	21.81	0.73	●
34	Belgium	5,969.55	21.42	0.72	
35	Spain	5,940.70	21.32	0.71	
36	Hong Kong (China)	5,511.33	19.77	0.70	
37	Malta	5,220.93	18.73	0.69	
38	United Kingdom	5,155.45	18.49	0.69	
39	Montenegro	5,119.35	18.36	0.68	
40	Denmark	5,075.97	18.21	0.67	
41	Cyprus	5,058.14	18.14	0.66	
42	Malaysia	4,932.07	17.69	0.65	
43	Portugal	4,900.29	17.57	0.64	
44	Slovakia	4,787.32	17.17	0.64	
45	Serbia	4,690.88	16.82	0.63	
46	South Africa	4,619.83	16.56	0.62	
47	Italy	4,597.36	16.48	0.61	
48	Greece	4,374.43	15.68	0.60	
49	Poland	4,263.42	15.28	0.59	
50	Bosnia and Herzegovina	4,230.37	15.16	0.58	
51	China	4,152.95	14.88	0.58	
52	Chile	4,118.79	14.76	0.57	
53	Ukraine	4,011.73	14.38	0.56	
54	Lebanon	3,945.49	14.14	0.55	
55	Uruguay	3,804.39	13.63	0.54	
56	Belarus	3,667.90	13.14	0.53	
57	Iran, Islamic Rep.	3,514.32	12.59	0.53	
58	Turkey	3,351.70	12.00	0.52	
59	Argentina	3,286.64	11.77	0.51	
60	Romania	3,274.84	11.72	0.50	
61	Croatia	3,168.87	11.34	0.49	
62	Hungary	3,061.97	10.96	0.48	
63	Brazil	2,866.03	10.25	0.47	
64	Jordan	2,756.43	9.86	0.47	
65	Azerbaijan	2,592.03	9.27	0.46	
66	TFYR of Macedonia	2,583.65	9.24	0.45	
67	Latvia	2,583.42	9.23	0.44	
68	Armenia	2,574.75	9.20	0.43	
69	Thailand	2,563.58	9.16	0.42	
70	Mexico	2,538.55	9.07	0.42	
71	Kyrgyzstan	2,499.49	8.93	0.41	
72	Panama	2,399.74	8.57	0.40	
73	Mauritius	2,328.57	8.32	0.39	
74	Georgia	2,304.67	8.23	0.38	
75	Luxembourg	2,289.47	8.18	0.37	
76	Costa Rica	2,146.43	7.66	0.36	
77	Tajikistan	1,984.58	7.08	0.36	
78	Egypt	1,917.25	6.84	0.35	
79	Mongolia	1,847.42	6.59	0.34	
80	Dominican Republic	1,784.15	6.36	0.33	
81	Tunisia	1,729.45	6.16	0.32	
82	Algeria	1,650.19	5.88	0.31	
83	Albania	1,634.60	5.82	0.31	
84	Viet Nam	1,553.10	5.53	0.30	
85	Ecuador	1,528.74	5.44	0.29	
86	Jamaica	1,516.18	5.39	0.28	
87	Moldova, Rep.	1,503.09	5.35	0.27	
88	Peru	1,470.04	5.23	0.26	
89	Colombia	1,463.07	5.20	0.25	
90	Lithuania	1,265.53	4.49	0.25	○
91	Botswana	1,064.41	3.77	0.24	
92	El Salvador	1,018.49	3.60	0.23	
93	Honduras	1,009.80	3.57	0.22	
94	India	993.91	3.51	0.21	
95	Zambia	919.34	3.25	0.20	
96	Indonesia	898.20	3.17	0.19	
97	Morocco	847.46	2.99	0.19	○
98	Bolivia, Plurinational St.	829.07	2.92	0.18	
99	Philippines	779.32	2.74	0.17	
100	Guatemala	669.48	2.35	0.16	
101	Zimbabwe	657.25	2.30	0.15	
102	Mozambique	651.87	2.28	0.14	
103	Namibia	624.17	2.18	0.14	
104	Sri Lanka	603.73	2.11	0.13	○
105	Pakistan	569.09	1.99	0.12	
106	Côte d'Ivoire	373.92	1.28	0.11	
107	Bangladesh	351.05	1.20	0.10	
108	Cameroon	304.00	1.03	0.09	
109	Yemen	292.06	0.99	0.08	
110	Senegal	254.19	0.85	0.08	
111	Kenya	206.38	0.68	0.07	○
112	Cambodia	199.54	0.66	0.06	○
113	Nigeria	171.23	0.55	0.05	
114	Nepal	134.74	0.42	0.04	○
115	Tanzania, United Rep.	120.01	0.37	0.03	
116	Ethiopia	99.16	0.29	0.03	
117	Niger	36.11	0.07	0.02	
118	Togo	19.94	0.01	0.01	○
119	Benin	17.36	0.00	0.00	○
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	

SOURCE: International Energy Agency (IEA) *World Energy Balances on-line data service, 2015 edition*
NOTE: ● indicates a strength; ○ a weakness

3.2.2 Logistics performance

Logistics Performance Index | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Germany	4.23	100.00	1.00	●
2	Luxembourg	4.22	99.70	0.99	●
3	Sweden	4.20	99.01	0.98	●
4	Netherlands	4.19	98.22	0.98	●
5	Singapore	4.14	96.19	0.97	
6	Belgium	4.11	94.57	0.96	●
7	Austria	4.10	94.08	0.95	●
8	United Kingdom	4.07	92.77	0.94	
9	Hong Kong (China)	4.07	92.75	0.94	
10	United States of America	3.99	89.19	0.93	
11	Switzerland	3.99	88.96	0.92	
12	Japan	3.97	88.19	0.91	
13	United Arab Emirates	3.94	86.86	0.90	●
14	Canada	3.93	86.35	0.90	
15	Finland	3.92	85.89	0.89	
16	France	3.90	84.98	0.88	
17	Denmark	3.82	81.04	0.87	
18	Ireland	3.79	80.07	0.87	
19	Australia	3.79	80.00	0.86	
20	South Africa	3.78	79.17	0.85	●
21	Italy	3.76	78.25	0.84	
22	Norway	3.73	77.17	0.83	
23	Spain	3.73	76.95	0.83	
24	Korea, Rep.	3.72	76.48	0.82	
25	Czech Republic	3.67	74.50	0.81	
26	China	3.66	73.89	0.80	
27	Israel	3.66	73.85	0.79	
28	Lithuania	3.63	72.53	0.79	
29	Qatar	3.60	71.03	0.78	
30	Hungary	3.43	63.16	0.77	
31	Malaysia	3.43	63.03	0.76	
32	Poland	3.43	63.01	0.75	
33	Turkey	3.42	62.91	0.75	
34	India	3.42	62.74	0.74	
35	Portugal	3.41	62.25	0.73	
36	New Zealand	3.39	61.26	0.72	
37	Estonia	3.36	60.13	0.71	
38	Iceland	3.35	59.30	0.71	
39	Panama	3.34	58.94	0.70	
40	Slovakia	3.34	58.90	0.69	
41	Kenya	3.33	58.64	0.68	
42	Latvia	3.33	58.45	0.67	
43	Bahrain	3.31	57.84	0.67	
44	Thailand	3.26	55.12	0.66	
45	Chile	3.25	54.81	0.65	
46	Greece	3.24	54.40	0.64	
47	Oman	3.23	54.16	0.63	
48	Egypt	3.18	51.88	0.63	●
49	Slovenia	3.18	51.86	0.62	
50	Croatia	3.16	50.76	0.61	
51	Saudi Arabia	3.16	50.56	0.60	
52	Kuwait	3.15	50.34	0.60	
53	Mexico	3.11	48.60	0.59	
54	Brazil	3.09	47.39	0.58	
55	Malta	3.07	46.53	0.57	
56	Botswana	3.05	45.43	0.56	
57	Uganda	3.04	45.33	0.56	
58	Cyprus	3.00	43.28	0.55	
59	Romania	2.99	43.01	0.54	
60	Tanzania, United Rep.	2.99	42.87	0.53	●
61	Rwanda	2.99	42.69	0.52	
62	Indonesia	2.98	42.61	0.52	
63	Viet Nam	2.98	42.25	0.51	
64	Uruguay	2.97	42.15	0.50	
65	Argentina	2.96	41.60	0.49	
66	Jordan	2.96	41.32	0.48	
67	Pakistan	2.92	39.78	0.48	
68	Peru	2.89	38.40	0.47	
69	Brunei Darussalam	2.87	37.34	0.46	
70	Philippines	2.86	36.68	0.45	
71	Malawi (2014)	2.81	34.68	0.44	
72	Bulgaria	2.81	34.44	0.44	
73	Cambodia	2.80	34.11	0.43	
74	Ecuador	2.78	33.11	0.42	
75	Algeria	2.77	32.68	0.41	
76	Serbia	2.76	32.35	0.40	
77	Kazakhstan	2.75	31.86	0.40	
78	Namibia	2.74	31.53	0.39	
79	Ukraine	2.74	31.15	0.38	
80	Burkina Faso	2.73	30.88	0.37	
81	Lebanon	2.72	30.26	0.37	
82	El Salvador	2.71	29.72	0.36	
83	Sri Lanka (2014)	2.70	29.24	0.35	
84	Mozambique	2.68	28.72	0.34	
85	Morocco	2.67	27.89	0.33	
86	Bangladesh	2.66	27.79	0.33	
87	Costa Rica	2.65	27.10	0.32	
88	Nigeria	2.63	26.13	0.31	
89	Dominican Republic	2.63	26.10	0.30	
90	Togo	2.62	25.66	0.29	
91	Moldova, Rep.	2.61	25.50	0.29	
92	Colombia	2.61	25.41	0.28	
93	Côte d'Ivoire	2.60	24.95	0.27	
94	Iran, Islamic Rep.	2.60	24.89	0.26	
95	Bosnia and Herzegovina	2.60	24.66	0.25	
96	Russian Federation	2.57	23.49	0.25	○
97	Niger	2.56	23.08	0.24	
98	Paraguay	2.56	23.05	0.23	
99	Mauritius (2014)	2.51	20.90	0.22	
100	TFYR of Macedonia	2.51	20.69	0.21	○
101	Burundi	2.51	20.67	0.21	
102	Mongolia	2.51	20.49	0.20	
103	Mali	2.50	20.36	0.19	
104	Tunisia	2.50	20.06	0.18	○
105	Guatemala	2.48	19.12	0.17	
106	Honduras	2.46	18.49	0.17	
107	Azerbaijan (2014)	2.45	17.83	0.16	
108	Zambia	2.43	16.97	0.15	
109	Benin	2.43	16.89	0.14	
110	Albania	2.41	16.17	0.13	
111	Jamaica	2.40	15.60	0.13	○
112	Belarus	2.40	15.55	0.12	○
113	Trinidad and Tobago	2.40	15.52	0.11	
114	Montenegro	2.38	14.67	0.10	○
115	Nepal	2.38	14.52	0.10	
116	Ethiopia	2.38	14.52	0.09	
117	Guinea	2.36	13.69	0.08	
118	Georgia	2.35	13.42	0.07	○
119	Senegal	2.33	12.25	0.06	○
120	Bolivia, Plurinational St.	2.25	8.72	0.06	○
121	Armenia	2.21	6.60	0.05	○
122	Yemen (2014)	2.18	5.60	0.04	
123	Kyrgyzstan	2.16	4.31	0.03	○
124	Madagascar	2.15	4.25	0.02	○
125	Cameroon	2.15	4.10	0.02	○
126	Zimbabwe	2.08	0.91	0.01	○
127	Tajikistan	2.06	0.00	0.00	○

SOURCE: World Bank and Turku School of Economics, *Logistics Performance Index 2016*; Arvis et al., 2016, *Connecting to Compete 2016: Trade Logistics in the Global Economy*
NOTE: ● indicates a strength; ○ a weakness

3.2.3 Gross capital formation

Gross capital formation (% of GDP) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Algeria	47.81	100.00	1.00	●
2	Panama	47.20	98.64	0.99	●
3	China	43.66	90.70	0.98	●
4	Niger	42.52	88.13	0.98	●
5	Brunei Darussalam	40.94	84.58	0.97	●
6	Ethiopia	39.74	81.89	0.96	●
7	Mozambique	38.55	79.22	0.95	●
8	Indonesia	34.65	70.49	0.94	●
9	Nepal	33.96	68.92	0.93	●
10	Georgia	33.43	67.75	0.93	●
11	Kyrgyzstan	33.43	67.73	0.92	●
12	India	31.67	63.78	0.91	●
13	Saudi Arabia	31.66	63.77	0.90	●
14	Zambia	31.50	63.40	0.89	●
15	Oman	31.00	62.29	0.89	●
16	Tanzania, United Rep.	30.74	61.70	0.88	●
17	Botswana	30.44	61.04	0.87	●
18	Morocco	30.24	60.59	0.86	●
19	Azerbaijan	29.77	59.53	0.85	●
20	Rwanda	29.53	58.99	0.85	●
21	Namibia	29.23	58.32	0.84	●
22	Korea, Rep.	28.90	57.57	0.83	
23	Iran, Islamic Rep.	28.87	57.51	0.82	●
24	Albania	28.83	57.41	0.81	●
25	Bangladesh	28.45	56.57	0.80	●
26	Sri Lanka	28.34	56.31	0.80	●
27	Norway	28.31	56.25	0.79	
28	Kazakhstan	28.09	55.75	0.78	●
29	Viet Nam	28.03	55.63	0.77	●
30	Montenegro	27.08	53.50	0.76	
31	Mongolia	27.02	53.36	0.76	
32	Belarus	26.86	53.01	0.75	
33	Senegal	26.58	52.38	0.74	●
34	Benin	26.25	51.63	0.73	●
35	Malaysia	26.15	51.40	0.72	
36	Czech Republic	26.06	51.19	0.72	
37	Togo	26.02	51.12	0.71	●
38	Honduras	25.98	51.03	0.70	●
39	Singapore	25.97	51.00	0.69	
40	Uganda	25.63	50.25	0.68	●
41	Sweden	25.63	50.24	0.67	
42	Malta	25.60	50.18	0.67	
43	Romania	25.01	48.84	0.66	
44	Colombia	25.00	48.83	0.65	
45	Australia	24.92	48.66	0.64	
46	Ecuador	24.73	48.23	0.63	●
47	Peru	24.63	48.00	0.63	
48	Thailand	24.42	47.52	0.62	
49	Estonia	24.04	46.68	0.61	
50	Philippines	23.74	45.99	0.60	
51	Belgium	23.65	45.81	0.59	
52	Kuwait	23.49	45.44	0.59	
53	New Zealand	23.29	44.99	0.58	
54	Mexico	23.10	44.56	0.57	
55	Switzerland	23.08	44.53	0.56	○
56	Canada	23.07	44.50	0.55	
57	Cambodia	22.90	44.12	0.54	●
58	Slovakia	22.78	43.85	0.54	
59	Kenya	22.52	43.27	0.53	
60	Ireland	22.45	43.12	0.52	○
61	Austria	22.45	43.11	0.51	○
62	France	22.39	42.97	0.50	○
63	Chile	22.34	42.85	0.50	
64	Hong Kong (China)	22.06	42.23	0.49	
65	Bulgaria	21.96	42.00	0.48	
66	Cameroon	21.88	41.83	0.47	●
67	Tunisia	21.71	41.45	0.46	
68	Mauritius	21.67	41.37	0.46	
69	Russian Federation	21.63	41.27	0.45	
70	Latvia	21.61	41.22	0.44	
71	Japan	21.53	41.05	0.43	
72	Finland	21.42	40.79	0.42	○
73	Moldova, Rep.	21.07	40.01	0.41	
74	Spain	20.97	39.79	0.41	○
75	Hungary	20.95	39.75	0.40	
76	Armenia	20.62	39.00	0.39	
77	Iceland	20.55	38.83	0.38	○
78	Poland	20.33	38.34	0.37	○
79	Côte d'Ivoire	20.17	37.99	0.37	
80	Dominican Republic	20.06	37.75	0.36	
81	Uruguay	20.02	37.65	0.35	
82	United States of America	19.76	37.08	0.34	○
83	Bahrain	19.68	36.89	0.33	
84	United Arab Emirates	19.67	36.87	0.33	○
85	South Africa	19.60	36.71	0.32	
86	Denmark	19.56	36.61	0.31	○
87	Netherlands	19.50	36.48	0.30	○
88	Jordan	19.48	36.44	0.29	
89	Israel	19.45	36.38	0.28	○
90	Mali	19.40	36.26	0.28	
91	Germany	19.27	35.98	0.27	○
92	Bolivia, Plurinational St.	19.18	35.77	0.26	
93	Costa Rica	18.80	34.92	0.25	
94	Slovenia	18.79	34.90	0.24	○
95	Croatia	18.74	34.79	0.24	○
96	Luxembourg	18.58	34.43	0.23	○
97	Serbia	18.25	33.69	0.22	
98	Brazil	17.96	33.04	0.21	○
99	Tajikistan	17.89	32.88	0.20	
100	Lithuania	17.66	32.36	0.20	○
101	Turkey	17.40	31.79	0.19	○
102	United Kingdom	17.34	31.65	0.18	○
103	Bosnia and Herzegovina	17.12	31.16	0.17	
104	Guinea	16.90	30.66	0.16	
105	Italy	16.65	30.08	0.15	○
106	Argentina	16.50	29.77	0.15	
107	Paraguay	15.82	28.23	0.14	
108	Ukraine	15.81	28.22	0.13	○
109	Jamaica	15.43	27.35	0.12	○
110	Madagascar	15.33	27.13	0.11	
111	Pakistan	15.21	26.86	0.11	
112	Portugal	14.97	26.33	0.10	○
113	Egypt	14.53	25.34	0.09	
114	Burkina Faso	14.27	24.75	0.08	
115	Zimbabwe	14.23	24.67	0.07	
116	El Salvador	14.22	24.65	0.07	
117	Nigeria	13.81	23.71	0.06	
118	Trinidad and Tobago	13.42	22.85	0.05	○
119	Guatemala	13.36	22.71	0.04	○
120	Malawi	12.55	20.90	0.03	
121	Cyprus	10.44	16.17	0.02	○
122	Greece	10.33	15.91	0.02	○
123	Burundi	4.19	2.15	0.01	○
124	Yemen	3.24	0.00	0.00	○
n/a	Lebanon	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	

SOURCE: International Monetary Fund, *World Economic Outlook Database*, October 2016
NOTE: ● indicates a strength; ○ a weakness

3.3.1 GDP per unit of energy use

GDP per unit of energy use (2010 PPP$ per kg of oil equivalent) | 2014

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Hong Kong (China)	26.32	100.00	1.00	●
2	Sri Lanka	20.00	75.32	0.99	●
3	Panama	17.86	66.95	0.98	●
4	Colombia	17.54	65.73	0.96	●
4	Ireland	17.54	65.73	0.96	●
4	Switzerland	17.54	65.73	0.96	
7	Dominican Republic	16.95	63.40	0.95	●
8	Mauritius	15.63	58.23	0.94	●
9	Malta	15.15	56.38	0.92	
9	Singapore	15.15	56.38	0.92	
11	Denmark	14.93	55.50	0.92	
12	Peru	14.49	53.81	0.91	●
13	Uruguay	14.08	52.21	0.90	●
14	United Kingdom	13.89	51.45	0.89	
15	Costa Rica	13.51	49.98	0.88	●
16	Philippines	13.51	49.98	0.87	●
17	Luxembourg	13.33	49.28	0.86	
18	Bangladesh	13.16	48.59	0.85	●
18	Italy	13.16	48.59	0.85	
20	Cyprus	12.99	47.92	0.84	
21	Morocco	12.66	46.64	0.83	●
22	Albania	12.50	46.02	0.82	●
23	Spain	12.50	46.02	0.81	
23	Yemen	12.50	46.02	0.81	●
25	Botswana	12.35	45.42	0.79	●
25	Portugal	12.35	45.42	0.79	
27	Namibia	12.35	45.42	0.78	●
28	Ecuador	11.90	43.69	0.77	●
29	Egypt	11.76	43.15	0.75	●
29	El Salvador	11.76	43.15	0.75	●
31	Romania	11.49	42.09	0.75	
32	Austria	11.24	41.08	0.71	
32	Germany	11.24	41.08	0.71	
32	Greece	11.24	41.08	0.71	
32	Tunisia	11.24	41.08	0.71	●
36	Indonesia	11.11	40.59	0.70	●
37	Israel	11.11	40.59	0.69	
37	Turkey	11.11	40.59	0.69	
39	Azerbaijan	10.87	39.65	0.68	
40	Netherlands	10.75	39.19	0.67	○
41	Mexico	10.64	38.75	0.66	
42	Paraguay	10.53	38.31	0.65	●
43	Chile	10.42	37.88	0.63	
43	Lithuania	10.42	37.88	0.63	
43	Norway	10.42	37.88	0.63	
46	Japan	10.20	37.05	0.62	
47	Brazil	10.10	36.65	0.61	
48	Algeria	10.00	36.25	0.59	●
48	TFYR of Macedonia	10.00	36.25	0.59	
50	Croatia	10.00	36.25	0.58	
51	France	9.90	35.87	0.58	○
52	Lebanon	9.90	35.87	0.57	
53	Hungary	9.80	35.49	0.55	
53	Latvia	9.80	35.49	0.55	
55	Poland	9.71	35.11	0.54	
56	Argentina	9.35	33.70	0.53	
57	Pakistan	9.26	33.36	0.53	●
58	Montenegro	9.17	33.03	0.52	
59	Slovakia	9.09	32.70	0.51	
60	Jordan	9.09	32.70	0.50	
61	Slovenia	8.85	31.76	0.49	
62	Sweden	8.62	30.86	0.48	○
63	Belgium	8.47	30.29	0.47	○
63	Guatemala	8.47	30.29	0.47	
65	India	8.40	30.01	0.46	
66	Cameroon	8.33	29.74	0.45	●
67	Australia	8.20	29.21	0.44	○
68	United Arab Emirates	8.13	28.95	0.43	
69	Jamaica	8.06	28.69	0.42	
69	Senegal	8.06	28.69	0.42	
71	Malaysia	8.00	28.44	0.41	
72	Bolivia, Plurinational St.	7.87	27.95	0.40	
73	Brunei Darussalam	7.81	27.71	0.39	
74	Armenia	7.69	27.24	0.38	
75	New Zealand	7.63	27.01	0.37	○
76	Kuwait	7.58	26.78	0.36	
76	United States of America	7.58	26.78	0.36	○
78	Czech Republic	7.46	26.34	0.35	○
79	Tajikistan	7.46	26.34	0.34	
80	Thailand	7.41	26.12	0.33	
81	Cambodia	7.35	25.91	0.32	
82	Nigeria	7.30	25.70	0.31	
83	Georgia	7.25	25.49	0.31	
84	Viet Nam	7.14	25.09	0.30	
85	Saudi Arabia	7.04	24.70	0.29	
86	Honduras	6.80	23.76	0.28	
87	Bulgaria	6.54	22.72	0.27	○
88	Qatar	6.49	22.55	0.26	
89	Finland	6.33	21.91	0.25	○
90	Oman	6.29	21.75	0.25	
91	Korea, Rep.	6.29	21.75	0.24	○
92	Estonia	6.13	21.15	0.23	○
93	Mongolia	6.06	20.86	0.22	
94	Belarus	5.81	19.90	0.20	
94	Niger	5.81	19.90	0.20	
96	Zambia	5.71	19.51	0.19	
97	Canada	5.56	18.89	0.19	○
98	China	5.52	18.77	0.18	○
99	Nepal	5.35	18.07	0.17	
100	Iran, Islamic Rep.	5.32	17.96	0.16	
101	Kenya	5.24	17.64	0.15	
102	Kazakhstan	5.10	17.12	0.14	
103	Moldova, Rep.	5.03	16.81	0.14	○
104	Côte d'Ivoire	4.85	16.15	0.13	
105	Tanzania, United Rep.	4.81	15.97	0.12	
106	Kyrgyzstan	4.78	15.88	0.11	
107	Benin	4.69	15.52	0.10	
108	Bosnia and Herzegovina	4.52	14.86	0.08	○
108	Russian Federation	4.52	14.86	0.08	○
110	South Africa	4.48	14.70	0.08	○
111	Bahrain	4.10	13.19	0.07	○
112	Ukraine	3.28	9.99	0.06	○
113	Togo	2.88	8.44	0.05	
114	Ethiopia	2.81	8.16	0.04	
115	Mozambique	2.47	6.83	0.03	
116	Iceland	2.41	6.60	0.03	○
117	Zimbabwe	2.31	6.20	0.02	○
118	Trinidad and Tobago	2.07	5.27	0.01	○
119	Serbia	0.72	0.00	0.00	○
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	

SOURCE: International Energy Agency (IEA) *World Energy Balances on-line data service, 2016 edition*
NOTE: ● indicates a strength; ○ a weakness

3.3.2 Environmental performance

Environmental Performance Index | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Finland	90.68	90.68	1.00	●
2	Iceland	90.51	90.51	0.99	●
3	Sweden	90.43	90.43	0.98	●
4	Denmark	89.21	89.21	0.98	●
5	Slovenia	88.98	88.98	0.97	●
6	Spain	88.91	88.91	0.96	●
7	Portugal	88.63	88.63	0.95	●
8	Estonia	88.59	88.59	0.94	●
9	Malta	88.48	88.48	0.93	
10	France	88.20	88.20	0.93	●
11	New Zealand	88.00	88.00	0.92	
12	United Kingdom	87.38	87.38	0.91	
13	Australia	87.22	87.22	0.90	
14	Singapore	87.04	87.04	0.89	
15	Croatia	86.98	86.98	0.89	●
16	Switzerland	86.93	86.93	0.88	
17	Norway	86.90	86.90	0.87	
18	Austria	86.64	86.64	0.86	
19	Ireland	86.60	86.60	0.85	
20	Luxembourg	86.58	86.58	0.84	
21	Greece	85.81	85.81	0.84	●
22	Latvia	85.71	85.71	0.83	
23	Lithuania	85.49	85.49	0.82	
24	Slovakia	85.42	85.42	0.81	
25	Canada	85.06	85.06	0.80	
26	United States of America	84.72	84.72	0.80	
27	Czech Republic	84.67	84.67	0.79	
28	Hungary	84.60	84.60	0.78	
29	Italy	84.48	84.48	0.77	
30	Germany	84.26	84.26	0.76	
31	Azerbaijan	83.78	83.78	0.75	●
32	Russian Federation	83.52	83.52	0.75	
33	Bulgaria	83.40	83.40	0.74	
34	Romania	83.24	83.24	0.73	
35	Belarus	82.30	82.30	0.72	
36	Netherlands	82.03	82.03	0.71	
37	Armenia	81.60	81.60	0.70	
38	Poland	81.26	81.26	0.70	
39	Japan	80.59	80.59	0.69	
40	Cyprus	80.24	80.24	0.68	
41	Belgium	80.15	80.15	0.67	
42	Costa Rica	80.03	80.03	0.66	
43	Argentina	79.84	79.84	0.66	
44	Ukraine	79.69	79.69	0.65	
45	Brazil	78.90	78.90	0.64	
46	Montenegro	78.89	78.89	0.63	
47	Serbia	78.67	78.67	0.62	
48	Israel	78.14	78.14	0.61	
49	TFYR of Macedonia	78.02	78.02	0.61	
50	Panama	78.00	78.00	0.60	
51	Chile	77.67	77.67	0.59	
52	Tunisia	77.28	77.28	0.58	
53	Jamaica	77.02	77.02	0.57	
54	Moldova, Rep.	76.69	76.69	0.57	
55	Colombia	75.93	75.93	0.56	
56	Dominican Republic	75.32	75.32	0.55	
57	Albania	74.38	74.38	0.54	
58	Trinidad and Tobago	74.34	74.34	0.53	
59	Malaysia	74.23	74.23	0.52	
60	Morocco	74.18	74.18	0.52	
61	Uruguay	73.98	73.98	0.51	
62	Philippines	73.70	73.70	0.50	
63	Mexico	73.59	73.59	0.49	
64	Kazakhstan	73.29	73.29	0.48	
65	Kyrgyzstan	73.13	73.13	0.48	
66	Tajikistan	73.05	73.05	0.47	
67	Peru	72.95	72.95	0.46	
68	Jordan	72.24	72.24	0.45	
69	Bolivia, Plurinational St.	71.09	71.09	0.44	
70	Mauritius	70.85	70.85	0.43	
71	Namibia	70.84	70.84	0.43	
72	Botswana	70.72	70.72	0.42	
73	Korea, Rep.	70.61	70.61	0.41	
74	South Africa	70.52	70.52	0.40	
75	Paraguay	70.36	70.36	0.39	
76	Algeria	70.28	70.28	0.39	
77	Bahrain	70.07	70.07	0.38	
78	Qatar	69.94	69.94	0.37	
79	Guatemala	69.64	69.64	0.35	
79	Honduras	69.64	69.64	0.35	
81	Thailand	69.54	69.54	0.34	
82	United Arab Emirates	69.35	69.35	0.34	
83	Lebanon	69.14	69.14	0.33	
84	Saudi Arabia	68.63	68.63	0.32	
85	El Salvador	68.07	68.07	0.31	
86	Brunei Darussalam	67.86	67.86	0.30	
87	Turkey	67.68	67.68	0.30	
88	Ecuador	66.58	66.58	0.29	
89	Egypt	66.45	66.45	0.28	
90	Iran, Islamic Rep.	66.32	66.32	0.27	
91	Indonesia	65.85	65.85	0.26	
92	Sri Lanka	65.55	65.55	0.25	
93	China	65.10	65.10	0.25	
94	Georgia	64.96	64.96	0.24	
95	Kuwait	64.41	64.41	0.23	
96	Mongolia	64.39	64.39	0.22	
97	Senegal	63.73	63.73	0.21	
98	Bosnia and Herzegovina	63.28	63.28	0.20	
99	Kenya	62.49	62.49	0.20	
100	Oman	60.13	60.13	0.19	
101	Côte d'Ivoire	59.89	59.89	0.18	
102	Viet Nam	58.50	58.50	0.17	
103	Tanzania, United Rep.	58.34	58.34	0.16	
104	Nigeria	58.27	58.27	0.16	
105	Uganda	57.56	57.56	0.15	
106	Cameroon	57.13	57.13	0.14	
107	Guinea	55.40	55.40	0.13	
108	India	53.58	53.58	0.12	○
109	Pakistan	51.42	51.42	0.11	
110	Cambodia	51.24	51.24	0.11	
111	Rwanda	50.34	50.34	0.10	
112	Nepal	50.21	50.21	0.09	
113	Malawi	49.69	49.69	0.08	
114	Togo	46.10	46.10	0.07	
115	Ethiopia	45.83	45.83	0.07	
116	Burkina Faso	43.71	43.71	0.06	○
117	Benin	43.66	43.66	0.05	
118	Burundi	43.37	43.37	0.04	
119	Mozambique	41.82	41.82	0.03	○
120	Bangladesh	41.77	41.77	0.02	○
121	Mali	41.48	41.48	0.02	○
122	Niger	37.48	37.48	0.01	○
123	Madagascar	37.10	37.10	0.00	○
n/a	Hong Kong (China)	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: Yale University and Columbia University *Environmental Performance Index 2016*
NOTE: ● indicates a strength; ○ a weakness

3.3.3 ISO 14001 environmental certificates

ISO 14001 Environmental management systems—Requirements with guidance for use: Number of certificates issued (per billion PPP$ GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Estonia	14.75	100.00	0.99	●
1	Romania	25.51	100.00	0.99	●
3	Slovakia	14.11	95.68	0.98	●
4	Serbia	11.46	77.70	0.98	●
5	Czech Republic	11.34	76.83	0.97	●
6	Bulgaria	10.82	73.34	0.96	●
7	Italy	10.27	69.63	0.95	●
8	Croatia	9.68	65.62	0.94	●
9	Cyprus	8.79	59.54	0.94	●
10	Lithuania	8.74	59.18	0.93	●
11	Spain	8.22	55.72	0.92	●
12	Latvia	7.92	53.68	0.91	●
13	Sweden	7.77	52.63	0.90	
14	Hungary	7.49	50.74	0.90	●
15	Switzerland	6.70	45.40	0.89	
16	United Kingdom	6.60	44.67	0.88	
17	Finland	6.52	44.14	0.87	
18	China	5.80	39.29	0.86	
19	Slovenia	5.60	37.89	0.86	
20	Japan	5.38	36.44	0.85	
21	Portugal	4.38	29.64	0.84	
22	TFYR of Macedonia	4.26	28.83	0.83	●
23	Colombia	4.21	28.51	0.82	●
24	Denmark	3.90	26.37	0.82	
25	Greece	3.89	26.32	0.81	●
26	Australia	3.86	26.09	0.80	
27	Iceland	3.69	24.94	0.79	
28	Bosnia and Herzegovina	3.66	24.72	0.78	●
29	Norway	3.54	23.94	0.78	
30	Singapore	3.45	23.32	0.77	
31	Albania	3.25	21.94	0.76	●
32	Uruguay	3.10	20.95	0.75	●
33	Austria	2.99	20.18	0.74	
34	Israel	2.95	19.94	0.74	
35	Malaysia	2.94	19.85	0.73	
36	United Arab Emirates	2.94	19.84	0.72	
37	Korea, Rep.	2.93	19.82	0.71	
38	Netherlands	2.93	19.78	0.70	
39	Chile	2.87	19.38	0.70	
40	Poland	2.78	18.77	0.69	
41	Thailand	2.75	18.56	0.68	
42	Malta	2.65	17.89	0.67	
43	France	2.57	17.34	0.66	
44	Belarus	2.56	17.25	0.66	
45	Ireland	2.48	16.75	0.65	
46	Belgium	2.32	15.68	0.64	
47	Viet Nam	2.16	14.60	0.63	
48	Germany	2.13	14.37	0.62	
49	Luxembourg	1.91	12.88	0.62	
50	Tunisia	1.81	12.18	0.61	
51	Turkey	1.80	12.11	0.60	
52	Montenegro	1.71	11.49	0.59	
53	Hong Kong (China)	1.70	11.43	0.58	
54	South Africa	1.64	11.06	0.58	
55	Argentina	1.61	10.83	0.57	
56	New Zealand	1.54	10.38	0.56	
57	Costa Rica	1.48	9.95	0.55	
58	Bahrain	1.45	9.75	0.54	
59	Honduras	1.17	7.83	0.54	
60	Ecuador	1.16	7.80	0.53	
61	Peru	1.04	6.98	0.52	
62	Moldova, Rep.	1.00	6.72	0.51	
63	Zimbabwe	1.00	6.69	0.50	
64	Qatar	0.98	6.54	0.50	
65	Brazil	0.97	6.52	0.49	
66	Brunei Darussalam	0.90	6.05	0.48	
67	Mauritius	0.89	5.97	0.47	
68	Sri Lanka	0.86	5.77	0.46	
69	India	0.85	5.67	0.46	
70	Egypt	0.81	5.41	0.45	
71	Jordan	0.80	5.32	0.44	
72	Indonesia	0.79	5.25	0.43	
73	Canada	0.77	5.15	0.42	○
74	Bolivia, Plurinational St.	0.74	4.92	0.42	
75	Philippines	0.73	4.89	0.41	
76	Namibia	0.70	4.69	0.40	
77	Oman	0.67	4.48	0.39	
78	Mexico	0.62	4.13	0.38	
79	Morocco	0.62	4.12	0.38	
80	Iran, Islamic Rep.	0.55	3.63	0.37	
81	Trinidad and Tobago	0.52	3.45	0.36	
82	Jamaica	0.49	3.21	0.35	
83	Pakistan	0.48	3.16	0.34	
84	Senegal	0.46	3.05	0.34	
85	Ukraine	0.46	3.01	0.33	
86	Lebanon	0.42	2.77	0.32	
87	Mozambique	0.42	2.76	0.31	
88	Zambia	0.40	2.63	0.30	
89	Azerbaijan	0.38	2.51	0.30	
90	Kenya	0.35	2.30	0.29	
91	United States of America	0.34	2.20	0.28	○
92	Cambodia	0.33	2.16	0.27	
93	Kuwait	0.32	2.12	0.26	
94	Russian Federation	0.31	2.02	0.26	○
95	Georgia	0.31	2.01	0.25	
96	Uganda	0.30	1.95	0.24	
97	Nepal	0.30	1.95	0.23	
98	Panama	0.30	1.94	0.22	
99	Kazakhstan	0.30	1.93	0.22	
100	Côte d'Ivoire	0.29	1.88	0.21	
101	El Salvador	0.27	1.71	0.20	
102	Cameroon	0.26	1.69	0.19	
103	Botswana	0.26	1.66	0.18	
104	Paraguay	0.25	1.58	0.18	
105	Tanzania, United Rep.	0.22	1.43	0.17	
106	Saudi Arabia	0.21	1.33	0.16	○
107	Madagascar	0.20	1.25	0.15	
108	Dominican Republic	0.19	1.18	0.14	
109	Togo	0.18	1.16	0.14	
110	Algeria	0.18	1.11	0.13	
111	Guatemala	0.17	1.10	0.12	
112	Bangladesh	0.17	1.10	0.11	
113	Mongolia	0.17	1.04	0.10	
114	Niger	0.16	0.99	0.10	
115	Armenia	0.12	0.72	0.09	○
116	Malawi	0.10	0.58	0.08	
117	Tajikistan	0.08	0.48	0.07	
118	Guinea	0.07	0.36	0.06	
119	Burkina Faso	0.06	0.35	0.06	○
120	Mali	0.06	0.30	0.05	
121	Nigeria	0.05	0.28	0.04	
122	Kyrgyzstan (2014)	0.05	0.27	0.03	○
123	Rwanda	0.05	0.25	0.02	○
124	Benin	0.04	0.21	0.02	○
125	Yemen	0.01	0.01	0.01	
126	Ethiopia	0.01	0.00	0.00	○
n/a	Burundi	n/a	n/a	n/a	

SOURCE: International Organization for Standardization, *The ISO Survey 2015*; International Monetary Fund, *World Economic Outlook Database*, October 2016 (PPP$ GDP)
NOTE: ● indicates a strength; ○ a weakness

4.1.1 Ease of getting credit

Ease of getting credit (distance to frontier) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	New Zealand	100.00	100.00	1.00	●
2	Colombia	95.00	95.00	0.98	●
2	Rwanda	95.00	95.00	0.98	●
2	United States of America	95.00	95.00	0.98	●
5	Australia	90.00	90.00	0.96	●
5	Mexico	90.00	90.00	0.96	●
7	Cambodia	85.00	85.00	0.90	●
7	Canada	85.00	85.00	0.90	
7	Costa Rica	85.00	85.00	0.90	●
7	Georgia	85.00	85.00	0.90	●
7	Honduras	85.00	85.00	0.90	●
7	Latvia	85.00	85.00	0.90	●
7	Montenegro	85.00	85.00	0.90	●
7	Romania	85.00	85.00	0.90	●
15	Guatemala	80.00	80.00	0.87	●
15	Jamaica	80.00	80.00	0.87	●
15	Peru	80.00	80.00	0.87	●
15	TFYR of Macedonia	80.00	80.00	0.87	●
19	Armenia	75.00	75.00	0.79	●
19	Hong Kong (China)	75.00	75.00	0.79	
19	Hungary	75.00	75.00	0.79	
19	Malaysia	75.00	75.00	0.79	
19	Panama	75.00	75.00	0.79	●
19	Poland	75.00	75.00	0.79	
19	Singapore	75.00	75.00	0.79	
19	Ukraine	75.00	75.00	0.79	
19	United Kingdom	75.00	75.00	0.79	
19	Zambia	75.00	75.00	0.79	●
29	Bulgaria	70.00	70.00	0.70	
29	Czech Republic	70.00	70.00	0.70	
29	Denmark	70.00	70.00	0.70	
29	Estonia	70.00	70.00	0.70	
29	Germany	70.00	70.00	0.70	
29	Ireland	70.00	70.00	0.70	
29	Kenya	70.00	70.00	0.70	
29	Kyrgyzstan	70.00	70.00	0.70	●
29	Lithuania	70.00	70.00	0.70	
29	Moldova, Rep.	70.00	70.00	0.70	
29	Viet Nam	70.00	70.00	0.70	
40	Albania	65.00	65.00	0.58	
40	Bosnia and Herzegovina	65.00	65.00	0.58	
40	El Salvador	65.00	65.00	0.58	
40	Finland	65.00	65.00	0.58	
40	India	65.00	65.00	0.58	
40	Israel	65.00	65.00	0.58	
40	Korea, Rep.	65.00	65.00	0.58	
40	Mauritius	65.00	65.00	0.58	
40	Nigeria	65.00	65.00	0.58	●
40	Russian Federation	65.00	65.00	0.58	
40	Serbia	65.00	65.00	0.58	
40	Slovakia	65.00	65.00	0.58	
40	Tanzania, United Rep.	65.00	65.00	0.58	●
40	Trinidad and Tobago	65.00	65.00	0.58	●
40	Uganda	65.00	65.00	0.58	
55	Austria	60.00	60.00	0.48	○
55	Brunei Darussalam	60.00	60.00	0.48	
55	China	60.00	60.00	0.48	
55	Cyprus	60.00	60.00	0.48	
55	Iceland	60.00	60.00	0.48	
55	Indonesia	60.00	60.00	0.48	
55	Mongolia	60.00	60.00	0.48	
55	Namibia	60.00	60.00	0.48	
55	South Africa	60.00	60.00	0.48	
55	Spain	60.00	60.00	0.48	○
55	Switzerland	60.00	60.00	0.48	○
55	Uruguay	60.00	60.00	0.48	
67	Botswana	55.00	55.00	0.44	
67	Croatia	55.00	55.00	0.44	
67	Kazakhstan	55.00	55.00	0.44	
67	Norway	55.00	55.00	0.44	○
67	Sweden	55.00	55.00	0.44	○
72	Argentina	50.00	50.00	0.35	
72	Chile	50.00	50.00	0.35	
72	Egypt	50.00	50.00	0.35	
72	France	50.00	50.00	0.35	○
72	Greece	50.00	50.00	0.35	
72	Japan	50.00	50.00	0.35	○
72	Netherlands	50.00	50.00	0.35	○
72	Pakistan	50.00	50.00	0.35	
72	Saudi Arabia	50.00	50.00	0.35	
72	Thailand	50.00	50.00	0.35	
72	Turkey	50.00	50.00	0.35	
72	Zimbabwe	50.00	50.00	0.35	
84	Bahrain	45.00	45.00	0.24	
84	Belarus	45.00	45.00	0.24	
84	Belgium	45.00	45.00	0.24	○
84	Brazil	45.00	45.00	0.24	
84	Dominican Republic	45.00	45.00	0.24	
84	Ecuador	45.00	45.00	0.24	
84	Iran, Islamic Rep.	45.00	45.00	0.24	
84	Italy	45.00	45.00	0.24	○
84	Malawi	45.00	45.00	0.24	
84	Morocco	45.00	45.00	0.24	
84	Paraguay	45.00	45.00	0.24	
84	Portugal	45.00	45.00	0.24	○
84	Tunisia	45.00	45.00	0.24	
84	United Arab Emirates	45.00	45.00	0.24	○
98	Azerbaijan	40.00	40.00	0.19	
98	Kuwait	40.00	40.00	0.19	
98	Lebanon	40.00	40.00	0.19	
98	Philippines	40.00	40.00	0.19	
98	Sri Lanka	40.00	40.00	0.19	
98	Tajikistan	40.00	40.00	0.19	
104	Bolivia, Plurinational St.	35.00	35.00	0.16	
104	Cameroon	35.00	35.00	0.16	
104	Oman	35.00	35.00	0.16	
104	Slovenia	35.00	35.00	0.16	○
108	Benin	30.00	30.00	0.07	
108	Burkina Faso	30.00	30.00	0.07	
108	Côte d'Ivoire	30.00	30.00	0.07	○
108	Guinea	30.00	30.00	0.07	
108	Mali	30.00	30.00	0.07	
108	Malta	30.00	30.00	0.07	○
108	Nepal	30.00	30.00	0.07	
108	Niger	30.00	30.00	0.07	
108	Qatar	30.00	30.00	0.07	○
108	Senegal	30.00	30.00	0.07	
108	Togo	30.00	30.00	0.07	
119	Bangladesh	25.00	25.00	0.06	
119	Mozambique	25.00	25.00	0.06	
121	Ethiopia	15.00	15.00	0.03	
121	Luxembourg	15.00	15.00	0.03	○
121	Madagascar	15.00	15.00	0.03	○
124	Algeria	10.00	10.00	0.02	○
124	Burundi	10.00	10.00	0.02	○
126	Jordan	0.00	0.00	0.00	○
126	Yemen	0.00	0.00	0.00	○

SOURCE: World Bank, *Ease of Doing Business Index 2017: Equal Opportunity for All*
NOTE: ● indicates a strength; ○ a weakness

4.1.2 Domestic credit to private sector

Domestic credit to private sector (% of GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Cyprus	247.64	100.00	1.00	●
2	Hong Kong (China)	208.03	83.82	0.99	●
3	United States of America	188.83	75.97	0.98	●
4	Japan	182.88	73.54	0.98	●
5	Denmark	174.09	69.95	0.97	●
6	Switzerland	172.58	69.33	0.96	
7	China	153.34	61.47	0.95	
8	Thailand	151.31	60.64	0.94	●
9	South Africa	149.18	59.77	0.94	●
10	New Zealand (2010)	142.33	56.97	0.93	
11	Korea, Rep.	140.57	56.26	0.92	
12	Norway	138.42	55.38	0.91	
13	Australia	137.64	55.06	0.90	
14	United Kingdom	134.07	53.60	0.90	
15	Singapore	129.75	51.83	0.89	
16	Sweden	128.95	51.51	0.88	
17	Malaysia	125.21	49.98	0.87	●
18	Canada (2008)	124.41	49.65	0.86	
19	Portugal	120.06	47.88	0.86	
20	Spain	118.86	47.39	0.85	
21	Greece	113.22	45.08	0.84	●
22	Viet Nam	111.93	44.55	0.83	●
23	Netherlands	111.50	44.38	0.82	
24	Chile	110.96	44.16	0.82	●
25	Lebanon	106.64	42.39	0.81	●
26	Mauritius	102.81	40.83	0.80	●
27	Kuwait	98.60	39.11	0.79	●
28	Malta	98.02	38.87	0.78	
29	France	95.85	37.98	0.78	
30	Finland	95.45	37.82	0.77	
31	Luxembourg	95.36	37.78	0.76	
32	Iceland	92.06	36.44	0.75	
33	Panama	88.52	34.99	0.74	
34	Italy	88.05	34.80	0.74	
35	Austria	86.98	34.36	0.73	
36	Turkey	80.04	31.52	0.72	
37	Tunisia	79.60	31.34	0.71	●
38	Germany	77.95	30.67	0.70	
39	United Arab Emirates	76.48	30.07	0.70	
40	Bahrain	73.72	28.94	0.69	
41	Estonia	70.26	27.53	0.68	
42	Jordan	70.25	27.53	0.67	●
43	Qatar	69.59	27.26	0.66	
44	Brazil	67.86	26.55	0.66	
45	Israel	66.61	26.04	0.65	
46	Oman	65.57	25.61	0.64	
47	Croatia	65.47	25.57	0.63	
48	Nepal	65.04	25.40	0.62	●
49	Morocco	64.31	25.10	0.62	
50	Cambodia	63.10	24.60	0.61	●
51	Belgium	61.55	23.97	0.60	
52	Bolivia, Plurinational St.	58.07	22.55	0.59	●
53	Paraguay	57.94	22.49	0.58	●
54	Ukraine	56.97	22.10	0.58	
55	Costa Rica	56.79	22.03	0.57	
56	Saudi Arabia	56.63	21.96	0.56	
57	Russian Federation	56.36	21.85	0.55	
58	Bulgaria	55.41	21.46	0.54	
59	Honduras	55.37	21.45	0.54	
60	Mongolia	54.83	21.23	0.53	
61	Iran, Islamic Rep. (2014)	54.41	21.05	0.52	
62	Ireland	54.35	21.03	0.51	○
63	Namibia	53.79	20.80	0.50	
64	Bosnia and Herzegovina	53.71	20.77	0.50	
65	Poland	53.65	20.74	0.49	
66	Slovakia	53.46	20.66	0.48	
67	India	52.62	20.32	0.47	
68	TFYR of Macedonia	50.88	19.61	0.46	
69	Montenegro	50.63	19.51	0.46	
70	Czech Republic	50.31	19.38	0.45	○
71	Slovenia	50.20	19.33	0.44	
72	Georgia	49.76	19.15	0.43	
73	Latvia	48.75	18.74	0.42	
74	Colombia	47.13	18.08	0.42	
75	Armenia	45.74	17.51	0.41	
76	El Salvador	44.86	17.15	0.40	
77	Bangladesh	43.93	16.77	0.39	
78	Serbia	43.37	16.54	0.38	
79	Philippines	41.81	15.91	0.38	
80	Lithuania	41.81	15.90	0.37	
81	Brunei Darussalam	41.44	15.75	0.36	
82	Sri Lanka	40.73	15.46	0.35	
83	Indonesia	39.07	14.79	0.34	
84	Azerbaijan	38.45	14.53	0.34	
85	Kazakhstan	37.73	14.24	0.33	
86	Peru	37.42	14.11	0.32	
87	Trinidad and Tobago	37.11	13.98	0.31	
88	Togo	37.08	13.97	0.30	
89	Hungary	36.12	13.58	0.30	
90	Albania	35.46	13.31	0.29	
91	Mozambique	35.09	13.16	0.28	
92	Kenya	34.89	13.08	0.27	
93	Moldova, Rep.	34.76	13.02	0.26	
94	Guatemala	34.37	12.87	0.26	
95	Botswana	33.85	12.65	0.25	
96	Senegal	33.30	12.43	0.24	
97	Mexico	32.70	12.18	0.23	
98	Uruguay	30.02	11.09	0.22	
99	Jamaica	29.89	11.04	0.22	
100	Romania	29.89	11.04	0.21	○
101	Burkina Faso	27.23	9.95	0.20	
102	Dominican Republic	27.13	9.91	0.19	
103	Ecuador	26.92	9.82	0.18	
104	Egypt	26.47	9.64	0.18	
105	Mali	24.39	8.79	0.17	
106	Côte d'Ivoire	23.09	8.26	0.16	
107	Kyrgyzstan	22.96	8.20	0.15	
108	Tajikistan	22.72	8.11	0.14	
109	Rwanda	21.61	7.65	0.14	
110	Algeria	21.60	7.65	0.13	
111	Benin	21.49	7.60	0.12	
112	Zambia	19.76	6.90	0.11	
113	Ethiopia (2008)	17.71	6.06	0.10	
114	Cameroon	16.39	5.52	0.10	
115	Pakistan	15.38	5.11	0.09	○
116	Tanzania, United Rep.	15.17	5.02	0.08	
117	Argentina	14.70	4.83	0.07	○
118	Uganda	14.58	4.78	0.06	○
119	Guinea	14.38	4.70	0.06	
120	Burundi	14.26	4.65	0.05	
121	Nigeria	14.22	4.63	0.04	
122	Niger	14.17	4.61	0.03	
123	Madagascar	13.33	4.27	0.02	○
124	Malawi	12.20	3.81	0.02	○
125	Yemen (2013)	5.64	1.13	0.01	
126	Belarus	2.88	0.00	0.00	○
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: International Monetary Fund, International Financial Statistics and data files; and World Bank and OECD GDP estimates; extracted from the World Bank's *World Development Indicators* database

NOTE: ● indicates a strength; ○ a weakness

4.1.3 Microfinance institutions' gross loan portfolio

Microfinance institutions: Gross loan portfolio (% of GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Bolivia, Plurinational St.	19.59	100.00	0.96	●
1	Cambodia	29.59	100.00	0.96	●
1	Mongolia	18.36	100.00	0.96	●
1	Tajikistan	5.64	100.00	0.96	●
5	Paraguay	5.34	94.70	0.95	●
6	Peru	4.84	85.88	0.94	●
7	Armenia	4.78	84.76	0.93	●
8	Ecuador	4.72	83.73	0.91	●
9	Kenya	4.28	75.84	0.90	●
10	Azerbaijan	4.27	75.71	0.89	●
11	Kyrgyzstan	4.16	73.80	0.88	●
12	Viet Nam	3.52	62.40	0.86	●
13	Burundi	3.42	60.71	0.85	●
14	Togo	2.65	47.04	0.84	●
15	Georgia	2.29	40.63	0.83	
16	Bangladesh	1.94	34.39	0.81	●
17	Colombia	1.75	30.99	0.80	●
18	Nepal	1.73	30.76	0.79	●
19	Burkina Faso	1.53	27.16	0.78	●
20	Senegal	1.53	27.09	0.76	●
21	Benin	1.50	26.58	0.75	●
22	El Salvador	1.28	22.78	0.74	●
23	Bosnia and Herzegovina	1.25	22.09	0.73	●
24	Madagascar	1.24	21.99	0.71	●
25	Cameroon	1.11	19.61	0.70	●
26	Montenegro	1.01	17.98	0.69	
27	Niger	0.77	13.68	0.68	●
28	Chile	0.75	13.27	0.66	
29	Dominican Republic	0.73	12.90	0.65	●
30	Belarus	0.71	12.55	0.64	
31	Rwanda	0.70	12.35	0.63	
32	Honduras	0.57	10.17	0.61	●
33	Morocco	0.56	9.98	0.60	
34	India	0.56	9.88	0.59	
35	Albania	0.46	8.17	0.58	
36	Jordan	0.45	7.94	0.56	
37	Côte d'Ivoire	0.36	6.33	0.55	●
38	Moldova, Rep.	0.35	6.28	0.54	
39	Philippines	0.34	6.04	0.53	
40	TFYR of Macedonia	0.34	5.99	0.51	
41	Tunisia	0.34	5.95	0.50	
42	Malawi	0.30	5.32	0.49	
43	Panama	0.30	5.23	0.48	
44	Mali	0.27	4.85	0.46	
45	Serbia	0.26	4.53	0.45	
46	Guinea (2012)	0.25	4.42	0.44	●
47	Mexico	0.24	4.18	0.43	
48	Tanzania, United Rep.	0.24	4.17	0.41	
49	Uganda	0.23	4.04	0.40	
50	Pakistan	0.22	3.85	0.39	
51	Mozambique	0.20	3.54	0.38	
52	Guatemala	0.19	3.30	0.36	
53	Jamaica	0.14	2.49	0.35	
54	Malaysia (2011)	0.13	2.27	0.34	
55	Poland	0.12	2.04	0.33	○
56	Nigeria	0.11	1.90	0.31	
57	Lebanon	0.10	1.76	0.30	
58	Zambia	0.10	1.71	0.29	
59	Kazakhstan	0.08	1.40	0.28	
60	Russian Federation	0.08	1.37	0.26	
61	Egypt	0.05	0.84	0.25	
62	Brazil	0.05	0.79	0.24	
63	Sri Lanka	0.04	0.69	0.23	
64	Yemen	0.04	0.69	0.21	
65	Namibia (2012)	0.03	0.52	0.20	
66	Ethiopia	0.03	0.49	0.19	
67	Costa Rica	0.02	0.26	0.18	○
68	Indonesia	0.01	0.25	0.16	
69	Zimbabwe	0.01	0.23	0.15	
70	Croatia (2007)	0.01	0.19	0.14	○
71	Uruguay	0.01	0.17	0.13	○
72	Romania	0.01	0.16	0.11	○
73	China	0.01	0.15	0.10	○
74	South Africa	0.01	0.11	0.09	○
75	Bulgaria	0.01	0.10	0.08	○
76	Turkey	0.00	0.04	0.06	○
77	Trinidad and Tobago (2013)	0.00	0.03	0.05	
78	Argentina	0.00	0.02	0.04	○
79	Hungary (2007)	0.00	0.01	0.03	○
80	Ukraine	0.00	0.01	0.01	○
81	Thailand (2011)	0.00	0.00	0.00	○
n/a	Algeria	n/a	n/a	n/a	
n/a	Australia	n/a	n/a	n/a	
n/a	Austria	n/a	n/a	n/a	
n/a	Bahrain	n/a	n/a	n/a	
n/a	Belgium	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Canada	n/a	n/a	n/a	
n/a	Cyprus	n/a	n/a	n/a	
n/a	Czech Republic	n/a	n/a	n/a	
n/a	Denmark	n/a	n/a	n/a	
n/a	Estonia	n/a	n/a	n/a	
n/a	Finland	n/a	n/a	n/a	
n/a	France	n/a	n/a	n/a	
n/a	Germany	n/a	n/a	n/a	
n/a	Greece	n/a	n/a	n/a	
n/a	Hong Kong (China)	n/a	n/a	n/a	
n/a	Iceland	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Ireland	n/a	n/a	n/a	
n/a	Israel	n/a	n/a	n/a	
n/a	Italy	n/a	n/a	n/a	
n/a	Japan	n/a	n/a	n/a	
n/a	Korea, Rep.	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Latvia	n/a	n/a	n/a	
n/a	Lithuania	n/a	n/a	n/a	
n/a	Luxembourg	n/a	n/a	n/a	
n/a	Malta	n/a	n/a	n/a	
n/a	Mauritius	n/a	n/a	n/a	
n/a	Netherlands	n/a	n/a	n/a	
n/a	New Zealand	n/a	n/a	n/a	
n/a	Norway	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Portugal	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Singapore	n/a	n/a	n/a	
n/a	Slovakia	n/a	n/a	n/a	
n/a	Slovenia	n/a	n/a	n/a	
n/a	Spain	n/a	n/a	n/a	
n/a	Sweden	n/a	n/a	n/a	
n/a	Switzerland	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	United Kingdom	n/a	n/a	n/a	
n/a	United States of America	n/a	n/a	n/a	

SOURCE: Microfinance Information Exchange, *Mix Market database*; International Monetary Fund, *World Economic Outlook Database*, October 2016

NOTE: ● indicates a strength; ○ a weakness

4.2.1 Ease of protecting minority investors

Ease of protecting minority investors (distance to frontier) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	New Zealand	83.33	83.33	0.99	●
1	Singapore	83.33	83.33	0.99	●
3	Hong Kong (China)	80.00	80.00	0.97	●
3	Kazakhstan	80.00	80.00	0.97	●
3	Malaysia	80.00	80.00	0.97	●
6	United Kingdom	78.33	78.33	0.96	
7	Canada	76.67	76.67	0.94	
7	Georgia	76.67	76.67	0.94	●
9	Israel	75.00	75.00	0.91	
9	Norway	75.00	75.00	0.91	
9	Slovenia	75.00	75.00	0.91	●
9	United Arab Emirates	75.00	75.00	0.91	●
13	Bulgaria	73.33	73.33	0.87	●
13	Colombia	73.33	73.33	0.87	●
13	India	73.33	73.33	0.87	●
13	Ireland	73.33	73.33	0.87	
13	Korea, Rep.	73.33	73.33	0.87	
13	TFYR of Macedonia	73.33	73.33	0.87	●
19	Albania	71.67	71.67	0.84	●
19	Denmark	71.67	71.67	0.84	
19	Sweden	71.67	71.67	0.84	
22	Iceland	70.00	70.00	0.82	
22	South Africa	70.00	70.00	0.82	●
22	Turkey	70.00	70.00	0.82	●
25	Mongolia	68.33	68.33	0.81	●
26	Croatia	66.67	66.67	0.77	
26	Cyprus	66.67	66.67	0.77	
26	Pakistan	66.67	66.67	0.77	●
26	Tajikistan	66.67	66.67	0.77	●
26	Thailand	66.67	66.67	0.77	
31	Austria	65.00	65.00	0.70	
31	Azerbaijan	65.00	65.00	0.70	●
31	Brazil	65.00	65.00	0.70	
31	Chile	65.00	65.00	0.70	
31	France	65.00	65.00	0.70	
31	Malta	65.00	65.00	0.70	
31	Mauritius	65.00	65.00	0.70	
31	Nigeria	65.00	65.00	0.70	●
31	Spain	65.00	65.00	0.70	
40	United States of America	64.67	64.67	0.69	
41	Belarus	63.33	63.33	0.62	
41	Greece	63.33	63.33	0.62	
41	Italy	63.33	63.33	0.62	
41	Kyrgyzstan	63.33	63.33	0.62	
41	Latvia	63.33	63.33	0.62	
41	Moldova, Rep.	63.33	63.33	0.62	
41	Montenegro	63.33	63.33	0.62	
41	Poland	63.33	63.33	0.62	
41	Sri Lanka	63.33	63.33	0.62	●
50	Argentina	61.67	61.67	0.60	
50	Lithuania	61.67	61.67	0.60	
52	Armenia	60.00	60.00	0.52	
52	Czech Republic	60.00	60.00	0.52	
52	Estonia	60.00	60.00	0.52	
52	Germany	60.00	60.00	0.52	
52	Japan	60.00	60.00	0.52	
52	Mexico	60.00	60.00	0.52	
52	Peru	60.00	60.00	0.52	
52	Romania	60.00	60.00	0.52	
52	Russian Federation	60.00	60.00	0.52	
52	Trinidad and Tobago	60.00	60.00	0.52	
62	Australia	58.33	58.33	0.48	
62	Belgium	58.33	58.33	0.48	○
62	Jamaica	58.33	58.33	0.48	
62	Nepal	58.33	58.33	0.48	●
62	Saudi Arabia	58.33	58.33	0.48	
67	Bangladesh	56.67	56.67	0.42	
67	Finland	56.67	56.67	0.42	○
67	Indonesia	56.67	56.67	0.42	
67	Netherlands	56.67	56.67	0.42	○
67	Panama	56.67	56.67	0.42	
67	Portugal	56.67	56.67	0.42	○
67	Serbia	56.67	56.67	0.42	
67	Ukraine	56.67	56.67	0.42	
75	Bosnia and Herzegovina	55.00	55.00	0.38	
75	Botswana	55.00	55.00	0.38	
75	Hungary	55.00	55.00	0.38	
75	Kuwait	55.00	55.00	0.38	
75	Namibia	55.00	55.00	0.38	
80	Dominican Republic	53.33	53.33	0.33	
80	Kenya	53.33	53.33	0.33	
80	Morocco	53.33	53.33	0.33	
80	Slovakia	53.33	53.33	0.33	○
80	Viet Nam	53.33	53.33	0.33	
80	Zambia	53.33	53.33	0.33	
86	Brunei Darussalam	51.67	51.67	0.31	
86	Rwanda	51.67	51.67	0.31	
86	Zimbabwe	51.67	51.67	0.31	
89	Bahrain	50.00	50.00	0.29	
89	Switzerland	50.00	50.00	0.29	○
89	Uganda	50.00	50.00	0.29	
92	Cambodia	48.33	48.33	0.26	
92	Egypt	48.33	48.33	0.26	
92	Madagascar	48.33	48.33	0.26	
95	Ecuador	46.67	46.67	0.24	
95	Oman	46.67	46.67	0.24	
95	Tunisia	46.67	46.67	0.24	
98	China	45.00	45.00	0.21	○
98	Luxembourg	45.00	45.00	0.21	○
98	Uruguay	45.00	45.00	0.21	○
101	Honduras	43.33	43.33	0.18	
101	Malawi	43.33	43.33	0.18	
101	Mozambique	43.33	43.33	0.18	
101	Yemen	43.33	43.33	0.18	
105	Bolivia, Plurinational St.	41.67	41.67	0.13	
105	Burundi	41.67	41.67	0.13	
105	Cameroon	41.67	41.67	0.13	
105	Paraguay	41.67	41.67	0.13	
105	Philippines	41.67	41.67	0.13	
105	Senegal	41.67	41.67	0.13	
111	Benin	40.00	40.00	0.06	
111	Burkina Faso	40.00	40.00	0.06	
111	Côte d'Ivoire	40.00	40.00	0.06	○
111	Guinea	40.00	40.00	0.06	
111	Lebanon	40.00	40.00	0.06	○
111	Mali	40.00	40.00	0.06	
111	Niger	40.00	40.00	0.06	
111	Tanzania, United Rep.	40.00	40.00	0.06	
111	Togo	40.00	40.00	0.06	
120	El Salvador	38.33	38.33	0.06	○
121	Costa Rica	35.00	35.00	0.03	○
121	Iran, Islamic Rep.	35.00	35.00	0.03	○
121	Jordan	35.00	35.00	0.03	○
124	Algeria	33.33	33.33	0.02	○
124	Guatemala	33.33	33.33	0.02	○
126	Ethiopia	31.67	31.67	0.01	○
127	Qatar	26.67	26.67	0.00	○

SOURCE: World Bank, *Ease of Doing Business Index 2017: Equal Opportunity for All*
NOTE: ● indicates a strength; ○ a weakness

4.2.2 Market capitalization

Market capitalization of listed companies (% of GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Hong Kong (China)	1,029.92	100.00	0.99	●
1	Singapore	218.61	93.44	0.96	
3	South Africa	233.95	100.00	0.99	●
4	Switzerland	226.50	96.81	0.98	●
5	United States of America	138.98	59.40	0.95	
6	Malaysia	129.26	55.25	0.94	●
7	Japan	111.68	47.73	0.93	
8	Canada	102.76	43.92	0.92	
9	Netherlands	97.09	41.50	0.91	
10	Montenegro (2012)	92.65	39.60	0.89	●
11	Belgium	91.09	38.93	0.88	
12	Korea, Rep.	89.36	38.19	0.87	
13	Australia	88.65	37.89	0.86	
14	Thailand	88.27	37.73	0.85	●
15	Qatar	86.59	37.01	0.84	
16	France	86.34	36.90	0.82	
17	Philippines	81.66	34.90	0.81	●
18	Luxembourg	81.55	34.86	0.80	
19	Israel	81.46	34.82	0.79	
20	Chile	79.05	33.79	0.78	
21	China	74.38	31.79	0.76	
22	India	72.36	30.93	0.75	
23	Jordan	67.84	29.00	0.74	●
24	Spain	65.65	28.06	0.73	
25	Saudi Arabia	65.18	27.86	0.72	
26	United Kingdom (2008)	64.97	27.77	0.71	
27	Mauritius	61.96	26.48	0.69	
28	Bahrain	61.85	26.43	0.68	
29	Oman	58.89	25.17	0.67	
30	United Arab Emirates	52.90	22.61	0.66	
31	Germany	51.01	21.80	0.65	
32	Norway	50.16	21.44	0.64	
33	Morocco	45.66	19.51	0.62	
34	Malta	45.20	19.32	0.61	
35	Ireland	45.12	19.28	0.60	○
36	El Salvador (2012)	45.11	19.28	0.59	
37	New Zealand	42.79	18.29	0.58	
38	Indonesia	40.99	17.52	0.56	
39	Côte d'Ivoire	39.34	16.81	0.55	●
40	Bangladesh (2011)	37.08	15.85	0.54	●
41	Croatia (2011)	36.24	15.49	0.53	
42	Mexico	35.17	15.03	0.52	
43	Jamaica (2011)	34.69	14.82	0.51	
44	Panama (2011)	31.08	13.28	0.49	
45	Uganda (2012)	31.03	13.26	0.48	
46	Portugal	30.08	12.85	0.47	
47	Peru	29.91	12.78	0.46	
48	Russian Federation	29.54	12.62	0.45	
49	Colombia	29.43	12.58	0.44	
50	Poland	28.88	12.34	0.42	
51	Brazil	27.64	11.81	0.41	
52	Iran, Islamic Rep. (2014)	27.42	11.72	0.40	
53	Italy (2014)	27.32	11.67	0.39	○
54	Viet Nam	26.80	11.45	0.38	
55	Turkey	26.31	11.24	0.36	
56	Austria	25.49	10.89	0.35	○
57	Sri Lanka	25.27	10.80	0.34	
58	Kenya (2011)	24.32	10.39	0.33	
59	Lebanon (2011)	22.57	9.65	0.32	
60	Greece	21.60	9.23	0.31	
61	Tunisia (2011)	21.09	9.01	0.29	
62	Kazakhstan	18.92	8.08	0.28	
63	Czech Republic (2008)	17.39	7.43	0.27	○
64	Egypt	16.69	7.13	0.26	
65	Bolivia, Plurinational St. (2012)	16.41	7.01	0.25	
66	Ukraine (2011)	15.72	6.72	0.24	
67	Pakistan (2011)	15.25	6.51	0.22	
68	Hungary	14.53	6.21	0.21	○
69	Bulgaria (2011)	14.37	6.14	0.20	○
70	Slovenia	14.11	6.03	0.19	○
71	Cyprus	13.76	5.88	0.18	○
72	Zambia (2011)	13.57	5.80	0.16	
73	Malawi (2012)	12.60	5.38	0.15	
74	Bosnia and Herzegovina (2011)	12.15	5.19	0.14	
75	Mongolia (2012)	10.52	4.49	0.13	
76	Nigeria	10.39	4.44	0.12	
77	Argentina	9.63	4.11	0.11	○
78	Serbia (2011)	8.73	3.73	0.09	○
79	Romania (2011)	7.57	3.23	0.08	○
80	Georgia (2012)	5.95	2.54	0.07	○
81	TFYR of Macedonia (2012)	5.74	2.45	0.06	○
82	Slovakia (2013)	4.88	2.08	0.05	○
83	Costa Rica (2011)	3.55	1.51	0.04	○
84	Kyrgyzstan (2012)	2.50	1.06	0.02	○
85	Armenia (2012)	1.24	0.53	0.01	○
86	Namibia (2011)	0.01	0.00	0.00	○
n/a	Albania	n/a	n/a	n/a	
n/a	Algeria	n/a	n/a	n/a	
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Belarus	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Denmark	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	Ecuador	n/a	n/a	n/a	
n/a	Estonia	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Finland	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Iceland	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Latvia	n/a	n/a	n/a	
n/a	Lithuania	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Moldova, Rep.	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Senegal	n/a	n/a	n/a	
n/a	Sweden	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Uruguay	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: World Federation of Exchanges database; extracted from the World Bank's *World Development Indicators* database
NOTE: ● indicates a strength; ○ a weakness

4.2.3 Venture capital deals

Venture capital per investment location: Number of deals (per billion PPP$ GDP) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Canada	0.55	100.00	0.97	●
1	France	0.31	100.00	0.97	●
1	Israel	0.43	100.00	0.97	●
1	United States of America	0.39	100.00	0.97	●
5	Finland	0.28	89.93	0.96	
6	Denmark	0.22	70.83	0.95	
7	United Kingdom	0.21	67.39	0.93	
8	Sweden	0.19	61.88	0.92	
9	Iceland	0.19	59.04	0.91	
10	Switzerland	0.18	57.20	0.90	
11	Netherlands	0.18	56.50	0.89	
12	Estonia	0.16	49.23	0.88	
13	Luxembourg	0.15	48.64	0.87	
14	Singapore	0.13	39.74	0.86	
15	Malta	0.12	38.87	0.85	
16	Germany	0.12	37.93	0.84	
17	Ireland	0.11	36.17	0.82	
18	Lithuania (2015)	0.11	34.72	0.81	
19	Belgium	0.10	31.13	0.80	
20	New Zealand	0.09	27.14	0.79	
21	Portugal	0.08	26.62	0.78	
22	Australia	0.08	26.34	0.77	
23	Lebanon	0.08	26.00	0.76	●
24	Guinea (2015)	0.07	20.66	0.75	●
25	Austria	0.06	19.72	0.74	
26	China	0.06	18.37	0.73	
27	Spain	0.06	17.52	0.71	
28	United Arab Emirates	0.05	16.51	0.70	
29	Kenya	0.05	16.49	0.69	
30	Italy	0.05	15.58	0.68	
31	Rwanda (2015)	0.05	15.48	0.67	●
32	Tunisia	0.05	14.41	0.66	
33	Norway	0.04	13.77	0.65	
34	Hong Kong (China)	0.04	12.47	0.64	
35	Mauritius	0.04	12.12	0.63	
36	Zimbabwe	0.04	11.04	0.62	●
37	Mali (2015)	0.03	10.72	0.60	●
38	Cyprus	0.03	10.68	0.59	
39	Burkina Faso (2015)	0.03	10.01	0.58	●
40	India	0.03	9.88	0.57	
41	Slovenia	0.03	9.43	0.56	
42	Czech Republic	0.03	8.87	0.55	
43	Senegal (2015)	0.03	8.57	0.54	
44	Georgia	0.03	8.31	0.53	
45	Hungary	0.03	8.12	0.52	
46	Panama (2015)	0.02	7.54	0.51	
47	Poland	0.02	7.36	0.49	
48	Brazil	0.02	7.21	0.48	
49	Japan	0.02	7.15	0.47	
50	Morocco	0.02	6.55	0.46	
51	South Africa	0.02	6.28	0.45	
52	Latvia	0.02	6.05	0.44	
53	Korea, Rep.	0.02	5.73	0.43	
54	Cambodia (2015)	0.02	5.67	0.42	
55	Malaysia	0.02	5.32	0.41	
56	Zambia	0.02	4.67	0.40	
57	Bahrain	0.02	4.59	0.38	
58	Greece (2015)	0.01	4.31	0.37	
59	Uruguay	0.01	4.10	0.36	
60	Viet Nam	0.01	4.07	0.35	
61	Côte d'Ivoire (2015)	0.01	3.85	0.34	
62	Costa Rica	0.01	3.81	0.33	
63	Uganda (2015)	0.01	3.78	0.32	
64	Peru	0.01	3.67	0.31	
65	Jordan	0.01	3.48	0.30	
66	Ethiopia	0.01	3.43	0.29	
67	Romania	0.01	3.40	0.27	
68	Croatia	0.01	3.17	0.26	○
69	Colombia	0.01	3.02	0.25	
70	Mexico	0.01	2.82	0.24	
71	Chile	0.01	2.71	0.23	○
72	Egypt	0.01	2.67	0.22	
73	Turkey	0.01	2.65	0.21	
74	Philippines	0.01	2.57	0.20	
75	Ukraine	0.01	2.52	0.19	
76	Bulgaria	0.01	2.01	0.18	○
77	Thailand	0.01	1.98	0.16	○
78	Argentina	0.01	1.96	0.15	
79	Tanzania, United Rep.	0.01	1.90	0.14	
80	Indonesia	0.01	1.89	0.13	
81	Algeria	0.01	1.87	0.12	
82	Belarus	0.01	1.71	0.11	○
83	Slovakia	0.01	1.67	0.10	○
84	Saudi Arabia	0.01	1.62	0.09	○
85	Ecuador (2015)	0.01	1.54	0.08	
86	Nigeria	0.00	1.25	0.07	
87	Kuwait (2015)	0.00	0.89	0.05	○
88	Kazakhstan (2015)	0.00	0.52	0.04	○
89	Pakistan (2015)	0.00	0.47	0.03	○
90	Russian Federation	0.00	0.29	0.02	○
91	Bangladesh	0.00	0.29	0.01	○
92	Iran, Islamic Rep.	0.00	0.00	0.00	○
n/a	Albania	n/a	n/a	n/a	
n/a	Armenia	n/a	n/a	n/a	
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Bosnia and Herzegovina	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Kyrgyzstan	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Moldova, Rep.	n/a	n/a	n/a	
n/a	Mongolia	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	Serbia	n/a	n/a	n/a	
n/a	Sri Lanka	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	

SOURCE: Thomson Reuters, *Thomson One Banker Private Equity, SDC Platinum* database; International Monetary Fund, *World Economic Outlook Database,* October 2016 (PPP$ GDP)
NOTE: ● indicates a strength; ○ a weakness

4.3.1 Applied tariff rate, weighted mean

Tariff rate, applied, weighted mean, all products (%) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Hong Kong (China)	0.00	100.00	0.98	●
1	Singapore	0.00	100.00	0.98	●
1	Switzerland	0.00	100.00	0.98	●
4	Georgia	0.30	98.26	0.98	●
5	Brunei Darussalam (2014)	0.46	97.33	0.97	●
6	Botswana	0.54	96.86	0.96	●
7	Mauritius	0.63	96.34	0.95	●
8	Chile	0.64	96.28	0.94	●
9	Iceland	0.77	95.53	0.94	
10	Namibia	0.87	94.95	0.93	●
11	Canada	0.96	94.43	0.92	
12	Mexico (2014)	1.02	94.08	0.91	●
13	Norway	1.04	93.96	0.90	
14	Bosnia and Herzegovina	1.09	93.67	0.90	●
15	Albania	1.11	93.55	0.89	●
16	TFYR of Macedonia	1.12	93.50	0.88	●
17	Malaysia (2014)	1.28	92.57	0.87	●
18	Croatia (2013)	1.30	92.45	0.86	●
19	New Zealand	1.32	92.33	0.86	
20	Japan	1.36	92.10	0.85	
21	Guatemala	1.39	91.93	0.84	●
22	Peru (2014)	1.43	91.70	0.83	●
23	Austria	1.57	90.88	0.62	
23	Belgium	1.57	90.88	0.62	
23	Bulgaria	1.57	90.88	0.62	
23	Cyprus	1.57	90.88	0.62	
23	Czech Republic	1.57	90.88	0.62	
23	Denmark	1.57	90.88	0.62	
23	Estonia	1.57	90.88	0.62	
23	Finland	1.57	90.88	0.62	
23	France	1.57	90.88	0.62	
23	Germany	1.57	90.88	0.62	
23	Greece	1.57	90.88	0.62	
23	Hungary	1.57	90.88	0.62	
23	Ireland	1.57	90.88	0.62	
23	Italy	1.57	90.88	0.62	
23	Latvia	1.57	90.88	0.62	
23	Lithuania	1.57	90.88	0.62	
23	Luxembourg	1.57	90.88	0.62	
23	Malta	1.57	90.88	0.62	
23	Netherlands	1.57	90.88	0.62	○
23	Poland	1.57	90.88	0.62	
23	Portugal	1.57	90.88	0.62	
23	Romania	1.57	90.88	0.62	
23	Slovakia	1.57	90.88	0.62	
23	Slovenia	1.57	90.88	0.62	
23	Spain	1.57	90.88	0.62	
23	Sweden	1.57	90.88	0.62	○
23	United Kingdom	1.57	90.88	0.62	○
50	United States of America	1.64	90.48	0.61	
51	El Salvador	1.79	89.61	0.60	
52	Belarus	1.80	89.55	0.59	
53	Australia	1.89	89.02	0.58	
54	Oman	1.90	88.97	0.58	
55	Ukraine	1.93	88.79	0.57	
56	Philippines (2013)	2.15	87.51	0.56	
57	Israel	2.23	87.05	0.55	
58	Indonesia (2013)	2.27	86.82	0.54	
59	Armenia	2.52	85.37	0.54	
60	Montenegro (2012)	2.63	84.73	0.53	
61	Costa Rica (2014)	2.66	84.55	0.52	
62	Kyrgyzstan	2.74	84.09	0.51	
63	Lebanon	2.77	83.91	0.50	
64	Honduras	2.79	83.80	0.49	
64	Morocco	2.79	83.80	0.49	
66	Russian Federation	2.80	83.74	0.48	
67	United Arab Emirates	2.83	83.57	0.47	
68	Kuwait	2.96	82.81	0.46	
69	Viet Nam	3.14	81.77	0.46	
70	Turkey	3.20	81.42	0.45	
71	Bahrain	3.29	80.89	0.44	
72	Moldova, Rep.	3.35	80.55	0.42	
72	Zambia (2013)	3.35	80.55	0.42	
74	Qatar	3.36	80.49	0.42	
75	Saudi Arabia (2014)	3.40	80.26	0.41	
76	China	3.41	80.20	0.40	
77	Thailand	3.47	79.85	0.39	
78	Tunisia	3.94	77.12	0.38	
79	Jordan	3.98	76.89	0.38	
80	Mozambique (2014)	4.17	75.78	0.37	
81	Colombia (2014)	4.21	75.55	0.36	
82	South Africa	4.22	75.49	0.35	
83	Malawi	4.24	75.38	0.34	
84	Paraguay	4.43	74.27	0.34	
85	Mongolia	4.57	73.46	0.33	
86	Kazakhstan	4.72	72.59	0.32	
87	Bolivia, Plurinational St.	4.75	72.42	0.31	
88	Korea, Rep.	4.78	72.24	0.30	○
89	Uruguay	4.79	72.18	0.30	
90	Cambodia (2014)	4.85	71.84	0.29	
91	Yemen	5.14	70.15	0.28	●
92	Azerbaijan	5.19	69.86	0.27	
93	Sri Lanka (2014)	5.25	69.51	0.26	
94	Burundi	5.39	68.70	0.26	
95	Zimbabwe	5.43	68.47	0.25	
96	Ecuador	5.60	67.48	0.24	
97	Uganda	5.93	65.56	0.23	
98	Madagascar (2014)	5.99	65.21	0.22	
99	Panama (2013)	6.08	64.69	0.22	
100	Dominican Republic	6.30	63.41	0.20	
100	India (2013)	6.30	63.41	0.20	
102	Tanzania, United Rep.	6.54	62.02	0.19	
103	Egypt	7.04	59.12	0.18	
104	Rwanda	7.15	58.48	0.18	
105	Tajikistan	7.18	58.30	0.17	
106	Argentina	7.35	57.32	0.16	
107	Kenya	7.60	55.87	0.15	
108	Algeria	8.27	51.97	0.13	
108	Brazil	8.27	51.97	0.13	○
108	Trinidad and Tobago (2013)	8.27	51.97	0.13	
111	Pakistan	9.53	44.66	0.12	
112	Burkina Faso	9.59	44.31	0.10	
112	Jamaica (2013)	9.59	44.31	0.10	○
114	Nigeria	9.75	43.38	0.10	
115	Côte d'Ivoire	10.63	38.27	0.09	
116	Mali	10.64	38.21	0.08	
117	Togo	11.41	33.74	0.07	
118	Senegal	11.64	32.40	0.06	○
119	Nepal	11.72	31.94	0.06	○
120	Niger	11.77	31.65	0.05	
121	Bangladesh	11.89	30.95	0.04	○
122	Guinea (2012)	11.91	30.84	0.03	
123	Ethiopia	12.14	29.50	0.02	
124	Iran, Islamic Rep. (2011)	15.23	11.56	0.02	○
125	Cameroon (2014)	15.78	8.36	0.01	○
126	Benin	17.22	0.00	0.00	○
n/a	Serbia	n/a	n/a	n/a	

SOURCE: World Bank, based on data from United Nations Conference on Trade and Development's Trade Analysis and Information System (TRAINS) database and the World Trade Organization's (WTO) Integrated Data Base (IDB) and Consolidated Tariff Schedules (CTS) database; extracted from World Bank *World Development Indicators* database

NOTE: ● indicates a strength; ○ a weakness

4.3.2 Intensity of local competition

Average answer to the question: In your country, how intense is competition in the local markets? [1 = not intense at all; 7 = extremely intense] | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Japan	6.23	87.11	1.00	●
2	Hong Kong (China)	6.16	86.02	0.99	●
3	United Kingdom	5.99	83.23	0.98	●
4	Malta	5.99	83.22	0.98	●
5	United States of America	5.98	82.95	0.97	
6	Australia	5.92	81.94	0.96	●
7	Korea, Rep.	5.92	81.92	0.95	
8	United Arab Emirates	5.90	81.75	0.94	●
9	Germany	5.90	81.74	0.93	
10	Netherlands	5.90	81.64	0.93	
11	Turkey	5.88	81.29	0.92	●
12	Belgium	5.85	80.83	0.91	●
13	France	5.76	79.36	0.90	
14	Czech Republic	5.76	79.35	0.89	●
15	Estonia	5.75	79.17	0.89	
16	Qatar	5.74	79.04	0.88	●
17	Spain	5.64	77.27	0.87	
18	Kenya	5.63	77.24	0.86	●
19	Singapore	5.62	76.94	0.85	
20	Dominican Republic	5.60	76.60	0.84	●
21	Sweden	5.59	76.49	0.84	
22	Austria	5.59	76.49	0.83	
23	Colombia	5.58	76.26	0.82	●
24	Slovakia	5.52	75.39	0.81	
25	Guatemala	5.52	75.33	0.80	●
26	Lithuania	5.51	75.25	0.80	
27	Jamaica	5.49	74.76	0.79	●
28	New Zealand	5.48	74.62	0.78	
29	South Africa	5.46	74.29	0.77	
30	Denmark	5.45	74.24	0.76	
31	Canada	5.45	74.10	0.75	
32	Lebanon	5.44	73.92	0.75	●
33	Panama	5.42	73.74	0.74	
34	Latvia	5.42	73.68	0.73	
35	China	5.41	73.54	0.72	
36	Saudi Arabia	5.40	73.36	0.71	
37	Jordan	5.40	73.27	0.70	●
38	Switzerland	5.39	73.19	0.70	
39	Malaysia	5.38	73.08	0.69	
40	TFYR of Macedonia	5.38	72.98	0.68	
41	Luxembourg	5.32	71.93	0.67	
42	Cyprus	5.31	71.90	0.66	
43	Thailand	5.31	71.89	0.66	
44	Uganda	5.31	71.83	0.65	●
45	Italy	5.31	71.82	0.64	
46	Poland	5.31	71.81	0.63	
47	Mauritius	5.30	71.68	0.62	
48	Costa Rica	5.30	71.59	0.61	
49	Botswana	5.27	71.25	0.61	
50	Indonesia	5.27	71.24	0.60	
51	Brazil	5.26	71.01	0.59	
52	El Salvador	5.26	70.99	0.58	
53	Senegal	5.24	70.59	0.57	●
54	Slovenia	5.23	70.54	0.57	
55	Portugal	5.23	70.52	0.56	
56	Mexico	5.22	70.30	0.55	
57	Trinidad and Tobago	5.22	70.28	0.54	
58	Kuwait	5.21	70.23	0.53	
59	Philippines	5.21	70.21	0.52	
60	Bahrain	5.21	70.14	0.52	
61	Chile	5.20	70.05	0.51	
62	Zambia	5.20	69.94	0.50	●
63	Ireland	5.19	69.88	0.49	○
64	Israel	5.19	69.82	0.48	
65	Sri Lanka	5.18	69.67	0.48	
66	Peru	5.18	69.63	0.47	
67	Norway	5.14	68.94	0.46	○
68	Morocco	5.12	68.75	0.45	
69	Bangladesh	5.11	68.48	0.44	
70	Greece	5.06	67.62	0.43	
71	Paraguay	5.04	67.31	0.43	
72	Nigeria	5.03	67.23	0.42	●
73	Ecuador	5.02	66.93	0.41	
74	Rwanda	4.98	66.39	0.40	
75	Georgia	4.97	66.09	0.39	
76	Honduras	4.95	65.86	0.39	
77	Viet Nam	4.95	65.86	0.38	
78	Russian Federation	4.95	65.83	0.37	
79	Bolivia, Plurinational St.	4.94	65.64	0.36	
80	Nepal	4.91	65.23	0.35	
81	Tunisia	4.85	64.19	0.34	
82	Iceland	4.84	63.96	0.34	○
83	Cameroon	4.83	63.84	0.33	
84	Benin	4.82	63.72	0.32	
85	Zimbabwe	4.82	63.64	0.31	
86	Armenia	4.81	63.50	0.30	
87	Croatia	4.80	63.27	0.30	○
88	Romania	4.79	63.14	0.29	
89	Finland	4.78	63.04	0.28	○
90	Côte d'Ivoire	4.77	62.92	0.27	
91	India	4.75	62.49	0.26	
92	Tajikistan	4.73	62.16	0.25	
93	Cambodia	4.73	62.12	0.25	
94	Tanzania, United Rep.	4.72	62.01	0.24	
95	Namibia	4.67	61.13	0.23	
96	Uruguay	4.64	60.61	0.22	
97	Kazakhstan	4.63	60.53	0.21	
98	Bulgaria	4.62	60.28	0.20	○
99	Ukraine	4.61	60.16	0.20	
100	Mongolia	4.60	60.06	0.19	
101	Madagascar	4.60	60.05	0.18	
102	Brunei Darussalam	4.60	60.05	0.17	
103	Oman	4.60	59.99	0.16	
104	Malawi	4.58	59.72	0.16	
105	Moldova, Rep.	4.55	59.13	0.15	○
106	Azerbaijan	4.52	58.65	0.14	○
107	Albania	4.50	58.31	0.13	○
108	Mozambique	4.48	57.96	0.12	
109	Pakistan	4.47	57.81	0.11	
110	Bosnia and Herzegovina	4.46	57.61	0.11	○
111	Mali	4.43	57.16	0.10	
112	Argentina	4.42	57.07	0.09	○
113	Burundi	4.36	56.08	0.08	
114	Montenegro	4.28	54.59	0.07	○
115	Yemen	4.27	54.58	0.07	
116	Iran, Islamic Rep.	4.24	53.97	0.06	○
117	Egypt	4.24	53.95	0.05	○
118	Serbia	4.23	53.91	0.04	○
119	Guinea (2015)	4.20	53.28	0.03	
120	Hungary	4.16	52.74	0.02	○
121	Kyrgyzstan	4.15	52.51	0.02	○
122	Ethiopia	3.88	48.08	0.01	○
123	Algeria	3.78	46.35	0.00	○
n/a	Belarus	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	

SOURCE: World Economic Forum, *Executive Opinion Survey 2016–2017*
NOTE: ● indicates a strength; ○ a weakness

4.3.3 Domestic market scale

Domestic market scale as measured by GDP, billion PPP$ | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	China	21,269.02	100.00	1.00	●
2	United States of America	18,561.93	98.63	0.99	●
3	India	8,720.51	91.05	0.98	●
4	Japan	4,931.88	85.32	0.98	●
5	Germany	3,979.08	83.16	0.97	●
6	Russian Federation	3,745.08	82.56	0.96	●
7	Brazil	3,134.89	80.77	0.95	●
8	Indonesia	3,027.83	80.42	0.94	●
9	United Kingdom	2,787.74	79.59	0.94	
10	France	2,736.72	79.40	0.93	●
11	Mexico	2,306.67	77.68	0.92	●
12	Italy	2,220.58	77.30	0.91	●
13	Korea, Rep.	1,928.62	75.88	0.90	
14	Saudi Arabia	1,731.23	74.79	0.90	●
15	Spain	1,689.71	74.55	0.89	
16	Canada	1,674.31	74.45	0.88	
17	Turkey	1,669.89	74.43	0.87	●
18	Iran, Islamic Rep.	1,459.20	73.07	0.87	●
19	Australia	1,188.76	71.00	0.86	
20	Thailand	1,161.33	70.76	0.85	●
21	Egypt	1,105.04	70.26	0.84	●
22	Nigeria	1,088.94	70.11	0.83	●
23	Poland	1,052.25	69.77	0.83	●
24	Pakistan	988.22	69.13	0.82	●
25	Argentina	879.45	67.96	0.81	●
26	Netherlands	865.91	67.80	0.80	
27	Malaysia	863.77	67.77	0.79	
28	Philippines	801.90	67.02	0.79	●
29	South Africa	736.33	66.16	0.78	●
30	Colombia	690.39	65.50	0.77	
31	United Arab Emirates	667.21	65.16	0.76	
32	Bangladesh	628.37	64.55	0.75	●
33	Algeria	609.39	64.24	0.75	●
34	Viet Nam	594.89	63.99	0.74	
35	Belgium	508.60	62.40	0.73	
36	Sweden	498.13	62.19	0.72	
37	Switzerland	494.30	62.11	0.71	
38	Singapore	486.91	61.96	0.71	
39	Kazakhstan	460.69	61.39	0.70	
40	Romania	441.03	60.95	0.69	
41	Chile	436.14	60.84	0.68	
42	Hong Kong (China)	427.39	60.63	0.67	
43	Austria	415.94	60.35	0.67	
44	Peru	409.85	60.20	0.66	●
45	Norway	364.69	59.01	0.65	
46	Czech Republic	350.86	58.61	0.64	
47	Ukraine	349.77	58.58	0.63	
48	Qatar	334.49	58.12	0.63	
49	Ireland	324.30	57.81	0.62	
50	Kuwait	301.06	57.04	0.61	
51	Portugal	297.09	56.91	0.60	
52	Israel	297.05	56.91	0.60	
53	Greece	290.49	56.68	0.59	
54	Morocco	282.78	56.40	0.58	
55	Hungary	267.62	55.83	0.57	
56	Denmark	264.84	55.73	0.56	○
57	Sri Lanka	237.79	54.61	0.56	
58	Finland	229.95	54.27	0.55	○
59	Ecuador	182.42	51.86	0.54	
60	New Zealand	174.85	51.42	0.53	
61	Ethiopia	174.74	51.41	0.52	●
62	Oman	173.07	51.31	0.52	
63	Slovakia	169.07	51.07	0.51	
64	Azerbaijan	167.91	51.00	0.50	
65	Belarus	165.36	50.84	0.49	
66	Dominican Republic	160.86	50.55	0.48	
67	Kenya	152.74	50.00	0.48	
68	Tanzania, United Rep.	150.63	49.86	0.47	●
69	Bulgaria	143.10	49.32	0.46	
70	Guatemala	132.34	48.49	0.45	
71	Tunisia	130.83	48.37	0.44	
72	Serbia	101.46	45.66	0.44	
73	Croatia	94.24	44.86	0.43	
74	Panama	93.12	44.73	0.42	
75	Côte d'Ivoire	87.12	44.01	0.41	
76	Jordan	86.19	43.89	0.40	
77	Lithuania	85.79	43.84	0.40	
78	Lebanon	85.16	43.76	0.39	
79	Uganda	84.93	43.73	0.38	
80	Costa Rica	79.26	42.97	0.37	
81	Bolivia, Plurinational St.	78.35	42.84	0.37	
82	Cameroon	77.24	42.69	0.36	
83	Uruguay	73.93	42.20	0.35	
84	Yemen	73.45	42.13	0.34	●
85	Nepal	71.52	41.84	0.33	
86	Bahrain	66.37	41.00	0.33	
87	Slovenia	66.13	40.96	0.32	○
88	Zambia	65.17	40.80	0.31	
89	Paraguay	64.12	40.61	0.30	
90	Cambodia	58.94	39.66	0.29	
91	Luxembourg	58.74	39.63	0.29	○
92	El Salvador	54.79	38.83	0.28	
93	Latvia	50.87	37.97	0.27	○
94	Trinidad and Tobago	43.57	36.15	0.26	
95	Honduras	43.19	36.05	0.25	
96	Bosnia and Herzegovina	42.53	35.86	0.25	
97	Senegal	39.72	35.04	0.24	
98	Estonia	38.70	34.72	0.23	○
99	Mali	38.09	34.53	0.22	
100	Madagascar	37.49	34.33	0.21	
101	Georgia	37.38	34.30	0.21	
102	Mongolia	36.65	34.05	0.20	
103	Botswana	36.51	34.00	0.19	
104	Mozambique	35.31	33.59	0.18	
105	Albania	34.21	33.20	0.17	
106	Brunei Darussalam	33.73	33.02	0.17	
107	Burkina Faso	32.99	32.73	0.16	
108	TFYR of Macedonia	30.13	31.57	0.15	○
109	Cyprus	29.26	31.19	0.14	○
110	Zimbabwe	28.33	30.76	0.13	
111	Namibia	27.04	30.14	0.13	
112	Armenia	26.56	29.90	0.12	○
113	Mauritius	25.85	29.53	0.11	○
114	Tajikistan	25.81	29.51	0.10	
115	Jamaica	25.39	29.28	0.10	○
116	Benin	24.31	28.68	0.09	
117	Rwanda	21.97	27.23	0.08	
118	Malawi	21.23	26.72	0.07	
119	Kyrgyzstan	21.01	26.57	0.06	
120	Niger	20.27	26.03	0.06	
121	Moldova, Rep.	18.54	24.64	0.05	○
122	Malta	16.32	22.52	0.04	○
123	Iceland	16.15	22.33	0.03	○
124	Guinea	16.08	22.26	0.02	
125	Togo	11.61	15.57	0.02	○
126	Montenegro	10.61	13.19	0.01	○
127	Burundi	7.89	0.00	0.00	○

SOURCE: World Bank; International Monetary Fund, *World Economic Outlook Database* October 2016 (PPP$ GDP)

NOTE: ● indicates a strength; ○ a weakness

5.1.1 Employment in knowledge-intensive services

Employment in knowledge-intensive services (% of workforce) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Luxembourg	56.81	100.00	1.00	●
2	Singapore	54.33	95.58	0.99	●
3	Switzerland	52.98	93.17	0.98	●
4	Norway	51.68	90.86	0.97	●
5	Sweden	50.38	88.54	0.96	
6	Israel	48.30	84.82	0.95	
7	Iceland	47.83	83.98	0.94	
8	United Kingdom	47.63	83.62	0.93	
9	Netherlands	46.57	81.73	0.93	
10	Finland	45.96	80.64	0.92	
11	Belgium	45.58	79.98	0.91	
12	Denmark	45.13	79.17	0.90	
13	Australia (2014)	44.90	78.76	0.89	
14	France	44.56	78.15	0.88	
15	Russian Federation	44.35	77.77	0.87	●
16	Germany	44.19	77.49	0.86	
17	Estonia	43.99	77.14	0.85	
18	Canada (2014)	43.73	76.66	0.84	
19	New Zealand (2008)	42.92	75.22	0.83	
20	Lithuania	41.80	73.22	0.82	
21	Slovenia	41.66	72.97	0.81	
22	Latvia	41.18	72.13	0.80	
23	Austria	40.62	71.13	0.79	
24	Ireland	40.58	71.05	0.79	
25	Brunei Darussalam (2014)	40.53	70.96	0.78	●
26	Malta	39.78	69.63	0.77	
27	Hong Kong (China)	38.64	67.59	0.76	
28	United States of America (2013)	38.01	66.47	0.75	
29	Poland	37.63	65.78	0.74	
30	Ukraine	37.59	65.72	0.73	
31	Czech Republic	37.58	65.71	0.72	
32	Montenegro	37.39	65.36	0.71	
33	United Arab Emirates (2008)	36.08	63.02	0.70	
34	Belarus (2009)	35.90	62.70	0.69	
35	Italy	35.70	62.34	0.68	
36	Croatia	35.62	62.20	0.67	
37	Portugal	35.55	62.07	0.66	
38	Cyprus	35.20	61.45	0.65	
39	Hungary	34.87	60.86	0.64	
40	Egypt	33.93	59.19	0.64	●
41	Kazakhstan	33.34	58.13	0.63	
42	Spain	32.87	57.30	0.62	
43	Bulgaria	32.26	56.20	0.61	
44	Slovakia	31.93	55.62	0.60	
45	Lebanon (2007)	31.84	55.47	0.59	
46	Armenia	31.13	54.19	0.58	
47	Greece	29.85	51.92	0.57	
48	Serbia	28.87	50.16	0.56	
49	Trinidad and Tobago	28.41	49.34	0.55	
50	Moldova, Rep.	28.07	48.74	0.54	
51	TFYR of Macedonia	27.34	47.43	0.53	
52	Saudi Arabia	27.30	47.36	0.52	
53	Malaysia	25.50	44.16	0.51	
54	Chile	25.01	43.28	0.50	
55	Japan	24.78	42.87	0.50	
56	Mauritius	24.72	42.76	0.49	
57	Mongolia	24.67	42.68	0.48	
58	Philippines	24.03	41.54	0.47	
59	Panama (2014)	24.01	41.50	0.46	
60	Bosnia and Herzegovina	23.97	41.42	0.45	
61	Argentina (2014)	23.91	41.32	0.44	
62	Azerbaijan	23.42	40.44	0.43	
63	Romania	22.74	39.23	0.42	
64	South Africa	22.46	38.74	0.41	
65	Georgia (2007)	22.30	38.45	0.40	
66	Costa Rica	21.63	37.26	0.39	
67	Brazil (2014)	21.63	37.24	0.38	
68	Korea, Rep.	21.42	36.88	0.37	○
69	Uruguay (2014)	20.97	36.07	0.36	
70	Tunisia (2012)	20.97	36.07	0.36	
71	Bahrain (2008)	20.88	35.91	0.35	
72	Turkey	20.49	35.21	0.34	
73	Jamaica (2008)	20.12	34.56	0.33	
74	Bangladesh (2011)	20.01	34.36	0.32	
75	Pakistan (2008)	19.48	33.41	0.31	
76	Paraguay	19.00	32.55	0.30	
77	Mexico	18.85	32.29	0.29	
78	Kyrgyzstan	18.28	31.28	0.28	
79	Dominican Republic	17.94	30.67	0.27	
80	Botswana (2010)	17.79	30.40	0.26	
81	Iran, Islamic Rep.	17.65	30.16	0.25	
82	Sri Lanka (2014)	16.87	28.76	0.24	
83	Colombia (2010)	16.81	28.66	0.23	○
84	Qatar	16.08	27.34	0.22	
85	Albania (2009)	16.02	27.24	0.21	
86	Bolivia, Plurinational St. (2009)	15.25	25.86	0.21	
87	Yemen (2010)	15.03	25.48	0.20	
88	Ecuador	14.66	24.82	0.19	
89	Namibia (2013)	14.64	24.78	0.18	
90	Peru	14.61	24.72	0.17	○
91	Thailand (2014)	13.80	23.28	0.16	○
92	El Salvador (2013)	12.13	20.30	0.15	
93	Honduras	12.01	20.08	0.14	
94	Viet Nam	10.76	17.86	0.13	○
95	Algeria (2014)	10.00	16.50	0.12	
96	Indonesia	9.82	16.18	0.11	○
97	Guatemala	9.56	15.73	0.10	
98	Zambia (2010)	7.28	11.66	0.09	
99	Morocco (2008)	6.78	10.76	0.08	○
100	Zimbabwe (2014)	6.13	9.60	0.07	
101	Nepal (2008)	4.28	6.30	0.07	
102	Cambodia (2010)	4.12	6.01	0.06	○
103	Uganda (2013)	4.09	5.97	0.05	○
104	Ethiopia (2013)	3.77	5.39	0.04	
105	Rwanda (2012)	3.76	5.37	0.03	○
106	Madagascar	3.66	5.20	0.02	○
107	Tanzania, United Rep. (2014)	3.37	4.69	0.01	○
108	Guinea (2010)	0.75	0.00	0.00	○
n/a	Benin	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	China	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	India	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kenya	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Senegal	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	

SOURCE: International Labour Organization *ILOSTAT Database of Labour Statistics*
NOTE: ● indicates a strength; ○ a weakness

5.1.2 Firms offering formal training

Firms offering formal training (% of firms) | 2013

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	China (2012)	79.20	100.00	1.00	●
2	Sweden (2014)	70.30	88.26	0.99	●
3	Ecuador (2010)	65.90	82.45	0.98	●
4	Colombia (2010)	65.10	81.40	0.97	●
5	Argentina (2010)	63.60	79.42	0.96	●
6	Kyrgyzstan	62.70	78.23	0.95	●
7	Mongolia	60.90	75.86	0.93	●
8	Peru (2010)	60.10	74.80	0.92	●
9	Philippines (2015)	59.80	74.41	0.91	●
10	Chile (2010)	57.50	71.37	0.90	●
11	Bolivia, Plurinational St. (2010)	57.10	70.84	0.89	●
12	Dominican Republic (2010)	57.00	70.71	0.88	●
13	Rwanda (2011)	55.40	68.60	0.87	●
14	Czech Republic	55.10	68.21	0.86	
15	Paraguay (2010)	54.90	67.94	0.85	●
16	Costa Rica (2010)	54.70	67.68	0.84	●
17	El Salvador (2016)	53.80	66.49	0.82	●
18	Bosnia and Herzegovina	52.40	64.64	0.81	●
19	Botswana (2010)	51.90	63.98	0.79	●
19	Guatemala (2010)	51.90	63.98	0.79	●
21	Belarus	51.10	62.93	0.78	●
22	Mexico (2010)	50.80	62.53	0.77	
23	Croatia	49.30	60.55	0.76	
24	Uruguay (2010)	48.60	59.63	0.75	●
25	TFYR of Macedonia	46.90	57.39	0.74	
26	Russian Federation (2012)	46.20	56.46	0.73	
27	Slovakia	43.50	52.90	0.71	
28	Bulgaria	42.70	51.85	0.70	
29	Brazil (2009)	42.20	51.19	0.69	
30	Lithuania	42.00	50.92	0.68	
31	Slovenia	41.50	50.26	0.67	
32	Romania	40.70	49.21	0.66	
33	Kenya	40.60	49.08	0.65	
34	Serbia	37.80	45.38	0.64	
35	South Africa (2007)	36.80	44.06	0.63	
36	India (2014)	35.90	42.88	0.62	
37	Honduras (2010)	35.80	42.74	0.60	●
38	Estonia	35.20	41.95	0.59	
39	Uganda	34.70	41.29	0.58	●
40	Poland	34.60	41.16	0.57	
41	Tajikistan	33.10	39.18	0.56	●
42	Malawi (2014)	32.90	38.92	0.55	●
43	Moldova, Rep.	32.40	38.26	0.54	
44	Mali (2010)	32.10	37.86	0.52	●
44	Niger (2009)	32.10	37.86	0.52	
46	Burundi (2014)	32.00	37.73	0.49	
46	Pakistan	32.00	37.73	0.49	
48	Nepal	31.90	37.60	0.48	●
49	Zimbabwe (2011)	31.20	36.68	0.47	
50	Togo (2009)	31.00	36.41	0.46	●
51	Nigeria (2014)	30.70	36.02	0.44	●
51	Tanzania, United Rep.	30.70	36.02	0.44	
53	Tunisia	28.90	33.64	0.43	
54	Turkey	28.40	32.98	0.42	
55	Kazakhstan	28.30	32.85	0.41	
56	Zambia	28.20	32.72	0.40	
57	Trinidad and Tobago (2010)	28.00	32.45	0.38	
58	Lebanon	26.60	30.61	0.37	
59	Morocco	26.30	30.21	0.36	
60	Jamaica (2010)	25.90	29.68	0.35	
61	Mauritius (2009)	25.60	29.29	0.34	
62	Cameroon (2009)	25.50	29.16	0.33	
63	Namibia (2014)	25.40	29.02	0.32	
64	Latvia	25.20	28.76	0.31	○
65	Burkina Faso (2009)	24.80	28.23	0.30	
66	Albania	23.80	26.91	0.29	
67	Montenegro	23.70	26.78	0.27	
68	Ukraine	22.60	25.33	0.26	
69	Cambodia (2016)	22.20	24.80	0.24	
69	Viet Nam (2015)	22.20	24.80	0.24	
71	Mozambique (2007)	22.10	24.67	0.23	
72	Bangladesh	21.90	24.41	0.22	
73	Guinea (2006)	21.10	23.35	0.21	
74	Ethiopia (2015)	20.80	22.96	0.20	
75	Azerbaijan	20.20	22.16	0.19	
76	Benin (2016)	20.00	21.90	0.18	
77	Côte d'Ivoire (2009)	19.10	20.71	0.16	
78	Israel	18.60	20.05	0.15	○
79	Malaysia (2015)	18.50	19.92	0.14	○
80	Sri Lanka (2011)	18.40	19.79	0.13	○
81	Thailand (2016)	18.00	19.26	0.12	○
82	Senegal (2014)	17.40	18.47	0.11	
83	Algeria (2007)	17.30	18.34	0.10	
84	Armenia	16.20	16.89	0.09	○
85	Hungary	15.80	16.36	0.08	○
86	Yemen	14.30	14.38	0.07	
87	Madagascar	12.70	12.27	0.05	
88	Panama (2010)	11.00	10.03	0.04	○
89	Georgia	10.50	9.37	0.03	○
90	Indonesia (2015)	7.70	5.67	0.02	○
91	Egypt	5.20	2.37	0.01	○
92	Jordan	3.40	0.00	0.00	○
n/a	Australia	n/a	n/a	n/a	
n/a	Austria	n/a	n/a	n/a	
n/a	Bahrain	n/a	n/a	n/a	
n/a	Belgium	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Canada	n/a	n/a	n/a	
n/a	Cyprus	n/a	n/a	n/a	
n/a	Denmark	n/a	n/a	n/a	
n/a	Finland	n/a	n/a	n/a	
n/a	France	n/a	n/a	n/a	
n/a	Germany	n/a	n/a	n/a	
n/a	Greece	n/a	n/a	n/a	
n/a	Hong Kong (China)	n/a	n/a	n/a	
n/a	Iceland	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Ireland	n/a	n/a	n/a	
n/a	Italy	n/a	n/a	n/a	
n/a	Japan	n/a	n/a	n/a	
n/a	Korea, Rep.	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Luxembourg	n/a	n/a	n/a	
n/a	Malta	n/a	n/a	n/a	
n/a	Netherlands	n/a	n/a	n/a	
n/a	New Zealand	n/a	n/a	n/a	
n/a	Norway	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Portugal	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Singapore	n/a	n/a	n/a	
n/a	Spain	n/a	n/a	n/a	
n/a	Switzerland	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	United Kingdom	n/a	n/a	n/a	
n/a	United States of America	n/a	n/a	n/a	

SOURCE: World Bank, *Enterprise Surveys*
NOTE: ● indicates a strength; ○ a weakness

5.1.3 GERD performed by business enterprise

GERD: Performed by business enterprise (% of GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Israel	3.67	100.00	1.00	●
2	Korea, Rep.	3.28	89.37	0.99	●
3	Japan	2.74	74.69	0.98	●
4	Sweden	2.28	62.16	0.97	
5	Austria	2.19	59.74	0.96	●
6	Switzerland (2012)	2.05	55.97	0.94	
7	United States of America	2.00	54.59	0.93	
8	Finland	1.95	53.20	0.92	
9	Germany	1.95	53.17	0.91	
10	Denmark	1.93	52.62	0.90	
11	Belgium	1.77	48.22	0.89	
12	Slovenia	1.69	45.98	0.88	
13	China	1.61	43.80	0.87	
14	France	1.45	39.50	0.85	
15	Iceland	1.43	39.02	0.84	
16	Singapore (2014)	1.34	36.60	0.83	
17	Australia (2013)	1.24	33.68	0.82	
18	United Kingdom	1.12	30.58	0.81	
19	Netherlands	1.12	30.40	0.80	
20	Ireland (2014)	1.11	30.36	0.79	
21	Czech Republic	1.08	29.32	0.78	
22	Norway	1.04	28.46	0.76	
23	Hungary	1.02	27.79	0.75	
24	Canada (2014)	0.80	21.92	0.74	
25	Italy	0.74	20.15	0.73	
26	Bulgaria	0.72	19.57	0.72	
27	Estonia	0.68	18.56	0.71	
28	Russian Federation	0.67	18.25	0.70	
29	Luxembourg	0.66	17.90	0.69	
30	Spain	0.64	17.43	0.67	
31	Portugal	0.60	16.38	0.66	
32	Malaysia (2014)	0.58	15.70	0.65	
33	New Zealand (2013)	0.54	14.59	0.64	
34	Turkey (2014)	0.50	13.65	0.63	
35	Poland	0.47	12.80	0.62	
36	Thailand	0.44	11.96	0.61	
37	Croatia	0.44	11.91	0.60	
38	Malta (2014)	0.42	11.48	0.58	
39	United Arab Emirates	0.41	11.16	0.57	
40	Ukraine	0.38	10.42	0.56	
41	Belarus	0.34	9.24	0.55	
42	South Africa (2013)	0.33	9.08	0.54	
43	Slovakia	0.33	9.04	0.53	
44	Hong Kong (China) (2014)	0.33	8.97	0.52	
45	Greece	0.32	8.69	0.51	
46	India (2011)	0.29	8.03	0.49	
47	Lithuania	0.28	7.62	0.48	
48	Serbia	0.28	7.61	0.47	
49	Romania	0.21	5.84	0.46	
50	Morocco (2010)	0.21	5.83	0.45	
51	Costa Rica (2014)	0.21	5.80	0.44	
52	Viet Nam (2013)	0.19	5.26	0.43	
53	Ecuador (2014)	0.19	5.14	0.42	
54	Mexico	0.17	4.64	0.40	
55	Uganda (2010)	0.17	4.50	0.39	
56	Latvia	0.15	4.21	0.38	
57	Montenegro (2014)	0.14	3.81	0.37	
58	Chile	0.13	3.61	0.36	
59	Argentina (2014)	0.12	3.35	0.35	
60	Qatar (2012)	0.12	3.31	0.34	
61	Tunisia (2014)	0.12	3.30	0.33	
62	Botswana (2013)	0.10	2.60	0.31	
63	Colombia	0.08	2.13	0.30	
64	Moldova, Rep.	0.08	2.09	0.29	
65	Cyprus	0.08	2.08	0.28	○
66	Bosnia and Herzegovina	0.07	1.99	0.27	
67	Iran, Islamic Rep. (2008)	0.07	1.94	0.26	
68	Kenya (2010)	0.07	1.85	0.25	
69	Philippines (2013)	0.05	1.34	0.24	
70	Kazakhstan (2013)	0.05	1.33	0.22	
71	Sri Lanka (2013)	0.05	1.23	0.21	
72	Egypt	0.04	1.22	0.20	
73	Oman	0.04	1.17	0.19	
74	Namibia (2014)	0.04	1.05	0.18	
75	TFYR of Macedonia (2011)	0.03	0.94	0.17	○
76	Indonesia (2013)	0.02	0.59	0.16	
77	Azerbaijan (2014)	0.02	0.57	0.15	
78	Bahrain (2014)	0.02	0.55	0.13	
79	Kyrgyzstan	0.02	0.46	0.12	
80	Uruguay (2014)	0.02	0.42	0.11	○
81	Mongolia	0.01	0.31	0.10	○
82	Ethiopia (2013)	0.01	0.19	0.09	
83	Mali (2007)	0.01	0.17	0.08	
84	Zambia (2008)	0.01	0.15	0.07	
85	Senegal (2010)	0.00	0.05	0.06	○
86	Mozambique	0.00	0.04	0.04	
87	Trinidad and Tobago (2009)	0.00	0.03	0.03	○
88	Panama (2013)	0.00	0.03	0.02	○
89	Paraguay (2011)	0.00	0.01	0.01	○
90	Guatemala (2012)	0.00	0.00	0.00	○
n/a	Albania	n/a	n/a	n/a	
n/a	Algeria	n/a	n/a	n/a	
n/a	Armenia	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Brazil	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Georgia	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mauritius	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Peru	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*
NOTE: ● indicates a strength; ○ a weakness

5.1.4 GERD financed by business enterprise

GERD: Financed by business enterprise (% of total GERD) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Japan	77.97	100.00	1.00	●
2	China	74.73	95.83	0.99	●
3	Korea, Rep.	74.55	95.60	0.98	●
4	United Arab Emirates (2014)	74.29	95.27	0.97	●
5	Slovenia	69.21	88.75	0.96	●
6	Thailand	66.24	84.94	0.95	●
7	Germany (2014)	65.84	84.43	0.94	
8	United States of America	64.15	82.26	0.92	
9	Australia (2008)	61.91	79.38	0.91	
10	Belgium (2013)	61.32	78.62	0.90	
11	Sweden (2013)	60.96	78.15	0.89	
12	Switzerland (2012)	60.78	77.93	0.88	
13	Denmark	59.37	76.12	0.87	
14	France (2014)	55.65	71.35	0.86	
15	Finland	54.76	70.21	0.85	
16	Singapore (2014)	54.10	69.36	0.84	
17	Ireland (2014)	52.78	67.66	0.83	
18	Austria (2016)	52.50	67.30	0.82	
19	Turkey (2014)	50.87	65.20	0.81	●
20	Hungary	49.72	63.73	0.80	
21	Netherlands	48.70	62.42	0.78	
22	United Kingdom	48.39	62.02	0.77	
23	Croatia	46.64	59.78	0.76	
24	Spain (2014)	46.41	59.48	0.75	
25	Hong Kong (China) (2014)	46.39	59.46	0.74	
26	Italy (2014)	46.23	59.25	0.73	
27	Canada (2014)	45.39	58.16	0.72	
28	Malta	44.13	56.55	0.71	
29	Norway (2013)	43.14	55.29	0.70	
30	Portugal (2014)	41.80	53.56	0.69	
31	South Africa (2013)	41.37	53.01	0.68	
32	Belarus	41.31	52.93	0.67	
33	Estonia	41.00	52.54	0.66	
34	Sri Lanka (2013)	40.68	52.13	0.65	●
35	Ukraine	40.28	51.60	0.63	
36	Viet Nam (2013)	39.97	51.22	0.62	
37	New Zealand (2013)	39.78	50.96	0.61	
38	Poland	39.00	49.97	0.60	
39	Romania	37.29	47.77	0.59	
40	Israel (2013)	37.05	47.46	0.58	
41	Philippines (2013)	36.86	47.22	0.57	
42	Brazil (2014)	36.36	46.57	0.56	
43	Czech Republic	34.53	44.22	0.55	
44	Colombia	33.60	43.03	0.54	
45	Iceland	33.25	42.59	0.53	
46	Chile	32.78	41.98	0.52	
47	Greece	31.76	40.67	0.51	
48	Bosnia and Herzegovina	31.39	40.20	0.49	
49	Iran, Islamic Rep. (2008)	30.92	39.59	0.48	
50	Azerbaijan (2014)	30.53	39.10	0.47	
51	Morocco (2010)	29.94	38.33	0.46	
52	Kazakhstan (2013)	28.92	37.03	0.45	
53	Montenegro (2014)	28.53	36.52	0.44	
54	Lithuania	28.01	35.86	0.43	
55	Argentina (2008)	26.52	33.95	0.42	
56	Russian Federation	26.47	33.89	0.41	
57	Slovakia	25.06	32.07	0.40	
58	Qatar (2012)	24.18	30.95	0.39	
59	Bulgaria (2014)	22.25	28.47	0.38	○
60	Bahrain (2014)	21.77	27.85	0.37	
61	Oman	21.37	27.33	0.35	
62	Mexico	20.59	26.33	0.34	
63	Latvia	20.09	25.69	0.33	○
64	Tunisia (2014)	18.50	23.65	0.32	
65	Botswana (2013)	17.68	22.60	0.31	
66	Luxembourg (2013)	16.51	21.09	0.30	
67	Cyprus (2014)	13.72	17.51	0.29	○
68	Uganda (2010)	13.67	17.45	0.28	
69	Serbia	12.78	16.31	0.27	
70	Burkina Faso (2009)	11.93	15.22	0.26	
71	Namibia (2014)	11.10	14.15	0.25	
72	Panama (2013)	10.85	13.83	0.24	
73	Mali (2007)	10.10	12.87	0.23	
74	Mongolia	7.35	9.33	0.22	
75	Malaysia (2014)	6.91	8.77	0.20	○
76	Egypt	6.20	7.86	0.19	
77	Bolivia, Plurinational St. (2009)	5.20	6.58	0.18	
78	Uruguay (2014)	4.57	5.76	0.17	○
79	Kenya (2010)	4.34	5.47	0.16	
80	Senegal (2010)	4.10	5.16	0.15	
81	Albania (2008)	3.26	4.08	0.14	
82	Zambia (2008)	3.23	4.04	0.13	
83	Kyrgyzstan	2.24	2.78	0.12	
84	Tajikistan (2011)	1.65	2.02	0.11	
85	Costa Rica (2014)	1.49	1.81	0.10	○
86	Kuwait (2013)	1.41	1.71	0.09	○
87	Ethiopia (2013)	0.75	0.86	0.08	
88	El Salvador (2014)	0.66	0.74	0.06	○
89	Mozambique	0.47	0.50	0.05	
90	Paraguay	0.28	0.26	0.04	○
91	Mauritius (2012)	0.27	0.25	0.03	○
92	Nigeria (2007)	0.16	0.10	0.02	○
93	Ecuador (2014)	0.12	0.05	0.01	○
94	Tanzania, United Rep. (2010)	0.08	0.00	0.00	○
n/a	Algeria	n/a	n/a	n/a	
n/a	Armenia	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	Georgia	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	India	n/a	n/a	n/a	
n/a	Indonesia	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Moldova, Rep.	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Peru	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*
NOTE: ● indicates a strength; ○ a weakness

5.1.5 Females employed with advanced degrees

Females employed with advanced degrees, % total employed (25+ years old) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Belarus (2009)	33.85	100.00	1.00	●
2	Russian Federation	33.24	98.19	0.99	●
3	Ukraine	29.71	87.75	0.98	●
4	Israel (2013)	28.39	83.85	0.97	●
5	Lithuania	27.15	80.18	0.95	●
6	Finland	26.56	78.41	0.94	
7	Estonia	25.84	76.30	0.93	
8	Ireland	24.90	73.52	0.92	
9	Norway	24.69	72.88	0.91	
10	Sweden	24.11	71.16	0.90	
11	Cyprus	24.02	70.92	0.89	
12	Latvia	23.58	69.60	0.87	
13	Singapore (2014)	23.34	68.89	0.86	
14	Belgium	23.33	68.85	0.85	
15	Iceland	22.73	67.08	0.84	
16	Australia (2013)	22.64	66.82	0.83	
17	United Kingdom	22.16	65.39	0.82	
18	Denmark	21.77	64.24	0.80	
19	Spain	21.74	64.17	0.79	
20	France	21.05	62.12	0.78	
21	Luxembourg	20.59	60.75	0.77	
22	Japan	20.34	60.02	0.76	
23	Slovenia	20.07	59.22	0.75	
24	Bulgaria	19.73	58.21	0.74	
25	New Zealand (2013)	19.55	57.67	0.72	
26	Poland	19.53	57.63	0.71	
27	Netherlands	18.74	55.30	0.70	
28	Switzerland	17.84	52.62	0.69	
29	Kazakhstan (2013)	17.55	51.76	0.68	
30	Canada (2016)	17.02	50.19	0.67	
31	Greece	16.85	49.70	0.66	
32	Mongolia (2014)	16.67	49.15	0.64	
33	Panama (2012)	16.58	48.90	0.63	
34	Argentina (2014)	16.44	48.49	0.62	
35	Korea, Rep.	16.24	47.88	0.61	
36	Austria	16.01	47.20	0.60	
37	Croatia	15.97	47.07	0.59	
38	Chile	15.89	46.84	0.57	
39	Georgia	15.45	45.55	0.56	
40	Portugal	15.31	45.15	0.55	
41	Hungary	15.17	44.72	0.54	
42	Armenia	14.52	42.81	0.53	
43	Moldova, Rep. (2013)	13.95	41.12	0.52	
44	Uruguay (2014)	13.70	40.36	0.51	
45	Peru	13.50	39.78	0.49	
46	Hong Kong (China)	13.38	39.42	0.48	
47	Philippines	12.98	38.24	0.47	
48	Costa Rica	12.97	38.21	0.46	
49	TFYR of Macedonia	12.94	38.12	0.45	
50	Azerbaijan (2013)	12.87	37.93	0.44	
51	Germany	12.75	37.55	0.43	○
52	Dominican Republic	12.73	37.51	0.41	
53	Slovakia	12.51	36.86	0.40	
54	Paraguay (2013)	12.44	36.66	0.39	
55	Malta	12.35	36.37	0.38	○
56	Serbia (2013)	12.23	36.03	0.37	
57	Malaysia	12.20	35.95	0.36	
58	Colombia (2014)	12.09	35.62	0.34	
59	Czech Republic	11.56	34.05	0.33	○
60	Italy	11.46	33.74	0.32	○
61	Kyrgyzstan (2013)	10.83	31.87	0.31	
62	Ecuador	10.63	31.29	0.30	
63	Romania	10.59	31.17	0.29	
64	South Africa (2014)	10.16	29.90	0.28	
65	Albania	9.25	27.20	0.26	
66	Brazil (2014)	9.14	26.88	0.25	
67	Botswana (2010)	9.09	26.74	0.24	
68	Sri Lanka (2014)	8.76	25.75	0.23	
69	Mexico (2013)	8.16	23.98	0.22	○
70	Turkey	7.97	23.42	0.21	○
71	Thailand (2013)	7.55	22.17	0.20	
72	Viet Nam	7.36	21.61	0.18	
73	Mauritius (2010)	7.35	21.59	0.17	○
74	Ethiopia (2012)	6.02	17.65	0.16	
75	Saudi Arabia (2014)	5.76	16.88	0.15	○
76	Egypt (2013)	5.51	16.16	0.14	
77	Indonesia	4.80	14.05	0.13	
78	Algeria (2014)	4.56	13.32	0.11	
79	Qatar (2013)	4.50	13.16	0.10	○
80	Guatemala (2013)	3.51	10.24	0.09	
81	Bosnia and Herzegovina	3.20	9.30	0.08	○
82	Uganda (2013)	2.71	7.86	0.07	
83	Madagascar (2012)	2.32	6.69	0.06	
84	Yemen (2010)	1.60	4.58	0.05	
85	Tanzania, United Rep. (2014)	1.35	3.82	0.03	
86	Senegal (2011)	0.73	2.01	0.02	○
87	Mozambique (2012)	0.51	1.36	0.01	○
88	El Salvador (2013)	0.05	0.00	0.00	○
n/a	Bahrain	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	China	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	India	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kenya	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Morocco	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Tunisia	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	United States of America	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: International Labour Organization, ILOSTAT *Annual Indicators*; and Statistics Canada, Table 282-0004; Labour Force Survey estimates (LFS) by educational attainment, sex and age group, annual, CANSIM, accessed 9 February 2017

NOTE: ● indicates a strength; ○ a weakness

5.2.1 University/industry research collaboration

Average answer to the survey question: In your country, to what extent do businesses and universities collaborate on research and development (R&D)? [1 = do not collaborate at all; 7 = collaborate extensively] | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Switzerland	5.80	80.00	1.00	●
2	Finland	5.72	78.62	0.99	●
3	Israel	5.60	76.67	0.98	●
4	United States of America	5.57	76.22	0.98	
5	Netherlands	5.50	75.00	0.97	●
6	United Kingdom	5.47	74.51	0.96	
7	Singapore	5.47	74.47	0.95	
8	Germany	5.35	72.52	0.94	
9	Belgium	5.26	71.00	0.93	●
10	Qatar	5.23	70.53	0.93	●
11	Malaysia	5.20	70.00	0.92	●
12	Sweden	5.16	69.33	0.91	
13	Ireland	5.11	68.52	0.90	
14	Denmark	4.84	63.99	0.89	
15	Austria	4.81	63.58	0.89	
16	Iceland	4.78	63.05	0.88	
17	Japan	4.75	62.54	0.87	
18	New Zealand	4.75	62.50	0.86	
19	Norway	4.74	62.37	0.85	
20	Luxembourg	4.65	60.83	0.84	
21	Hong Kong (China) (2015)	4.59	59.78	0.84	
22	Canada	4.58	59.63	0.83	
23	India	4.54	58.93	0.82	
24	United Arab Emirates	4.51	58.47	0.81	
25	Kenya	4.46	57.63	0.80	●
26	South Africa	4.44	57.36	0.80	●
27	Indonesia	4.42	57.03	0.79	●
28	Korea, Rep.	4.36	56.00	0.78	
29	China	4.32	55.27	0.77	
30	Tajikistan	4.31	55.19	0.76	●
31	France	4.29	54.79	0.75	
32	Australia	4.27	54.49	0.75	
33	Lithuania	4.12	51.93	0.74	
34	Estonia	4.08	51.37	0.73	
35	Portugal	4.03	50.46	0.72	
36	Malta	4.00	50.00	0.71	
37	Jordan	3.84	47.31	0.70	●
38	Ethiopia	3.83	47.19	0.70	●
39	Uganda	3.79	46.48	0.69	●
40	Thailand	3.77	46.15	0.68	
41	Slovenia	3.76	45.98	0.67	
42	Bahrain	3.73	45.44	0.66	
43	Italy	3.68	44.68	0.66	
44	Russian Federation	3.68	44.63	0.65	
45	Czech Republic	3.66	44.39	0.64	
46	Colombia	3.66	44.30	0.63	
47	Senegal	3.64	43.97	0.62	●
48	Lebanon	3.64	43.94	0.61	
49	Sri Lanka	3.63	43.83	0.61	
50	Mexico	3.63	43.75	0.60	
51	Oman	3.61	43.44	0.59	
52	Azerbaijan	3.56	42.67	0.58	
53	Tanzania, United Rep.	3.54	42.28	0.57	●
54	Saudi Arabia	3.51	41.86	0.57	
55	Spain	3.51	41.83	0.55	
55	Ukraine	3.51	41.83	0.55	
57	Guatemala	3.51	41.77	0.54	
58	Zambia	3.49	41.42	0.53	●
59	Philippines	3.48	41.35	0.52	
60	Turkey	3.47	41.15	0.52	
61	Chile	3.47	41.14	0.51	
62	Costa Rica	3.45	40.91	0.50	
63	Kazakhstan	3.45	40.86	0.49	
64	Jamaica	3.45	40.77	0.48	
65	Pakistan	3.44	40.70	0.48	
66	Uruguay	3.44	40.70	0.47	
67	TFYR of Macedonia	3.44	40.65	0.46	
68	Argentina	3.43	40.43	0.45	
69	Botswana	3.41	40.25	0.44	
70	Madagascar	3.40	40.00	0.43	
71	Bulgaria	3.38	39.71	0.43	
72	Panama	3.38	39.66	0.42	
73	Cyprus	3.35	39.23	0.41	
74	Latvia	3.35	39.17	0.40	
75	Rwanda	3.34	38.94	0.39	
76	Viet Nam	3.33	38.89	0.39	
77	Romania	3.33	38.83	0.38	
78	Slovakia	3.31	38.56	0.37	
79	Brunei Darussalam	3.30	38.41	0.36	
80	Poland	3.29	38.22	0.35	○
81	Côte d'Ivoire	3.29	38.19	0.34	
82	Mozambique	3.27	37.78	0.34	
83	Namibia	3.26	37.67	0.33	
84	Brazil	3.25	37.43	0.32	
85	Cameroon	3.23	37.23	0.31	
86	Armenia	3.21	36.89	0.30	
87	Mauritius	3.19	36.48	0.30	
88	Montenegro	3.18	36.40	0.29	
89	Serbia	3.15	35.86	0.28	
90	Mali	3.15	35.82	0.27	
91	Benin	3.14	35.61	0.26	
92	Honduras	3.12	35.37	0.25	
93	Morocco	3.12	35.35	0.25	
94	Ecuador	3.11	35.14	0.24	
95	Cambodia	3.08	34.70	0.23	
96	Albania	3.03	33.86	0.22	
97	Iran, Islamic Rep.	3.02	33.63	0.21	
98	Tunisia	2.97	32.79	0.20	
99	Hungary	2.92	32.03	0.20	○
100	Peru	2.91	31.78	0.19	○
101	Dominican Republic	2.91	31.78	0.18	
102	Trinidad and Tobago	2.90	31.67	0.17	
103	Croatia	2.87	31.10	0.16	○
104	Burundi	2.81	30.21	0.16	
105	Bosnia and Herzegovina	2.78	29.65	0.15	
106	El Salvador	2.78	29.59	0.14	
107	Georgia	2.72	28.68	0.13	○
108	Algeria	2.71	28.53	0.12	
109	Kyrgyzstan	2.71	28.52	0.11	
110	Malawi	2.71	28.48	0.11	
111	Nigeria	2.67	27.78	0.10	
112	Greece	2.65	27.56	0.09	○
113	Kuwait	2.64	27.30	0.08	○
114	Mongolia	2.59	26.58	0.07	○
115	Nepal	2.55	25.87	0.07	
116	Bangladesh	2.54	25.74	0.06	
117	Moldova, Rep.	2.52	25.34	0.05	○
118	Zimbabwe	2.50	25.00	0.04	
119	Paraguay	2.47	24.57	0.03	○
120	Bolivia, Plurinational St.	2.43	23.81	0.02	○
121	Egypt (2015)	2.43	23.78	0.02	○
122	Guinea (2015)	2.18	19.72	0.01	○
123	Yemen	1.89	14.76	0.00	○
n/a	Belarus	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	

SOURCE: World Economic Forum, *Executive Opinion Survey 2016–2017*
NOTE: ● indicates a strength; ○ a weakness

5.2.2 State of cluster development

Average answer to the survey question on the role of clusters in the economy: In your country, how widespread are well-developed and deep clusters (geographic concentrations of firms, suppliers, producers of related products and services, and specialized institutions in a particular field)? [1 = nonexistent; 7 = widespread in many fields] | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United States of America	5.56	75.99	1.00	●
2	United Arab Emirates	5.42	73.65	0.99	●
3	Germany	5.36	72.70	0.98	●
4	Italy	5.35	72.58	0.98	●
5	United Kingdom	5.34	72.27	0.97	
6	Netherlands	5.27	71.18	0.96	
7	Japan	5.22	70.32	0.95	
8	Norway	5.21	70.19	0.94	●
9	Qatar	5.20	69.98	0.93	●
10	Luxembourg	5.18	69.74	0.93	
11	Singapore	5.17	69.49	0.92	
12	Malaysia	5.17	69.45	0.91	●
13	Switzerland	5.14	68.93	0.90	
14	Hong Kong (China)	5.04	67.28	0.89	
15	Sweden	4.99	66.42	0.89	
16	Ireland	4.95	65.78	0.88	
17	Finland	4.89	64.88	0.87	
18	Austria	4.83	63.81	0.86	
19	Canada	4.72	61.93	0.85	
20	China	4.66	60.94	0.84	
21	Denmark	4.64	60.66	0.84	
22	Saudi Arabia	4.63	60.56	0.83	●
23	Bahrain	4.62	60.33	0.82	●
24	Belgium	4.61	60.09	0.81	
25	France	4.56	59.26	0.80	
26	India	4.52	58.73	0.80	
27	Korea, Rep.	4.51	58.56	0.79	
28	Indonesia	4.46	57.59	0.78	●
29	South Africa	4.38	56.38	0.77	
30	Jordan	4.28	54.65	0.76	●
31	Egypt	4.27	54.48	0.75	●
32	Spain	4.25	54.21	0.75	
33	Israel	4.23	53.82	0.74	
34	Mexico	4.23	53.79	0.73	
35	Malta	4.21	53.57	0.72	
36	Panama	4.20	53.27	0.71	
37	Portugal	4.16	52.61	0.70	
38	Kenya	4.16	52.61	0.70	
39	Mauritius	4.14	52.27	0.69	
40	Rwanda	4.13	52.15	0.68	●
41	Iceland	4.09	51.52	0.67	
42	Australia	3.97	49.56	0.66	
43	Brazil	3.96	49.33	0.66	
44	Cambodia	3.95	49.10	0.65	●
45	New Zealand	3.94	49.07	0.64	
46	Kuwait	3.94	49.05	0.63	
47	Brunei Darussalam	3.94	48.92	0.62	
48	Costa Rica	3.92	48.72	0.61	
49	Slovakia	3.91	48.48	0.61	
50	Viet Nam	3.85	47.53	0.60	
51	Guatemala	3.84	47.36	0.59	
52	TFYR of Macedonia	3.84	47.27	0.58	
53	Lebanon	3.83	47.19	0.57	
54	Turkey	3.82	47.00	0.57	
55	Cyprus	3.80	46.74	0.56	
56	Czech Republic	3.80	46.74	0.55	
57	Sri Lanka	3.78	46.28	0.54	
58	Thailand	3.77	46.18	0.53	
59	Estonia	3.76	46.00	0.52	
60	Dominican Republic	3.75	45.89	0.52	
61	Oman	3.74	45.73	0.51	
62	Philippines	3.74	45.70	0.50	
63	Honduras	3.73	45.53	0.49	
64	Zambia	3.72	45.34	0.48	●
65	Azerbaijan	3.71	45.20	0.48	
66	Poland	3.69	44.88	0.47	
67	Tanzania, United Rep.	3.69	44.80	0.46	
68	Namibia	3.67	44.54	0.45	
69	Senegal	3.66	44.40	0.44	
70	Jamaica	3.66	44.27	0.43	
71	Pakistan	3.65	44.25	0.43	
72	Bangladesh	3.64	44.05	0.42	
73	Bulgaria	3.63	43.79	0.41	○
74	Morocco	3.61	43.57	0.40	
75	Colombia	3.61	43.48	0.39	
76	Iran, Islamic Rep.	3.60	43.28	0.39	
77	Ethiopia	3.54	42.30	0.38	
78	Trinidad and Tobago	3.49	41.54	0.37	
79	Slovenia	3.49	41.53	0.36	○
80	Nigeria	3.49	41.49	0.35	
81	Uganda	3.48	41.33	0.34	
82	Latvia	3.47	41.21	0.34	○
83	Mali	3.45	40.81	0.33	
84	Botswana	3.44	40.62	0.32	
85	Chile	3.39	39.79	0.31	○
86	Russian Federation	3.36	39.36	0.30	
87	Hungary	3.36	39.34	0.30	
88	Lithuania	3.34	39.05	0.29	○
89	Armenia	3.33	38.86	0.28	
90	Benin	3.31	38.57	0.27	
91	Uruguay	3.27	37.91	0.26	
92	Ecuador	3.26	37.71	0.25	
93	Peru	3.24	37.38	0.25	
94	Argentina	3.23	37.20	0.24	
95	Romania	3.22	36.98	0.23	○
96	Cameroon	3.21	36.79	0.22	
97	Tunisia	3.18	36.25	0.21	
98	El Salvador	3.17	36.16	0.20	
99	Bosnia and Herzegovina	3.15	35.84	0.20	
100	Nepal	3.14	35.70	0.19	
101	Madagascar	3.14	35.60	0.18	
102	Serbia	3.10	35.05	0.17	○
103	Montenegro	3.09	34.77	0.16	○
104	Mozambique	3.07	34.54	0.16	
105	Algeria	3.05	34.19	0.15	
106	Guinea (2015)	3.02	33.75	0.14	
107	Greece	3.01	33.56	0.13	○
108	Tajikistan	3.01	33.55	0.12	
109	Kazakhstan	3.00	33.33	0.11	○
110	Albania	2.98	32.93	0.11	○
111	Georgia	2.97	32.89	0.10	○
112	Kyrgyzstan	2.96	32.72	0.09	
113	Croatia	2.96	32.70	0.08	○
114	Ukraine	2.95	32.54	0.07	○
115	Yemen	2.94	32.40	0.07	
116	Paraguay	2.91	31.88	0.06	○
117	Burundi	2.88	31.28	0.05	
118	Malawi	2.87	31.19	0.04	
119	Bolivia, Plurinational St.	2.85	30.83	0.03	○
120	Côte d'Ivoire	2.85	30.77	0.02	○
121	Mongolia	2.73	28.76	0.02	○
122	Zimbabwe	2.71	28.45	0.01	○
123	Moldova, Rep.	2.33	22.15	0.00	○
n/a	Belarus	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	

SOURCE: World Economic Forum, *Executive Opinion Survey 2016–2017*

NOTE: ● indicates a strength; ○ a weakness

5.2.3 GERD financed by abroad

GERD: Financed by abroad (% of total GERD) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Burkina Faso (2009)	59.61	100.00	1.00	●
2	Uganda (2010)	57.30	96.14	0.99	●
3	Bulgaria (2014)	50.88	85.36	0.98	●
4	Israel (2013)	49.25	82.62	0.97	●
5	Guatemala (2012)	49.01	82.22	0.96	●
6	Kenya (2010)	47.14	79.09	0.95	●
7	Latvia	44.98	75.46	0.94	●
8	Tanzania, United Rep. (2010)	42.00	70.47	0.93	●
9	Senegal (2010)	40.53	68.00	0.92	●
10	Burundi (2008)	39.92	66.97	0.91	●
11	Mozambique	39.88	66.91	0.90	●
12	Slovakia	39.43	66.15	0.89	●
13	Lithuania	34.58	58.02	0.88	●
14	Czech Republic	32.50	54.52	0.87	●
15	Luxembourg (2013)	32.34	54.26	0.86	
16	Iceland	26.35	44.21	0.85	
17	Cyprus (2014)	23.66	39.69	0.84	
18	Botswana (2013)	21.66	36.34	0.83	●
19	Malta	21.27	35.68	0.82	
20	Montenegro (2014)	20.70	34.73	0.81	●
21	Romania	19.23	32.26	0.80	●
22	Ireland (2014)	18.62	31.23	0.79	
23	Ukraine	18.18	30.50	0.78	
24	United Kingdom	17.59	29.51	0.77	
25	Bosnia and Herzegovina	16.90	28.35	0.76	●
26	El Salvador (2014)	16.88	28.32	0.74	●
27	Poland	16.74	28.09	0.73	
28	Austria (2016)	16.02	26.88	0.72	
29	Namibia (2014)	15.81	26.52	0.71	●
30	Netherlands	15.13	25.38	0.70	
31	Hungary	14.95	25.08	0.69	
32	Finland	14.52	24.36	0.68	
33	Croatia	14.48	24.28	0.67	
34	Georgia (2014)	14.27	23.94	0.66	
35	Belgium (2013)	13.17	22.09	0.65	
36	South Africa (2013)	12.92	21.67	0.64	
37	Chile	12.88	21.61	0.63	
38	Greece	12.85	21.55	0.62	
39	Belarus	12.72	21.34	0.61	
40	Serbia	12.55	21.06	0.60	
41	Bahrain (2014)	12.44	20.87	0.59	
42	Estonia	12.19	20.44	0.58	
43	Switzerland (2012)	12.07	20.26	0.57	
44	Moldova, Rep.	11.64	19.53	0.56	
45	Madagascar (2009)	10.58	17.75	0.55	●
46	Slovenia	10.56	17.71	0.54	
47	Paraguay	10.33	17.33	0.53	
48	Norway (2013)	9.47	15.88	0.52	
49	Italy (2014)	9.33	15.65	0.51	
50	Mali (2010)	8.81	14.78	0.50	
51	France (2014)	7.79	13.06	0.49	○
52	Spain (2014)	7.41	12.43	0.48	○
53	Uruguay (2014)	7.38	12.37	0.47	
54	Albania (2008)	7.37	12.36	0.46	
55	New Zealand (2013)	7.23	12.12	0.45	○
56	Hong Kong (China) (2014)	7.01	11.76	0.44	○
57	Singapore (2014)	6.85	11.48	0.43	○
58	Sweden (2013)	6.71	11.26	0.42	○
59	Denmark	6.52	10.94	0.41	○
60	Mauritius (2012)	6.43	10.79	0.40	
61	Canada (2014)	6.01	10.09	0.39	○
62	Portugal (2014)	5.61	9.42	0.38	○
63	Togo (2014)	5.54	9.30	0.37	
64	Sri Lanka (2013)	5.03	8.43	0.36	
65	Germany (2014)	4.99	8.38	0.35	○
66	United States of America	4.67	7.83	0.34	○
67	Tunisia (2014)	4.00	6.71	0.33	
68	Mongolia (2014)	2.85	4.78	0.32	
69	Pakistan	2.66	4.46	0.31	
70	Russian Federation	2.65	4.44	0.30	
71	Ecuador (2014)	2.46	4.13	0.29	
72	Colombia	2.42	4.07	0.28	
73	Qatar (2012)	2.42	4.06	0.27	
74	Armenia	2.28	3.82	0.26	
75	Ethiopia (2013)	2.15	3.61	0.24	
76	Bolivia, Plurinational St. (2009)	1.86	3.12	0.23	
77	Philippines (2013)	1.84	3.08	0.22	
78	Morocco (2010)	1.71	2.87	0.21	
79	Zambia (2008)	1.62	2.71	0.20	
80	Australia (2008)	1.61	2.70	0.19	○
81	Thailand	1.55	2.59	0.18	○
82	Viet Nam (2013)	1.51	2.53	0.17	
83	Costa Rica (2014)	1.42	2.38	0.16	○
84	Kuwait (2009)	1.18	1.97	0.15	
85	Turkey (2014)	1.08	1.81	0.14	○
86	Nigeria (2007)	1.04	1.74	0.13	
87	Kyrgyzstan	1.00	1.68	0.12	
88	Kazakhstan (2013)	0.76	1.27	0.11	○
89	Korea, Rep.	0.75	1.26	0.10	○
90	China	0.74	1.24	0.09	○
91	Argentina (2008)	0.60	1.00	0.08	○
92	Japan	0.48	0.80	0.07	○
93	Mexico	0.38	0.64	0.06	○
94	Panama (2013)	0.25	0.43	0.05	○
95	Tajikistan (2013)	0.21	0.35	0.04	
96	Malaysia (2014)	0.17	0.28	0.03	○
97	Azerbaijan (2014)	0.16	0.27	0.02	○
98	Egypt (2014)	0.12	0.20	0.01	○
99	Oman (2013)	0.00	0.00	0.00	○
n/a	Algeria	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Brazil	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	India	n/a	n/a	n/a	
n/a	Indonesia	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Peru	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*
NOTE: ● indicates a strength; ○ a weakness

5.2.4 Joint venture/strategic alliance deals

Joint ventures/strategic alliances: Number of deals, fractional counting (per billion PPP$ GDP) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Hong Kong (China)	0.28	100.00	1.00	●
2	Bahrain	0.19	68.67	0.99	●
3	Estonia	0.18	62.63	0.98	●
4	Singapore	0.17	59.50	0.97	
5	Canada	0.16	56.16	0.96	●
6	Cyprus	0.15	54.42	0.95	●
7	Australia	0.15	53.87	0.95	
8	Luxembourg	0.15	52.68	0.94	
9	Sweden	0.14	48.51	0.93	
10	Switzerland	0.12	40.68	0.92	
11	Finland	0.12	40.53	0.91	
12	Israel	0.11	39.95	0.90	
13	United Kingdom	0.10	35.01	0.89	
14	New Zealand	0.10	33.70	0.88	
15	Denmark	0.09	30.87	0.87	
16	United Arab Emirates	0.09	30.42	0.86	
17	United States of America	0.08	29.45	0.85	
18	Malaysia	0.08	29.29	0.85	
19	Kyrgyzstan	0.07	24.73	0.84	●
20	Botswana	0.07	23.68	0.83	●
21	Rwanda	0.07	23.61	0.82	●
22	Norway	0.06	21.98	0.81	
23	Netherlands	0.06	21.23	0.80	
24	Malta	0.06	21.09	0.79	
25	Cambodia	0.06	20.41	0.78	●
26	Ireland	0.06	19.69	0.77	
27	Moldova, Rep.	0.05	18.45	0.76	
28	Zimbabwe	0.05	18.09	0.75	●
29	Belgium	0.05	17.19	0.75	
30	Tunisia	0.05	16.91	0.74	●
31	Sri Lanka	0.05	16.81	0.73	●
32	Jordan	0.05	15.73	0.72	●
33	Slovenia	0.05	15.36	0.71	
34	Jamaica	0.04	13.20	0.70	
35	Mali	0.04	13.20	0.69	●
36	South Africa	0.04	12.92	0.68	
37	Oman	0.04	12.89	0.67	●
38	Japan	0.04	12.41	0.66	
39	France	0.04	12.41	0.65	
40	Namibia	0.04	12.34	0.65	
41	Qatar	0.04	12.12	0.64	
42	Bulgaria	0.03	11.60	0.63	
43	Korea, Rep.	0.03	11.60	0.62	
44	Kenya	0.03	10.81	0.61	
45	China	0.03	10.73	0.60	
46	Germany	0.03	10.66	0.59	
47	Thailand	0.03	10.57	0.58	
48	Iceland	0.03	10.17	0.57	
49	India	0.03	9.08	0.56	
50	Philippines	0.03	9.05	0.55	
51	Greece	0.03	8.73	0.55	
52	Austria	0.03	8.61	0.54	○
53	Belarus	0.03	8.09	0.53	
54	Chile	0.02	7.96	0.52	
55	Kuwait	0.02	7.59	0.51	
56	Bosnia and Herzegovina	0.02	7.48	0.50	
57	Pakistan	0.02	7.46	0.49	
58	Paraguay	0.02	7.44	0.48	
59	Mongolia	0.02	7.20	0.47	
60	Spain	0.02	7.13	0.46	○
61	Italy	0.02	7.12	0.45	○
62	Russian Federation	0.02	7.00	0.45	
63	Hungary	0.02	6.91	0.44	
64	Mauritius (2015)	0.02	6.36	0.43	
65	Viet Nam	0.02	6.33	0.42	
66	Uruguay	0.02	6.32	0.41	
67	Azerbaijan	0.02	6.24	0.40	
68	Latvia	0.02	6.10	0.39	
69	Costa Rica	0.02	5.83	0.38	
70	Armenia	0.02	5.79	0.37	
71	Uganda	0.02	5.38	0.36	
72	Portugal	0.02	5.32	0.35	○
73	Tanzania, United Rep.	0.02	4.99	0.35	
74	Croatia	0.02	4.75	0.34	
75	Lebanon	0.02	4.65	0.33	
76	Ukraine	0.01	4.33	0.32	
77	Nepal	0.01	4.05	0.31	
78	Kazakhstan	0.01	3.97	0.30	
79	Turkey	0.01	3.87	0.29	
80	Saudi Arabia	0.01	3.83	0.28	
81	Georgia	0.01	3.83	0.27	
82	Madagascar	0.01	3.82	0.26	
83	Poland	0.01	3.72	0.25	○
84	Bangladesh	0.01	3.69	0.25	
85	Bolivia, Plurinational St.	0.01	3.61	0.24	
86	Senegal	0.01	3.55	0.23	
87	Mexico	0.01	2.96	0.22	○
88	Colombia	0.01	2.84	0.21	○
89	Morocco	0.01	2.83	0.20	
90	Brazil	0.01	2.77	0.19	○
91	Serbia (2015)	0.01	2.72	0.18	○
92	Czech Republic	0.01	2.61	0.17	○
93	Brunei Darussalam	0.01	2.57	0.16	○
94	Iran, Islamic Rep.	0.01	2.14	0.15	
95	Peru	0.01	1.65	0.15	○
96	Cameroon	0.01	1.34	0.14	
97	Indonesia	0.01	1.27	0.13	
98	Argentina	0.01	1.27	0.12	
99	Lithuania	0.01	1.11	0.11	○
100	Côte d'Ivoire	0.01	1.08	0.10	
101	Ethiopia	0.01	1.07	0.09	
102	Mozambique	0.01	1.05	0.08	
103	Egypt	0.01	1.02	0.07	
104	Panama	0.01	0.95	0.06	○
105	Zambia (2015)	0.01	0.87	0.05	○
106	Nigeria	0.01	0.83	0.05	
107	Algeria	0.00	0.79	0.04	
108	Romania	0.00	0.65	0.03	○
109	Dominican Republic	0.00	0.13	0.02	○
110	Slovakia	0.00	0.08	0.01	○
111	Ecuador	0.00	0.00	0.00	○
n/a	Albania	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	

SOURCE: Thomson Reuters, *Thomson One Banker Private Equity, SDC Platinum* database; International Monetary Fund, *World Economic Outlook Database,* October 2016 (PPP$ GDP)
NOTE: ● indicates a strength; ○ a weakness

5.2.5 Patent families filed in two offices

Number of patent families filed by residents in at least two offices (per billion PPP$ GDP) | 2013

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Finland	9.39	100.00	0.97	●
1	Japan	15.53	100.00	0.97	●
1	Korea, Rep.	16.31	100.00	0.97	●
1	Switzerland	10.55	100.00	0.97	●
5	Sweden	8.81	93.74	0.97	
6	Malta	8.76	93.29	0.96	
7	Luxembourg	8.42	89.61	0.95	
8	Israel	8.02	85.39	0.94	
9	Denmark	7.96	84.74	0.93	
10	Germany	6.66	70.85	0.92	
11	Netherlands	6.17	65.70	0.92	
12	Iceland	5.10	54.28	0.91	
13	United States of America	4.95	52.70	0.90	
14	Austria	4.90	52.14	0.89	
15	New Zealand	4.73	50.38	0.88	
16	France	3.90	41.53	0.87	
17	Belgium	3.79	40.32	0.86	
18	Canada	2.90	30.85	0.86	
19	Singapore	2.79	29.73	0.85	
20	Ireland	2.55	27.15	0.84	
21	United Kingdom	2.52	26.81	0.83	
22	Cyprus	2.39	25.46	0.82	
23	Norway	2.22	23.64	0.81	
24	Slovenia	1.97	21.02	0.81	
25	Italy	1.77	18.82	0.80	
26	Hong Kong (China)	1.26	13.44	0.79	
27	Estonia	1.05	11.20	0.78	
28	Australia	1.05	11.13	0.77	
29	China	0.93	9.87	0.76	
30	Spain	0.79	8.40	0.75	
31	Czech Republic	0.74	7.86	0.75	
32	Portugal	0.73	7.76	0.74	
33	South Africa	0.69	7.31	0.73	
34	Ukraine	0.57	6.07	0.72	
35	Turkey	0.55	5.82	0.71	
36	Latvia	0.53	5.63	0.70	
37	Armenia	0.52	5.52	0.69	
38	Hungary	0.47	5.01	0.69	
39	Belarus	0.45	4.77	0.68	
40	Poland	0.44	4.68	0.67	
41	Greece	0.40	4.30	0.66	
42	Lithuania	0.39	4.17	0.65	
43	India	0.32	3.46	0.64	
44	Slovakia	0.31	3.32	0.64	
45	Malaysia	0.27	2.91	0.63	
46	Bulgaria	0.27	2.84	0.62	
47	Moldova, Rep.	0.24	2.55	0.61	
48	Montenegro (2012)	0.23	2.43	0.60	
49	Chile	0.22	2.34	0.59	
50	Russian Federation	0.21	2.26	0.58	
51	Saudi Arabia	0.20	2.11	0.58	
52	Niger	0.18	1.92	0.57	
53	Mauritius	0.18	1.91	0.56	
54	Burundi (2009)	0.17	1.82	0.55	●
55	Jamaica	0.17	1.80	0.54	
56	Bosnia and Herzegovina	0.16	1.68	0.53	
57	Kazakhstan	0.16	1.66	0.53	
58	Serbia	0.15	1.55	0.52	
59	Namibia	0.14	1.44	0.51	
60	Uruguay	0.13	1.41	0.50	
61	Brazil	0.13	1.37	0.49	
62	Croatia	0.13	1.34	0.48	
63	Brunei Darussalam	0.12	1.28	0.47	
64	Panama	0.11	1.13	0.47	
65	Jordan	0.10	1.12	0.46	
66	Colombia	0.10	1.11	0.45	
67	Argentina	0.10	1.05	0.44	
68	United Arab Emirates	0.10	1.04	0.43	
69	Tunisia	0.09	0.98	0.42	
70	Guinea (2009)	0.08	0.87	0.42	●
71	Zimbabwe (2012)	0.08	0.87	0.41	
72	Botswana (2008)	0.08	0.85	0.40	
73	Mexico	0.08	0.84	0.39	
74	Azerbaijan	0.08	0.80	0.38	
75	Romania	0.07	0.73	0.37	
76	Senegal (2012)	0.07	0.70	0.36	
77	Thailand	0.06	0.62	0.36	
78	Tajikistan (2011)	0.06	0.62	0.35	
79	Philippines	0.06	0.61	0.34	
80	Kyrgyzstan	0.05	0.58	0.33	
81	Lebanon	0.05	0.54	0.32	
82	Qatar	0.05	0.51	0.31	
83	Egypt	0.05	0.51	0.31	
84	Sri Lanka	0.05	0.48	0.30	
85	Trinidad and Tobago	0.05	0.48	0.29	
86	TFYR of Macedonia	0.04	0.40	0.28	
87	Mongolia (2012)	0.04	0.38	0.27	
88	Madagascar (2010)	0.03	0.37	0.26	
89	Bahrain	0.03	0.37	0.25	
90	Albania	0.03	0.35	0.25	
91	Kenya	0.03	0.34	0.24	
92	Georgia	0.03	0.33	0.23	
93	Cambodia (2008)	0.03	0.33	0.22	
94	Côte d'Ivoire	0.03	0.32	0.21	
95	Honduras (2011)	0.03	0.32	0.20	
96	Viet Nam	0.03	0.31	0.19	
97	Costa Rica	0.03	0.31	0.19	○
98	Zambia (2009)	0.03	0.27	0.18	
99	Morocco	0.02	0.26	0.17	○
100	Dominican Republic	0.02	0.25	0.16	
101	Algeria	0.02	0.24	0.15	
102	Kuwait	0.02	0.23	0.14	
103	Oman (2012)	0.02	0.22	0.14	
104	El Salvador	0.02	0.22	0.13	
105	Peru	0.02	0.21	0.12	○
106	Paraguay	0.02	0.19	0.11	
107	Cameroon (2012)	0.02	0.18	0.10	
108	Bolivia, Plurinational St. (2012)	0.02	0.18	0.09	
109	Pakistan	0.01	0.13	0.08	○
110	Yemen (2010)	0.01	0.10	0.08	
111	Iran, Islamic Rep.	0.01	0.10	0.07	○
112	Guatemala (2012)	0.01	0.10	0.06	
113	Tanzania, United Rep.	0.01	0.09	0.05	
114	Ecuador	0.01	0.06	0.04	○
115	Nigeria	0.00	0.04	0.03	○
116	Bangladesh	0.00	0.04	0.03	○
117	Indonesia	0.00	0.04	0.02	○
118	Mozambique	0.00	0.00	0.00	○
118	Uganda	0.00	0.00	0.00	○
n/a	Benin	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	

SOURCE: World Intellectual Property Organization, *Intellectual Property Statistics*; International Monetary Fund, *World Economic Outlook Database*, October 2016 (PPP$ GDP)
NOTE: ● indicates a strength; ○ a weakness

5.3.1 Intellectual property payments

Charges for use of intellectual property n.i.e., payments (% of total trade) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Ireland	26.27	100.00	0.98	●
1	Netherlands	5.39	100.00	0.98	●
1	Singapore	3.62	100.00	0.98	●
4	Switzerland	3.28	90.57	0.97	
5	Malta	3.24	89.41	0.97	●
6	Luxembourg	2.60	71.82	0.96	
7	Argentina	2.57	71.03	0.95	●
8	Brazil	2.26	62.41	0.94	●
9	Japan	2.16	59.55	0.93	
10	Sweden	2.07	57.02	0.92	
11	Chile (2014)	1.83	50.51	0.91	●
12	Canada	1.83	50.49	0.90	
13	France	1.78	49.14	0.90	
14	South Africa	1.74	48.06	0.89	●
15	New Zealand	1.72	47.53	0.88	
16	Russian Federation	1.68	46.35	0.87	●
17	Korea, Rep.	1.66	45.73	0.86	
18	Thailand	1.63	45.12	0.85	●
19	United States of America	1.58	43.55	0.84	
20	Australia	1.41	38.94	0.83	
21	United Kingdom	1.33	36.59	0.83	
22	Hungary	1.33	36.57	0.82	
23	Guatemala	1.23	33.87	0.81	●
24	Croatia	1.22	33.75	0.80	●
25	Spain	1.19	32.85	0.79	
26	Iceland	1.17	32.23	0.78	
27	Costa Rica	1.10	30.44	0.77	
28	Romania	1.10	30.35	0.77	
29	India	1.10	30.26	0.76	
30	Poland	1.07	29.57	0.75	
31	TFYR of Macedonia	0.99	27.19	0.74	
32	China	0.99	27.19	0.73	
33	Finland	0.98	27.14	0.72	
34	Kenya (2014)	0.97	26.68	0.71	
35	Jamaica	0.95	26.27	0.70	●
36	Indonesia	0.93	25.69	0.70	
37	Serbia	0.91	24.99	0.69	
38	Belgium	0.90	24.75	0.68	
39	Italy	0.88	24.40	0.67	
40	Portugal	0.86	23.64	0.66	
41	Denmark	0.83	22.78	0.65	
42	Colombia	0.81	22.24	0.64	
43	El Salvador	0.80	22.14	0.63	●
44	Austria	0.78	21.65	0.63	
45	Philippines	0.77	21.13	0.62	
46	Ukraine	0.75	20.56	0.61	
47	Czech Republic	0.73	20.15	0.60	
48	Slovenia	0.69	19.16	0.59	
49	Peru	0.69	18.96	0.58	
50	Slovakia	0.66	18.17	0.57	
51	United Arab Emirates	0.63	17.51	0.57	
52	Malaysia	0.63	17.34	0.56	
53	Cyprus	0.62	17.18	0.55	
54	Albania	0.61	16.71	0.54	
55	Bulgaria	0.58	16.06	0.53	
56	Israel	0.58	15.94	0.52	
57	Bolivia, Plurinational St.	0.57	15.61	0.51	●
58	Honduras	0.55	15.06	0.50	
59	Madagascar (2013)	0.54	15.02	0.50	
60	Germany	0.54	14.99	0.49	○
61	Moldova, Rep.	0.52	14.41	0.48	
62	Greece	0.50	13.77	0.47	
63	Pakistan	0.49	13.63	0.46	
64	Norway	0.47	12.91	0.45	○
65	Dominican Republic (2014)	0.44	12.27	0.44	
66	Egypt (2014)	0.41	11.25	0.43	
67	Nigeria	0.41	11.24	0.43	●
68	Uruguay	0.40	11.15	0.42	
69	Belarus	0.40	11.01	0.41	
70	Panama	0.40	10.95	0.40	
71	Zimbabwe (2012)	0.33	9.23	0.39	
72	Turkey	0.33	8.98	0.38	
73	Ecuador	0.32	8.86	0.37	
74	Hong Kong (China) (2014)	0.31	8.59	0.37	○
75	Kazakhstan	0.31	8.51	0.36	
76	Mongolia	0.30	8.23	0.35	
77	Mauritius (2014)	0.27	7.45	0.34	
78	Mozambique (2014)	0.24	6.65	0.33	
79	Estonia	0.24	6.63	0.32	○
80	Uganda	0.22	6.18	0.31	
81	Algeria (2014)	0.22	5.93	0.30	
82	Mexico	0.21	5.80	0.30	
83	Latvia	0.21	5.73	0.29	○
84	Morocco (2013)	0.19	5.19	0.28	
85	Iran, Islamic Rep. (2014)	0.18	4.90	0.27	
86	Montenegro	0.17	4.57	0.26	○
87	Paraguay	0.17	4.55	0.25	
88	Lithuania	0.16	4.27	0.24	○
89	Lebanon (2014)	0.14	3.86	0.23	
90	Bosnia and Herzegovina	0.14	3.85	0.23	
91	Brunei Darussalam (2009)	0.13	3.60	0.22	
92	Malawi (2014)	0.13	3.56	0.21	
93	Namibia	0.11	3.07	0.20	
94	Niger (2009)	0.11	3.02	0.19	
95	Kyrgyzstan (2014)	0.11	2.95	0.18	
96	Togo (2010)	0.11	2.93	0.17	
97	Azerbaijan (2012)	0.10	2.88	0.17	
98	Senegal (2014)	0.10	2.86	0.16	
99	Botswana (2014)	0.10	2.71	0.15	
100	Cameroon (2013)	0.09	2.57	0.14	
101	Georgia	0.09	2.54	0.13	○
102	Cambodia	0.09	2.53	0.12	
103	Tunisia (2014)	0.08	2.23	0.11	○
104	Bangladesh (2014)	0.07	1.98	0.10	
105	Mali (2010)	0.07	1.81	0.10	
106	Benin (2014)	0.06	1.72	0.09	
107	Guinea (2013)	0.06	1.68	0.08	
108	Rwanda (2012)	0.05	1.41	0.07	○
109	Yemen (2014)	0.04	1.17	0.06	
110	Côte d'Ivoire (2013)	0.03	0.85	0.05	○
111	Ethiopia (2012)	0.02	0.67	0.04	
112	Zambia (2014)	0.02	0.48	0.03	○
113	Tanzania, United Rep. (2014)	0.01	0.26	0.03	
114	Burkina Faso (2014)	0.01	0.17	0.02	○
115	Burundi (2012)	0.00	0.08	0.01	○
116	Tajikistan (2013)	0.00	0.00	0.00	○
n/a	Armenia	n/a	n/a	n/a	
n/a	Bahrain	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Sri Lanka	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Viet Nam	n/a	n/a	n/a	

SOURCE: World Trade Organization, *Trade in Commercial Services* database, based on the sixth (2009) edition of the International Monetary Fund's *Balance of Payments Manual* and *Balance of Payments* database

NOTE: ● indicates a strength; ○ a weakness

5.3.2 High-tech imports

High-tech net imports (% of total trade) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Hong Kong (China)	46.10	100.00	0.99	●
1	Malaysia	24.74	100.00	0.99	●
3	Viet Nam	22.58	90.27	0.98	●
4	Ethiopia	22.17	88.47	0.98	●
5	Singapore	21.41	85.05	0.97	
6	China	19.26	75.36	0.96	
7	Panama (2011)	18.82	73.42	0.95	●
8	Colombia	18.68	72.79	0.94	●
9	Mexico	18.43	71.65	0.94	●
10	Czech Republic	17.74	68.54	0.93	●
11	United States of America	17.70	68.39	0.92	
12	Thailand	15.65	59.15	0.91	●
13	Slovakia	15.62	59.01	0.90	●
14	Korea, Rep.	15.19	57.10	0.90	
15	Japan	14.87	55.65	0.89	
16	Hungary	13.81	50.91	0.88	●
17	Argentina	13.45	49.27	0.87	●
18	Paraguay	13.34	48.80	0.86	●
19	Netherlands	12.91	46.88	0.85	
20	Rwanda	12.78	46.29	0.85	●
21	United Kingdom	12.73	46.06	0.84	
22	Brazil	12.43	44.70	0.83	●
23	Estonia	12.21	43.72	0.82	
24	Costa Rica	11.80	41.89	0.81	
25	Algeria	11.68	41.34	0.81	●
26	Germany	11.61	41.03	0.80	
27	New Zealand	11.58	40.88	0.79	
28	Australia	11.49	40.47	0.78	
29	Israel	11.40	40.07	0.77	
30	Nepal	11.38	40.01	0.77	●
31	France	11.38	39.97	0.76	
32	Canada	11.12	38.82	0.75	
33	Peru	11.10	38.71	0.74	●
34	Latvia	10.87	37.70	0.73	
35	Burundi (2014)	10.84	37.55	0.73	●
36	Kenya (2013)	10.84	37.54	0.72	●
37	Poland	10.66	36.73	0.71	
38	Tunisia	10.47	35.91	0.70	●
39	Turkey	10.34	35.32	0.69	
40	Chile	10.33	35.26	0.69	
41	Pakistan	10.31	35.19	0.68	●
42	Belgium	10.29	35.11	0.67	
43	Romania	10.25	34.93	0.66	
44	South Africa	9.97	33.68	0.65	
45	Bolivia, Plurinational St.	9.97	33.67	0.65	●
46	El Salvador	9.93	33.48	0.64	●
47	Ecuador	9.72	32.52	0.63	●
48	Bangladesh (2011)	9.44	31.29	0.62	●
49	Guatemala	9.36	30.91	0.61	●
50	Austria	9.32	30.73	0.60	
51	Sweden	9.30	30.63	0.60	○
52	India	9.17	30.07	0.59	
53	Saudi Arabia	9.14	29.91	0.58	
54	Ireland	8.96	29.12	0.57	○
55	Mauritius	8.86	28.68	0.56	
56	Egypt	8.64	27.71	0.56	
57	Malawi	8.61	27.54	0.55	●
58	Indonesia	8.54	27.22	0.54	
59	Russian Federation	8.51	27.11	0.53	
60	Uruguay	8.42	26.71	0.52	
61	Zimbabwe (2014)	8.39	26.56	0.52	●
62	Finland	8.16	25.53	0.51	○
63	Switzerland	8.16	25.52	0.50	○
64	Italy	8.08	25.17	0.49	
65	Ukraine	7.98	24.70	0.48	
66	United Arab Emirates	7.97	24.69	0.48	
67	Moldova, Rep.	7.77	23.76	0.47	
68	Niger (2014)	7.62	23.10	0.46	
69	Kazakhstan	7.62	23.09	0.45	
70	Croatia	7.49	22.52	0.44	
71	Honduras (2014)	7.46	22.41	0.44	
72	Bulgaria	7.42	22.21	0.43	
73	Malta	7.41	22.15	0.42	
74	Spain	7.34	21.86	0.41	○
75	Morocco	7.34	21.83	0.40	
76	Tanzania, United Rep.	7.24	21.40	0.40	
77	Norway	7.02	20.39	0.39	○
78	Uganda	6.90	19.85	0.38	
79	Jordan	6.84	19.61	0.37	
80	Iceland	6.82	19.51	0.36	○
81	Serbia	6.76	19.22	0.35	
82	Lithuania	6.71	19.00	0.35	
83	Greece	6.65	18.76	0.34	
84	Bosnia and Herzegovina	6.52	18.18	0.33	
85	Kyrgyzstan	6.51	18.13	0.32	
86	Denmark	6.47	17.92	0.31	○
87	Portugal	6.45	17.86	0.31	○
88	Georgia	6.45	17.85	0.30	
89	TFYR of Macedonia	6.43	17.78	0.29	
90	Montenegro	6.41	17.65	0.28	
91	Burkina Faso	6.40	17.62	0.27	
92	Kuwait	6.38	17.53	0.27	
93	Jamaica	6.02	15.92	0.26	
94	Sri Lanka	6.01	15.89	0.25	
95	Namibia (2014)	5.99	15.78	0.24	
96	Brunei Darussalam	5.97	15.70	0.23	
97	Slovenia	5.95	15.62	0.23	○
98	Madagascar	5.88	15.30	0.22	
99	Dominican Republic	5.74	14.66	0.21	
100	Mozambique	5.70	14.48	0.20	
101	Côte d'Ivoire	5.60	14.05	0.19	
102	Senegal	5.55	13.79	0.19	
103	Mongolia	5.45	13.37	0.18	
104	Bahrain	5.35	12.90	0.17	
105	Belarus	5.21	12.26	0.16	○
106	Zambia	5.20	12.25	0.15	
107	Mali (2012)	5.12	11.87	0.15	
108	Cameroon	5.09	11.74	0.14	
109	Armenia	5.06	11.62	0.13	
110	Trinidad and Tobago (2010)	4.94	11.05	0.12	
111	Guinea (2014)	4.53	9.25	0.11	
112	Yemen (2014)	4.51	9.11	0.10	
113	Qatar	4.41	8.69	0.10	○
114	Albania	4.27	8.05	0.09	○
115	Iran, Islamic Rep. (2011)	4.00	6.83	0.08	○
116	Lebanon (2014)	3.84	6.14	0.07	○
117	Botswana	3.70	5.50	0.06	○
118	Cyprus	3.54	4.80	0.06	○
119	Nigeria (2014)	3.36	3.95	0.05	
120	Oman (2014)	3.14	2.98	0.04	○
121	Azerbaijan	3.11	2.83	0.03	○
122	Cambodia	2.94	2.08	0.02	○
123	Togo (2014)	2.69	0.95	0.02	○
124	Benin	2.61	0.60	0.01	○
125	Luxembourg	2.48	0.00	0.00	○
n/a	Philippines	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	

SOURCE: United Nations, *COMTRADE* database; Eurostat, *Annex 5: High-tech aggregation by SITC Rev. 4*, April 2009

NOTE: ● indicates a strength; ○ a weakness

5.3.3 ICT services imports

Telecommunications, computers, and information services imports (% of total trade) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Cyprus	7.73	100.00	0.99	●
1	Netherlands	5.53	100.00	0.99	●
3	Niger (2014)	4.98	90.08	0.98	●
4	Switzerland	3.67	66.29	0.98	
5	Finland	3.63	65.59	0.97	●
6	Sweden	3.27	58.91	0.96	
7	Mali (2014)	3.12	56.30	0.95	●
8	Madagascar (2013)	2.90	52.19	0.94	●
9	Luxembourg	2.84	51.16	0.94	
10	Senegal (2014)	2.64	47.55	0.93	●
11	Burundi (2014)	2.62	47.10	0.92	●
12	Moldova, Rep.	2.46	44.32	0.91	●
13	Denmark	2.41	43.44	0.90	
14	Burkina Faso (2014)	2.38	42.86	0.90	●
15	Montenegro	2.35	42.21	0.89	●
16	Belgium	2.26	40.70	0.88	
17	France	2.25	40.42	0.87	
18	Estonia	2.22	39.95	0.86	
19	Sri Lanka	2.15	38.59	0.86	●
20	Norway	2.12	38.19	0.85	
21	Iceland	2.11	37.92	0.84	
22	Israel	2.09	37.55	0.83	
23	Qatar	2.02	36.31	0.82	
24	Austria	1.93	34.66	0.82	
25	Slovenia	1.87	33.50	0.81	
26	Romania	1.80	32.40	0.80	●
27	United Kingdom	1.80	32.35	0.79	
28	Lebanon (2014)	1.75	31.46	0.78	●
29	Italy	1.75	31.34	0.78	
30	Germany	1.70	30.56	0.77	
31	Spain	1.68	30.06	0.76	
32	Nigeria	1.67	29.97	0.75	●
33	Singapore	1.66	29.83	0.74	
34	Ethiopia (2012)	1.65	29.55	0.74	●
35	Russian Federation	1.65	29.51	0.73	
36	Croatia	1.64	29.48	0.72	
37	TFYR of Macedonia	1.63	29.16	0.71	
38	Malaysia	1.62	29.13	0.70	
39	Serbia	1.57	28.07	0.70	
40	Mongolia	1.56	28.00	0.69	
41	Jamaica	1.51	26.97	0.68	
42	Albania	1.49	26.75	0.67	
43	Japan	1.48	26.43	0.66	
44	Guinea (2013)	1.45	26.01	0.66	●
45	Brazil	1.44	25.75	0.65	
46	Peru	1.44	25.72	0.64	
47	Argentina	1.43	25.68	0.63	
48	Yemen (2014)	1.41	25.30	0.62	●
49	Saudi Arabia	1.36	24.31	0.62	
50	New Zealand	1.35	24.16	0.61	
51	Hungary	1.34	24.03	0.60	
52	United States of America	1.34	23.90	0.59	
53	Latvia	1.34	23.90	0.58	
54	Mauritius (2014)	1.33	23.81	0.58	
55	Benin (2014)	1.32	23.62	0.57	●
56	Ukraine	1.30	23.30	0.56	
57	Uganda	1.30	23.16	0.55	
58	Portugal	1.23	22.05	0.54	
59	Malawi (2014)	1.21	21.63	0.54	●
60	Poland	1.19	21.23	0.53	
61	Pakistan	1.12	19.95	0.52	●
62	Czech Republic	1.11	19.84	0.51	
63	South Africa	1.07	19.05	0.50	
64	Greece	1.07	19.02	0.50	
65	Bulgaria	1.07	19.02	0.49	
66	Indonesia	1.03	18.34	0.48	
67	Malta	0.98	17.43	0.47	
68	Philippines	0.97	17.20	0.46	
69	Australia	0.96	17.15	0.46	○
70	Canada	0.95	16.87	0.45	○
71	Colombia	0.95	16.85	0.44	
72	Mozambique	0.95	16.85	0.43	
73	Armenia	0.92	16.38	0.42	
74	Slovakia	0.90	15.98	0.42	
75	Chile (2014)	0.84	14.99	0.41	
76	Honduras	0.84	14.87	0.40	
77	Togo (2014)	0.84	14.84	0.39	
78	India	0.83	14.69	0.38	
79	Bosnia and Herzegovina	0.77	13.67	0.38	
80	Bolivia, Plurinational St.	0.75	13.35	0.37	
81	Côte d'Ivoire (2013)	0.74	13.16	0.36	
82	Kazakhstan	0.72	12.79	0.35	
83	Azerbaijan	0.72	12.78	0.34	
84	Costa Rica	0.72	12.78	0.34	
85	Ireland	0.68	12.08	0.33	○
86	Egypt (2014)	0.66	11.58	0.32	
87	Cambodia	0.66	11.56	0.31	
88	Lithuania	0.65	11.40	0.30	○
89	Belarus	0.64	11.24	0.30	
90	Kuwait	0.62	10.95	0.29	
91	Kyrgyzstan	0.61	10.81	0.28	
92	United Arab Emirates	0.61	10.73	0.27	○
93	Iran, Islamic Rep. (2014)	0.61	10.65	0.26	
94	Nepal (2014)	0.58	10.26	0.26	
95	Rwanda (2014)	0.54	9.51	0.25	
96	Morocco (2013)	0.53	9.31	0.24	
97	Georgia	0.53	9.25	0.23	
98	Botswana (2014)	0.52	9.11	0.22	
99	China	0.51	8.92	0.22	○
100	Korea, Rep.	0.47	8.15	0.21	○
101	Tajikistan	0.46	7.98	0.20	
102	Cameroon (2013)	0.45	7.88	0.19	
103	Namibia	0.45	7.87	0.18	
104	El Salvador	0.44	7.72	0.18	
105	Uruguay	0.41	7.07	0.17	○
106	Tunisia (2014)	0.41	7.03	0.16	○
107	Guatemala	0.40	6.88	0.15	
108	Zambia (2014)	0.37	6.45	0.14	
109	Tanzania, United Rep. (2014)	0.35	6.04	0.14	
110	Algeria (2014)	0.31	5.26	0.13	
111	Hong Kong (China) (2014)	0.31	5.21	0.12	○
112	Bahrain (2014)	0.30	5.10	0.11	
113	Brunei Darussalam (2009)	0.27	4.58	0.10	○
114	Panama	0.27	4.50	0.10	
115	Dominican Republic (2014)	0.26	4.43	0.09	
116	Oman (2014)	0.24	4.08	0.08	○
117	Thailand	0.23	3.91	0.07	○
118	Zimbabwe (2012)	0.19	3.17	0.06	
119	Bangladesh (2014)	0.14	2.25	0.06	
120	Kenya (2014)	0.14	2.23	0.05	○
121	Turkey	0.10	1.40	0.04	○
122	Trinidad and Tobago (2011)	0.05	0.60	0.03	○
123	Viet Nam (2014)	0.05	0.58	0.02	○
124	Ecuador	0.04	0.41	0.02	○
125	Mexico	0.04	0.35	0.01	○
126	Paraguay	0.02	0.00	0.00	○
n/a	Jordan	n/a	n/a	n/a	

SOURCE: World Trade Organization, *Trade in Commercial Services* database, based on the sixth (2009) edition of the International Monetary Fund's *Balance of Payments Manual* and *Balance of Payments* database

NOTE: ● indicates a strength; ○ a weakness

5.3.4 Foreign direct investment net inflows

Foreign direct investment (FDI), net inflows (% of GDP, three-year average) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Hong Kong (China)	43.65	100.00	1.00	●
2	Ireland	42.15	99.18	0.99	●
3	Mozambique	32.47	93.19	0.98	●
4	Luxembourg	28.68	90.42	0.98	●
5	Singapore	22.22	84.91	0.97	
6	Netherlands	21.01	83.73	0.96	●
7	Montenegro	12.79	73.99	0.95	●
8	Kyrgyzstan	10.26	70.09	0.94	●
9	Panama	10.13	69.88	0.94	●
10	Malta	9.51	68.81	0.93	
11	Cambodia	9.48	68.76	0.92	●
12	Georgia	9.26	68.37	0.91	●
13	Albania	9.07	68.03	0.90	●
14	Niger	8.90	67.72	0.90	●
15	Malawi	8.74	67.44	0.89	●
16	Chile	8.04	66.11	0.88	●
17	Trinidad and Tobago	7.97	65.99	0.87	●
18	Zambia	6.84	63.69	0.87	●
19	Mongolia	6.65	63.28	0.86	●
20	Namibia	6.36	62.66	0.85	●
21	Honduras	6.31	62.56	0.84	●
22	Costa Rica	5.97	61.78	0.83	●
23	Lebanon	5.81	61.41	0.83	●
24	Azerbaijan	5.69	61.15	0.82	●
25	Switzerland	5.61	60.95	0.81	
26	Viet Nam	5.41	60.48	0.80	●
27	Serbia	5.12	59.78	0.79	●
28	Jamaica	4.86	59.12	0.79	●
29	Jordan	4.79	58.97	0.78	●
30	Madagascar	4.65	58.59	0.77	●
31	Iceland	4.61	58.50	0.76	
32	Tanzania, United Rep.	4.42	57.99	0.75	●
33	Peru	4.23	57.49	0.75	●
34	Cyprus	4.22	57.49	0.74	
35	Colombia	4.20	57.42	0.73	
36	Uganda	4.01	56.92	0.72	●
37	Uruguay	4.00	56.89	0.71	●
38	Finland	3.95	56.74	0.71	
39	Moldova, Rep.	3.86	56.50	0.70	
40	Rwanda	3.70	56.05	0.69	●
41	Brazil	3.68	55.99	0.68	
42	Canada	3.68	55.99	0.67	
43	Kazakhstan	3.67	55.96	0.67	
44	Bulgaria	3.63	55.86	0.66	
45	Benin	3.62	55.83	0.65	●
46	Portugal	3.62	55.82	0.64	
47	Malaysia	3.45	55.32	0.63	
48	Israel	3.42	55.25	0.63	
49	Tajikistan	3.42	55.23	0.62	●
50	Morocco	3.20	54.59	0.61	
51	Latvia	3.19	54.55	0.60	
52	Dominican Republic	3.18	54.53	0.60	●
53	Australia	3.17	54.50	0.59	
54	Ethiopia	3.12	54.35	0.58	●
55	Bolivia, Plurinational St.	3.00	53.99	0.57	●
56	Brunei Darussalam	2.98	53.94	0.56	
57	Croatia	2.96	53.87	0.56	
58	Zimbabwe	2.95	53.85	0.55	●
59	Czech Republic	2.91	53.73	0.54	
60	Botswana	2.89	53.65	0.53	
61	Mexico	2.87	53.58	0.52	
62	Burkina Faso	2.86	53.57	0.52	●
63	Belarus	2.85	53.53	0.51	
64	Burundi	2.85	53.53	0.50	
65	Spain	2.84	53.50	0.49	
66	Armenia	2.76	53.26	0.48	
67	United Arab Emirates	2.70	53.06	0.48	
68	China	2.62	52.80	0.47	
69	Estonia	2.61	52.76	0.46	○
70	Indonesia	2.57	52.64	0.45	
71	Togo	2.50	52.44	0.44	●
72	Mauritius	2.49	52.39	0.44	
73	Thailand	2.43	52.21	0.43	
74	Senegal	2.42	52.18	0.42	
75	TFYR of Macedonia	2.40	52.10	0.41	
76	Poland	2.24	51.58	0.40	
77	Tunisia	2.23	51.53	0.40	
78	Ukraine	2.15	51.28	0.39	
79	Romania	2.13	51.18	0.38	
80	Bosnia and Herzegovina	2.12	51.17	0.37	
81	Guatemala	2.11	51.14	0.37	
82	Slovenia	2.07	50.99	0.36	○
83	United Kingdom	2.05	50.92	0.35	○
84	Cameroon	1.92	50.48	0.34	
85	Turkey	1.81	50.09	0.33	
86	Philippines	1.80	50.04	0.33	
87	India	1.77	49.94	0.32	
88	Egypt	1.71	49.74	0.31	
89	El Salvador	1.68	49.62	0.30	
90	United States of America	1.65	49.52	0.29	○
91	Bangladesh	1.65	49.50	0.29	
92	Lithuania	1.64	49.49	0.28	○
93	Argentina	1.59	49.32	0.27	
94	Russian Federation	1.55	49.17	0.26	○
95	Mali	1.54	49.13	0.25	
96	Kenya	1.49	48.95	0.25	
97	Guinea	1.49	48.93	0.24	●
98	South Africa	1.46	48.83	0.23	○
99	Hungary	1.36	48.46	0.22	○
100	Côte d'Ivoire	1.31	48.27	0.21	
101	Saudi Arabia	1.17	47.73	0.21	○
102	Germany	1.10	47.44	0.20	○
103	Sri Lanka	1.07	47.32	0.19	
104	Greece	0.99	47.00	0.18	○
105	Paraguay	0.97	46.93	0.17	
106	Ecuador	0.86	46.50	0.17	
107	Nigeria	0.85	46.46	0.16	
108	France	0.84	46.44	0.15	○
109	Italy	0.81	46.29	0.14	○
110	Sweden	0.67	45.71	0.13	○
111	Korea, Rep.	0.67	45.71	0.13	○
112	Slovakia	0.66	45.68	0.12	○
113	Pakistan	0.57	45.29	0.11	
114	Austria	0.55	45.20	0.10	○
115	Iran, Islamic Rep.	0.55	45.19	0.10	
116	New Zealand	0.51	45.05	0.09	○
117	Kuwait	0.46	44.82	0.08	○
118	Algeria	0.42	44.67	0.07	
119	Bahrain	0.40	44.58	0.06	○
120	Nepal	0.26	43.95	0.06	○
121	Qatar	0.24	43.88	0.05	○
122	Japan	0.20	43.66	0.04	○
123	Denmark	0.04	42.95	0.03	○
124	Oman	0.02	42.84	0.02	○
125	Norway	0.00	42.79	0.02	○
126	Yemen	−0.30	41.31	0.01	
127	Belgium	−4.55	0.00	0.00	○

SOURCE: International Monetary Fund, *International Financial Statistics* and *Balance of Payments* databases, World Bank, *International Debt Statistics*, and World Bank and OECD GDP estimates; extracted from the World Bank's *World Development Indicators* database

NOTE: ● indicates a strength; ○ a weakness

5.3.5 Research talent in business enterprise

Researchers in business enterprise, per thousand population (%) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Israel (2012)	83.68	100.00	1.00	●
2	Korea, Rep.	79.71	95.25	0.99	●
3	Japan	73.44	87.74	0.98	●
4	United States of America (2014)	71.01	84.84	0.96	
5	Costa Rica (2011)	69.18	82.65	0.95	●
6	Sweden	68.56	81.91	0.94	
7	Austria	63.70	76.10	0.93	●
8	Philippines (2013)	63.21	75.51	0.92	●
9	China	62.67	74.86	0.90	
10	United Arab Emirates	60.88	72.72	0.89	
11	France (2014)	60.52	72.29	0.88	
12	Hungary	59.35	70.90	0.87	●
13	Netherlands	59.08	70.57	0.86	
14	Malta	58.02	69.30	0.85	
15	Denmark	58.02	69.30	0.83	
16	Finland	56.77	67.80	0.82	
17	Germany	56.51	67.49	0.81	
18	Canada (2013)	56.01	66.90	0.80	
19	Ireland	53.82	64.27	0.79	
20	Slovenia	53.05	63.36	0.77	
21	Thailand	50.89	60.77	0.76	
22	Uganda (2010)	50.61	60.43	0.75	●
23	Singapore (2014)	50.51	60.32	0.74	
24	Czech Republic	50.32	60.09	0.73	
25	Norway	49.44	59.03	0.71	
26	Mali (2010)	49.04	58.56	0.70	●
27	Belgium	48.28	57.65	0.69	
28	Turkey (2014)	46.67	55.73	0.68	
29	Russian Federation	46.44	55.45	0.67	
30	Switzerland (2012)	46.16	55.12	0.65	
31	Iceland	41.81	49.91	0.64	
32	Hong Kong (China) (2014)	40.86	48.78	0.63	
33	India (2010)	38.73	46.22	0.62	
34	Italy	38.62	46.10	0.61	
35	Bulgaria	38.60	46.07	0.60	
36	United Kingdom	38.16	45.55	0.58	○
37	Spain	36.88	44.01	0.57	
38	Luxembourg	36.01	42.97	0.56	
39	Indonesia (2009)	35.54	42.41	0.55	
40	Poland	34.80	41.53	0.54	
41	New Zealand (2013)	34.08	40.66	0.52	
42	Ukraine	32.52	38.79	0.51	
43	Sri Lanka (2013)	30.67	36.58	0.50	
44	Portugal	28.96	34.54	0.49	
45	Qatar (2012)	27.97	33.35	0.48	
46	Australia (2010)	27.87	33.24	0.46	○
47	Estonia	27.52	32.82	0.45	○
48	Chile	27.37	32.64	0.44	
49	Brazil (2010)	25.94	30.93	0.43	
50	Mexico (2013)	24.48	29.18	0.42	
51	Romania	24.25	28.91	0.40	
52	Lithuania	22.71	27.06	0.39	
53	Cyprus	21.51	25.63	0.38	
54	Viet Nam (2013)	21.06	25.09	0.37	
55	South Africa (2013)	19.40	23.11	0.36	
56	Slovakia	19.36	23.06	0.35	
57	Montenegro (2014)	19.00	22.63	0.33	
58	Croatia	16.73	19.91	0.32	
59	Latvia	16.72	19.90	0.31	○
60	Iran, Islamic Rep. (2008)	14.96	17.80	0.30	
61	Ecuador (2008)	14.95	17.78	0.29	
62	Greece	14.34	17.05	0.27	○
63	TFYR of Macedonia (2014)	11.70	13.89	0.26	
64	Kenya (2010)	11.41	13.55	0.25	
65	Oman	10.58	12.56	0.24	
66	Malaysia (2014)	10.25	12.16	0.23	○
67	Serbia	9.59	11.37	0.21	
68	Moldova, Rep.	7.65	9.04	0.20	
69	Morocco (2014)	7.52	8.89	0.19	○
70	Namibia (2014)	6.95	8.21	0.18	
71	Bosnia and Herzegovina	6.51	7.68	0.17	
72	Argentina (2014)	6.20	7.32	0.15	
73	Egypt	5.44	6.40	0.14	
74	Zambia (2008)	4.85	5.70	0.13	
75	Tunisia	4.01	4.70	0.12	○
76	Malawi (2007)	1.73	1.96	0.11	
77	Botswana (2013)	1.05	1.15	0.10	○
78	Uruguay	0.94	1.03	0.08	○
79	Panama (2008)	0.86	0.93	0.07	○
80	Colombia (2014)	0.63	0.65	0.06	○
81	Ethiopia (2013)	0.48	0.48	0.05	
82	Bahrain (2014)	0.41	0.38	0.04	○
83	Bolivia, Plurinational St. (2010)	0.36	0.33	0.02	○
84	Mozambique	0.30	0.26	0.01	○
85	Senegal (2010)	0.09	0.00	0.00	○
n/a	Albania	n/a	n/a	n/a	
n/a	Algeria	n/a	n/a	n/a	
n/a	Armenia	n/a	n/a	n/a	
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Belarus	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Georgia	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kazakhstan	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Kyrgyzstan	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Mauritius	n/a	n/a	n/a	
n/a	Mongolia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Peru	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*
NOTE: ● indicates a strength; ○ a weakness

6.1.1 Patent applications by origin

Number of resident patent applications filed at a given national or regional patent office (per billion PPP$ GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	China	49.16	100.00	0.98	●
1	Germany	18.71	100.00	0.98	●
1	Japan	53.44	100.00	0.98	●
1	Korea, Rep.	90.26	100.00	0.98	●
5	Switzerland	17.74	94.85	0.97	
6	United States of America	15.99	85.44	0.96	
7	Finland	14.63	78.20	0.95	
8	Denmark	13.09	69.97	0.94	
9	Sweden	12.37	66.11	0.93	
10	Netherlands	11.06	59.12	0.93	
11	Austria	10.37	55.41	0.92	●
12	Iran, Islamic Rep. (2014)	10.07	53.81	0.91	●
13	Luxembourg	9.68	51.70	0.90	
14	France	9.41	50.28	0.89	
15	Russian Federation	7.94	42.41	0.89	●
16	United Kingdom	7.37	39.35	0.88	
17	New Zealand	7.05	37.66	0.87	
18	Ukraine	6.68	35.66	0.86	●
19	Kyrgyzstan	6.36	33.96	0.85	●
20	Belgium	6.04	32.25	0.85	
21	Malta	6.01	32.10	0.84	
22	Iceland	5.60	29.89	0.83	
23	Poland	5.21	27.84	0.82	●
24	Norway	4.66	24.90	0.81	
25	Armenia	4.53	24.18	0.80	●
26	Israel	4.50	24.05	0.80	
27	Belarus	4.23	22.59	0.79	●
28	Portugal	3.66	19.54	0.78	
29	Turkey	3.63	19.39	0.77	
30	Moldova, Rep.	3.57	19.04	0.76	
31	Latvia	3.37	17.98	0.76	
32	Czech Republic	3.23	17.25	0.75	
33	Singapore	3.11	16.58	0.74	
34	Mongolia	3.01	16.08	0.73	
35	Kazakhstan	2.89	15.40	0.72	
36	Georgia	2.77	14.80	0.72	
37	Ireland	2.74	14.60	0.71	
38	Spain	2.67	14.24	0.70	
39	Canada	2.62	13.96	0.69	
40	Hungary	2.58	13.75	0.68	
41	Romania	2.43	12.96	0.67	
42	Montenegro	2.31	12.30	0.67	
43	Bulgaria	2.28	12.17	0.66	
44	Greece	2.23	11.90	0.65	
45	Australia	2.01	10.70	0.64	
46	Croatia	1.95	10.39	0.63	
47	Serbia	1.86	9.92	0.63	
48	Slovenia	1.85	9.85	0.62	
49	Italy	1.83	9.76	0.61	
50	Slovakia	1.72	9.14	0.60	
51	Lithuania	1.70	9.03	0.59	
52	Estonia	1.65	8.77	0.59	
53	India	1.57	8.37	0.58	
54	Malaysia	1.56	8.28	0.57	
55	Cyprus	1.53	8.14	0.56	
56	Brazil	1.45	7.72	0.55	
57	Tunisia	1.41	7.53	0.54	
58	Lebanon	1.32	7.03	0.54	
59	Azerbaijan	1.30	6.92	0.53	
60	South Africa	1.22	6.51	0.52	
61	Viet Nam	1.05	5.58	0.51	
62	Bosnia and Herzegovina (2014)	1.05	5.57	0.50	
63	Chile	1.05	5.56	0.50	
64	Sri Lanka	0.98	5.18	0.49	
65	Kenya	0.96	5.11	0.48	
66	Thailand (2014)	0.94	5.00	0.47	
67	Morocco	0.82	4.33	0.46	
68	Brunei Darussalam (2014)	0.79	4.17	0.46	
69	Egypt (2014)	0.75	3.99	0.45	
70	Mozambique	0.72	3.81	0.44	●
71	Argentina	0.62	3.26	0.43	
72	Mexico	0.61	3.23	0.42	
73	Hong Kong (China)	0.57	3.03	0.41	○
74	Saudi Arabia	0.54	2.86	0.41	
75	Philippines	0.50	2.66	0.40	
76	Jordan	0.50	2.61	0.39	
77	Colombia	0.48	2.54	0.38	
78	Albania	0.43	2.25	0.37	
79	Senegal	0.41	2.14	0.37	
80	Paraguay (2010)	0.41	2.13	0.36	
81	Indonesia	0.37	1.95	0.35	
82	Cameroon	0.37	1.95	0.34	
83	Uruguay	0.36	1.87	0.33	
84	Zimbabwe	0.32	1.68	0.33	
85	Niger	0.32	1.65	0.32	
86	Côte d'Ivoire	0.30	1.57	0.31	
87	Malawi	0.29	1.53	0.30	
88	Togo (2014)	0.29	1.53	0.29	
89	Jamaica	0.28	1.48	0.28	
90	Mali (2014)	0.27	1.41	0.28	
91	Rwanda	0.24	1.27	0.27	
92	Zambia (2014)	0.23	1.21	0.26	
93	Costa Rica	0.23	1.17	0.25	
94	Burkina Faso	0.23	1.17	0.24	
95	Pakistan	0.22	1.16	0.24	
96	Benin	0.22	1.13	0.23	
97	Peru	0.17	0.88	0.22	
98	Panama	0.16	0.82	0.21	
99	Nepal	0.16	0.80	0.20	
100	Bahrain	0.16	0.79	0.20	
101	Algeria	0.15	0.78	0.19	
102	Dominican Republic	0.14	0.71	0.18	
103	El Salvador	0.13	0.67	0.17	
104	Bolivia, Plurinational St. (2014)	0.13	0.65	0.16	
105	Botswana (2014)	0.12	0.58	0.15	
106	Uganda	0.11	0.56	0.15	
107	Honduras	0.10	0.48	0.14	
108	Madagascar	0.08	0.41	0.13	
109	Tajikistan	0.08	0.41	0.12	
110	Bangladesh	0.07	0.34	0.11	
111	Trinidad and Tobago	0.07	0.32	0.11	
112	Yemen	0.07	0.31	0.10	
113	Guinea	0.07	0.31	0.09	
114	United Arab Emirates	0.06	0.30	0.08	○
115	Guatemala	0.06	0.26	0.07	
116	Nigeria (2013)	0.05	0.24	0.07	
117	Mauritius	0.04	0.18	0.06	○
118	Cambodia (2014)	0.04	0.17	0.05	○
119	TFYR of Macedonia (2014)	0.04	0.15	0.04	○
120	Qatar	0.03	0.13	0.03	○
121	Ecuador (2010)	0.03	0.12	0.02	○
122	Oman	0.02	0.09	0.02	○
123	Kuwait	0.02	0.05	0.01	○
124	Tanzania, United Rep.	0.01	0.00	0.00	○
n/a	Burundi	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	

SOURCE: World Intellectual Property Organization, *Intellectual Property Statistics*; International Monetary Fund, *World Economic Outlook Database*, October 2016 (PPP$ GDP)
NOTE: ● indicates a strength; ○ a weakness

6.1.2 PCT international applications by origin

Number of international patent applications filed by residents at the Patent Cooperation Treaty (per billion PPP$ GDP) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Japan	9.17	100.00	0.97	●
1	Korea, Rep.	8.07	100.00	0.97	●
1	Sweden	7.47	100.00	0.97	●
1	Switzerland	8.83	100.00	0.97	●
5	Luxembourg	7.34	98.25	0.96	
6	Finland	6.63	88.74	0.95	
7	Israel	6.19	82.85	0.94	
8	Netherlands	5.40	72.34	0.93	
9	Malta	5.33	71.38	0.92	
10	Denmark	5.11	68.34	0.91	
11	Germany	4.60	61.62	0.90	
12	Iceland	3.47	46.42	0.89	
13	Austria	3.42	45.75	0.88	
14	United States of America	3.05	40.80	0.87	
15	France	3.00	40.13	0.86	
16	Belgium	2.40	32.09	0.85	
17	China	2.03	27.14	0.84	
18	United Kingdom	1.97	26.36	0.83	
19	Singapore	1.81	24.14	0.83	
20	Norway	1.79	23.94	0.82	
21	New Zealand	1.76	23.47	0.81	
22	Australia	1.54	20.63	0.80	
23	Italy	1.51	20.21	0.79	
24	Canada	1.39	18.62	0.78	
25	Ireland	1.35	18.09	0.77	
26	Cyprus	1.23	16.44	0.76	
27	Slovenia	1.04	13.93	0.75	
28	Spain	0.89	11.88	0.74	
29	Trinidad and Tobago	0.87	11.64	0.73	●
30	Hungary	0.67	8.86	0.72	
31	Panama	0.64	8.58	0.71	
32	Turkey	0.64	8.52	0.70	
33	Estonia	0.62	8.26	0.69	
34	Portugal	0.62	8.25	0.68	
35	Czech Republic	0.57	7.55	0.67	
36	Moldova, Rep.	0.54	7.18	0.66	
37	Ukraine	0.47	6.19	0.65	
38	Latvia	0.45	6.01	0.64	
39	Chile	0.45	6.00	0.63	
40	Bulgaria	0.44	5.85	0.62	
41	Croatia	0.41	5.50	0.61	
42	South Africa	0.39	5.17	0.60	
43	Greece	0.38	5.07	0.59	
44	Georgia	0.35	4.61	0.58	
45	Armenia	0.34	4.49	0.57	
46	Lithuania	0.33	4.32	0.56	
47	Poland	0.33	4.32	0.55	
48	Slovakia	0.33	4.31	0.54	
49	Russian Federation	0.23	3.00	0.53	
50	Malaysia	0.22	2.90	0.52	
51	Montenegro	0.19	2.48	0.51	
52	Brazil	0.18	2.38	0.50	
53	Senegal	0.18	2.31	0.50	
54	India	0.18	2.30	0.49	
55	Saudi Arabia	0.17	2.24	0.48	
56	Brunei Darussalam	0.15	1.94	0.47	
57	Serbia	0.15	1.93	0.46	
58	Colombia	0.14	1.87	0.45	
59	Morocco	0.14	1.80	0.44	
60	Thailand	0.13	1.74	0.43	
61	Mexico	0.12	1.62	0.42	
62	United Arab Emirates	0.12	1.58	0.41	
63	Belarus	0.10	1.33	0.40	
64	TFYR of Macedonia	0.10	1.28	0.39	
65	Romania	0.10	1.23	0.38	
66	Bosnia and Herzegovina	0.09	1.21	0.37	
67	Bahrain	0.09	1.16	0.36	
68	Namibia	0.07	0.94	0.35	
69	Zimbabwe	0.07	0.90	0.34	
70	Sri Lanka	0.07	0.85	0.33	
71	Dominican Republic	0.06	0.78	0.32	
72	Albania (2015)	0.06	0.77	0.31	
73	Madagascar (2014)	0.06	0.74	0.30	
74	Uganda (2014)	0.05	0.66	0.29	
75	Niger (2015)	0.05	0.66	0.28	
76	Kazakhstan	0.05	0.65	0.27	
77	Costa Rica	0.05	0.63	0.26	
78	Ecuador	0.05	0.61	0.25	
79	Kyrgyzstan (2015)	0.05	0.61	0.24	
80	Rwanda (2015)	0.05	0.61	0.23	
81	Peru	0.05	0.60	0.22	
82	Malawi	0.05	0.58	0.21	
83	Benin (2014)	0.05	0.57	0.20	
84	Tunisia	0.05	0.57	0.19	
85	Iran, Islamic Rep.	0.04	0.53	0.18	
86	Qatar	0.04	0.51	0.17	
87	Oman	0.04	0.49	0.17	
88	Egypt	0.04	0.47	0.16	
89	Philippines	0.04	0.44	0.15	
90	Mozambique	0.03	0.33	0.14	
91	Botswana	0.03	0.32	0.13	
92	Mongolia	0.03	0.32	0.12	
93	Kenya	0.03	0.30	0.11	○
94	Cameroon	0.03	0.30	0.10	
95	Honduras	0.02	0.26	0.09	○
96	Côte d'Ivoire	0.02	0.26	0.08	
97	Algeria	0.02	0.21	0.07	
98	El Salvador	0.02	0.20	0.06	○
99	Azerbaijan	0.02	0.19	0.05	○
100	Viet Nam	0.02	0.18	0.04	○
101	Guatemala	0.02	0.15	0.03	○
102	Tanzania, United Rep. (2015)	0.01	0.14	0.02	
103	Indonesia	0.00	0.02	0.01	○
104	Nigeria	0.00	0.00	0.00	○
n/a	Argentina	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Hong Kong (China)	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Mauritius	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Uruguay	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	

SOURCE: World Intellectual Property Organization, *Intellectual Property Statistics*; International Monetary Fund, *World Economic Outlook Database*, October 2016 (PPP$ GDP)

NOTE: ● indicates a strength; ○ a weakness

6.1.3 Utility model applications by origin

Number of utility model applications filed by residents at the national patent office (per billion PPP$ GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	China	56.85	100.00	0.95	●
1	Korea, Rep.	4.48	100.00	0.95	●
1	Moldova, Rep.	9.25	100.00	0.95	●
1	Ukraine	24.95	100.00	0.95	●
5	Mongolia	4.12	92.03	0.94	●
6	Czech Republic	4.04	90.12	0.92	●
7	Tajikistan	3.74	83.60	0.90	●
8	Russian Federation	3.06	68.27	0.89	●
9	Germany	2.68	59.78	0.87	
10	Slovakia	2.31	51.45	0.85	●
11	Belarus	2.26	50.38	0.84	●
12	Turkey	2.16	48.09	0.82	●
13	Armenia	2.13	47.29	0.81	●
14	Estonia	2.02	44.90	0.79	
15	Bulgaria	1.92	42.61	0.77	
16	Thailand	1.87	41.59	0.76	
17	Finland	1.82	40.37	0.74	
18	Georgia	1.71	37.93	0.73	
19	Austria	1.40	30.98	0.71	
20	Spain	1.38	30.45	0.69	
21	Italy (2014)	1.10	24.24	0.68	
22	Japan	1.08	23.72	0.66	
23	Philippines	1.06	23.37	0.65	
24	Hong Kong (China)	1.06	23.26	0.63	
25	Poland	0.99	21.72	0.61	
26	Kazakhstan	0.97	21.41	0.60	
27	Australia	0.97	21.37	0.58	
28	Hungary	0.84	18.46	0.56	
29	Brazil	0.81	17.85	0.55	
30	Kenya	0.80	17.55	0.53	
31	Croatia	0.80	17.52	0.52	
32	Kyrgyzstan	0.69	15.05	0.50	
33	Serbia	0.59	12.89	0.48	
34	Uruguay	0.56	12.19	0.47	
35	Viet Nam	0.56	12.14	0.45	
36	Peru	0.51	10.91	0.44	
37	Denmark	0.46	9.97	0.42	○
38	Portugal	0.40	8.61	0.40	○
39	Colombia	0.29	6.06	0.39	
40	Mexico	0.26	5.37	0.37	
41	Rwanda	0.24	5.05	0.35	
42	Chile	0.20	4.02	0.34	
43	Slovenia (2010)	0.16	3.09	0.32	○
44	Bolivia, Plurinational St. (2014)	0.16	3.08	0.31	
45	Argentina	0.15	2.92	0.29	
46	Azerbaijan (2014)	0.14	2.81	0.27	
47	Burkina Faso (2010)	0.14	2.66	0.26	
48	Romania	0.14	2.65	0.24	○
49	El Salvador (2014)	0.14	2.65	0.23	
50	Ecuador (2010)	0.13	2.52	0.21	
51	Malaysia	0.13	2.40	0.19	○
52	Costa Rica	0.11	1.96	0.18	○
53	Indonesia	0.10	1.85	0.16	
54	Guatemala	0.09	1.52	0.15	
55	France	0.08	1.29	0.13	○
56	Honduras	0.07	1.21	0.11	
57	Dominican Republic	0.07	1.07	0.10	
58	Panama	0.06	0.85	0.08	
59	Greece	0.03	0.35	0.06	○
60	Albania (2014)	0.03	0.28	0.05	○
61	Botswana (2014)	0.03	0.22	0.03	○
62	Trinidad and Tobago (2014)	0.02	0.07	0.02	○
63	Yemen (2014)	0.02	0.00	0.00	○
n/a	Algeria	n/a	n/a	n/a	
n/a	Bahrain	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Belgium	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Bosnia and Herzegovina	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Canada	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Cyprus	n/a	n/a	n/a	
n/a	Egypt	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Iceland	n/a	n/a	n/a	
n/a	India	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Ireland	n/a	n/a	n/a	
n/a	Israel	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Latvia	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Lithuania	n/a	n/a	n/a	
n/a	Luxembourg	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Malta	n/a	n/a	n/a	
n/a	Mauritius	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Morocco	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Netherlands	n/a	n/a	n/a	
n/a	New Zealand	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Norway	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Senegal	n/a	n/a	n/a	
n/a	Singapore	n/a	n/a	n/a	
n/a	South Africa	n/a	n/a	n/a	
n/a	Sri Lanka	n/a	n/a	n/a	
n/a	Sweden	n/a	n/a	n/a	
n/a	Switzerland	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Tunisia	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	United Kingdom	n/a	n/a	n/a	
n/a	United States of America	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: World Intellectual Property Organization, *Intellectual Property Statistics*; International Monetary Fund, *World Economic Outlook Database*, October 2016 (PPP$ GDP)
NOTE: ● indicates a strength; ○ a weakness

6.1.4 Scientific and technical publications

Number of scientific and technical journal articles (per billion PPP$ GDP) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Iceland	71.10	100.00	1.00	●
2	Denmark	66.80	93.91	0.99	●
3	Switzerland	58.07	81.54	0.98	●
4	Slovenia	55.45	77.83	0.98	●
5	Finland	55.04	77.24	0.97	●
6	Sweden	52.85	74.14	0.96	
7	New Zealand	50.85	71.31	0.95	
8	Serbia	49.19	68.96	0.94	●
9	Australia	48.75	68.33	0.94	
10	Estonia	47.57	66.66	0.93	
11	Israel	45.82	64.17	0.92	
12	Portugal	45.49	63.71	0.91	●
13	Netherlands	42.90	60.04	0.90	
14	United Kingdom	41.63	58.24	0.90	
15	Cyprus	40.98	57.32	0.89	
16	Belgium	40.13	56.12	0.88	
17	Canada	37.24	52.02	0.87	
18	Austria	36.09	50.39	0.86	
19	Croatia	35.24	49.19	0.86	●
20	Norway	34.97	48.80	0.85	
21	Czech Republic	34.67	48.37	0.84	
22	Greece	33.39	46.57	0.83	●
23	Spain	32.10	44.74	0.82	
24	Tunisia	31.83	44.36	0.82	●
25	Korea, Rep.	29.19	40.61	0.81	
26	Armenia	28.95	40.28	0.80	●
27	Italy	27.61	38.37	0.79	
28	Singapore	26.06	36.18	0.78	
29	Germany	25.66	35.61	0.78	
30	France	25.34	35.16	0.77	
31	Hungary	25.30	35.11	0.76	
32	Poland	25.09	34.81	0.75	
33	Lithuania	24.79	34.38	0.74	
34	Ireland	23.26	32.21	0.74	
35	Iran, Islamic Rep.	21.54	29.77	0.73	●
36	Montenegro	21.48	29.69	0.72	
37	Malawi	20.73	28.62	0.71	●
38	United States of America	19.84	27.36	0.70	
39	Slovakia	19.58	27.00	0.70	
40	Luxembourg	18.73	25.79	0.69	
41	Chile	18.45	25.40	0.68	
42	Malta	17.90	24.61	0.67	
43	Turkey	17.47	24.01	0.66	
44	South Africa	17.15	23.56	0.66	
45	Romania	16.49	22.62	0.65	
46	Jordan	16.03	21.97	0.64	
47	Georgia	16.02	21.96	0.63	
48	Lebanon	15.72	21.53	0.62	
49	Zimbabwe	15.64	21.41	0.62	●
50	Bulgaria	15.28	20.90	0.61	
51	Japan	15.14	20.70	0.60	
52	Latvia	14.90	20.37	0.59	
53	TFYR of Macedonia	14.24	19.43	0.58	
54	China	14.09	19.22	0.58	
55	Brazil	13.55	18.45	0.57	
56	Uruguay	13.24	18.02	0.56	
57	Moldova, Rep.	13.16	17.90	0.55	
58	Malaysia	12.32	16.71	0.54	
59	Ukraine	12.23	16.57	0.54	
60	Uganda	12.05	16.32	0.53	
61	Kenya	11.58	15.65	0.52	
62	Benin	11.31	15.28	0.51	
63	Burkina Faso	10.61	14.29	0.50	●
64	Cameroon	10.60	14.28	0.50	●
65	Senegal	10.30	13.84	0.49	
66	Bosnia and Herzegovina	10.23	13.74	0.48	
67	Egypt	9.75	13.06	0.47	
68	Argentina	9.60	12.85	0.46	
69	Rwanda	9.51	12.73	0.46	
70	Russian Federation	8.84	11.78	0.45	
71	Pakistan	8.73	11.62	0.44	
72	Nepal	8.54	11.36	0.43	●
73	Botswana	8.22	10.90	0.42	
74	Saudi Arabia	7.96	10.53	0.42	
75	Costa Rica	7.46	9.82	0.41	
76	Mozambique	7.45	9.80	0.40	
77	Ethiopia	7.06	9.25	0.39	
78	Morocco	6.97	9.13	0.38	
79	India	6.90	9.02	0.38	
80	Togo	6.72	8.77	0.37	
81	Namibia	6.66	8.69	0.36	
82	Jamaica	6.62	8.63	0.35	
83	Mongolia	6.55	8.53	0.34	
84	Thailand	6.51	8.48	0.34	
85	Belarus	6.47	8.42	0.33	
86	Qatar	6.33	8.23	0.32	
87	Tanzania, United Rep.	6.20	8.04	0.31	
88	Brunei Darussalam	6.14	7.95	0.30	
89	Ecuador	6.03	7.80	0.30	
90	Niger	6.02	7.78	0.29	
91	Colombia	6.00	7.75	0.28	
92	Madagascar	5.84	7.53	0.27	
93	Mexico	5.84	7.52	0.26	
94	Viet Nam	5.63	7.23	0.26	
95	Kyrgyzstan	5.57	7.14	0.25	
96	Zambia	5.43	6.95	0.24	
97	Algeria	5.36	6.85	0.23	
98	Albania	5.20	6.62	0.22	
99	Cambodia	5.02	6.37	0.22	
100	Mauritius	4.64	5.83	0.21	
101	Mali	4.62	5.80	0.20	
102	Panama	4.53	5.67	0.19	
103	Oman	4.24	5.25	0.18	
104	Burundi	3.93	4.82	0.18	
105	Sri Lanka	3.53	4.26	0.17	
106	United Arab Emirates	3.51	4.23	0.16	○
107	Trinidad and Tobago	3.28	3.90	0.15	
108	Azerbaijan	3.23	3.83	0.14	
109	Bolivia, Plurinational St.	3.17	3.74	0.14	
110	Bangladesh	2.89	3.35	0.13	
111	Côte d'Ivoire	2.86	3.30	0.12	
112	Yemen	2.82	3.24	0.11	
113	Peru	2.71	3.10	0.10	○
114	Bahrain	2.68	3.05	0.10	○
115	Kuwait	2.64	3.00	0.09	○
116	Tajikistan	2.56	2.87	0.08	
117	Nigeria	2.34	2.57	0.07	
118	Kazakhstan	1.84	1.86	0.06	○
119	Paraguay	1.64	1.57	0.06	○
120	Philippines	1.58	1.49	0.05	○
121	Guatemala	1.25	1.03	0.04	○
122	Honduras	1.18	0.92	0.03	○
123	El Salvador	1.11	0.83	0.02	○
124	Indonesia	0.69	0.23	0.02	○
125	Guinea	0.68	0.22	0.01	○
126	Dominican Republic	0.53	0.00	0.00	○
n/a	Hong Kong (China)	n/a	n/a	n/a	

SOURCE: *Clarivate Analytics*, special tabulations from Thomson Reuters, Web of Science, Science Citation Index (SCI) and Social Sciences Citation Index (SSCI); International Monetary Fund, *World Economic Outlook Database*, October 2016

NOTE: ● indicates a strength; ○ a weakness

6.1.5 Citable documents H index

The H index is the economy's number of published articles (H) that have received at least H citations | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United Kingdom	1,099.00	100.00	0.99	●
1	United States of America	1,783.00	100.00	0.99	●
3	Germany	961.00	87.10	0.98	●
4	France	878.00	79.35	0.98	●
5	Canada	862.00	77.85	0.97	●
6	Japan	797.00	71.78	0.96	
7	Italy	766.00	68.88	0.95	●
8	Netherlands	752.00	67.57	0.94	
9	Switzerland	744.00	66.82	0.94	
10	Australia	709.00	63.55	0.93	
11	Sweden	666.00	59.53	0.92	
12	Spain	648.00	57.85	0.91	●
13	Belgium	593.00	52.71	0.90	
14	China	563.00	49.91	0.90	
15	Denmark	558.00	49.44	0.89	
16	Israel	536.00	47.38	0.88	
17	Austria	487.00	42.80	0.87	
18	Finland	479.00	42.06	0.87	
19	Korea, Rep.	476.00	41.78	0.86	
20	Norway	439.00	38.32	0.85	
21	India	426.00	37.10	0.84	●
22	Russian Federation	421.00	36.64	0.83	●
23	Brazil	412.00	35.79	0.83	●
24	Poland	401.00	34.77	0.82	●
25	Hong Kong (China)	392.00	33.93	0.80	
25	Singapore	392.00	33.93	0.80	
27	New Zealand	387.00	33.46	0.79	
28	Ireland	364.00	31.31	0.79	
29	Greece	354.00	30.37	0.78	
30	Portugal	334.00	28.50	0.77	
31	Hungary	329.00	28.04	0.76	
32	Czech Republic	322.00	27.38	0.75	
33	South Africa	320.00	27.20	0.75	
34	Mexico	316.00	26.82	0.74	
35	Argentina	300.00	25.33	0.73	●
36	Turkey	296.00	24.95	0.72	
37	Chile	257.00	21.31	0.71	
38	Thailand	236.00	19.35	0.71	
39	Iceland	218.00	17.66	0.70	
40	Slovenia	204.00	16.36	0.69	
41	Iran, Islamic Rep.	199.00	15.89	0.68	●
42	Saudi Arabia	195.00	15.51	0.67	
42	Slovakia	195.00	15.51	0.67	
44	Croatia	194.00	15.42	0.66	
45	Malaysia	190.00	15.05	0.65	
46	Ukraine	188.00	14.86	0.64	
47	Romania	187.00	14.77	0.63	
48	Colombia	186.00	14.67	0.63	
49	Estonia	185.00	14.58	0.62	
50	Bulgaria	184.00	14.49	0.60	
50	Egypt	184.00	14.49	0.60	
52	Kenya	179.00	14.02	0.60	
53	Pakistan	166.00	12.80	0.59	●
54	Philippines	163.00	12.52	0.58	
55	Indonesia	155.00	11.78	0.57	
56	Peru	154.00	11.68	0.56	
57	Lithuania	144.00	10.75	0.56	
58	Panama	142.00	10.56	0.54	
58	Viet Nam	142.00	10.56	0.54	
60	Lebanon	138.00	10.19	0.53	
61	Costa Rica	137.00	10.09	0.52	
62	Armenia	135.00	9.91	0.52	
63	Bangladesh	134.00	9.81	0.51	●
64	Belarus	133.00	9.72	0.50	
65	Uruguay	132.00	9.63	0.49	
66	Nigeria	131.00	9.53	0.48	●
67	United Arab Emirates	130.00	9.44	0.48	
68	Morocco	129.00	9.35	0.47	
69	Uganda	128.00	9.25	0.46	
70	Cyprus	127.00	9.16	0.45	
71	Tunisia	123.00	8.79	0.44	
72	Tanzania, United Rep.	122.00	8.69	0.44	
73	Sri Lanka	120.00	8.50	0.43	
74	Serbia	118.00	8.32	0.42	
75	Georgia	114.00	7.94	0.40	
75	Luxembourg	114.00	7.94	0.40	
77	Jordan	112.00	7.76	0.39	
77	Latvia	112.00	7.76	0.39	
79	Ecuador	111.00	7.66	0.38	
80	Kuwait	108.00	7.38	0.37	
81	Algeria	106.00	7.20	0.37	
82	Malawi	104.00	7.01	0.36	
83	Ethiopia	101.00	6.73	0.35	
84	Zimbabwe	99.00	6.54	0.34	
85	Senegal	95.00	6.17	0.33	
86	Cameroon	94.00	6.07	0.32	
86	Nepal	94.00	6.07	0.32	
88	Zambia	92.00	5.89	0.31	
89	Oman	91.00	5.79	0.30	
90	Côte d'Ivoire	89.00	5.61	0.29	
91	Bolivia, Plurinational St.	88.00	5.51	0.29	
92	Qatar	86.00	5.33	0.28	
93	Malta	83.00	5.05	0.27	○
94	Burkina Faso	82.00	4.95	0.26	
95	TFYR of Macedonia	81.00	4.86	0.25	○
96	Moldova, Rep.	80.00	4.77	0.25	
97	Botswana	79.00	4.67	0.24	
98	Trinidad and Tobago	76.00	4.39	0.23	
99	Jamaica	75.00	4.30	0.21	
99	Mali	75.00	4.30	0.21	
101	Madagascar	74.00	4.21	0.21	
102	Mozambique	73.00	4.11	0.20	
103	Cambodia	72.00	4.02	0.17	
103	Mongolia	72.00	4.02	0.17	
103	Namibia	72.00	4.02	0.17	
106	Guatemala	69.00	3.74	0.17	
107	Kazakhstan	68.00	3.64	0.16	
108	Benin	65.00	3.36	0.15	
109	Azerbaijan	64.00	3.27	0.14	
110	Bosnia and Herzegovina	61.00	2.99	0.13	○
111	Paraguay	60.00	2.90	0.13	
112	Niger	59.00	2.80	0.12	
113	Bahrain	55.00	2.43	0.11	
114	Mauritius	54.00	2.34	0.10	○
114	Rwanda	54.00	2.34	0.10	
116	Brunei Darussalam	52.00	2.15	0.09	○
117	Dominican Republic	51.00	2.06	0.07	○
117	Honduras	51.00	2.06	0.07	○
119	Yemen	50.00	1.96	0.06	
120	Albania	48.00	1.78	0.06	○
121	Guinea	46.00	1.59	0.05	
122	Kyrgyzstan	45.00	1.50	0.04	○
123	El Salvador	44.00	1.40	0.03	○
124	Togo	39.00	0.93	0.02	○
125	Burundi	32.00	0.28	0.01	○
125	Montenegro	32.00	0.28	0.01	○
127	Tajikistan	29.00	0.00	0.00	○

SOURCE: SCImago (2017) SJR—SCImago Journal & Country Rank. Retrieved February 2017

NOTE: ● indicates a strength; ○ a weakness

6.2.1 Growth rate of GDP per person engaged

Growth rate of GDP per person engaged (constant 1990 PPP$) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Viet Nam	6.90	100.00	1.00	●
2	China	6.63	97.65	0.99	●
3	Ethiopia	5.56	88.46	0.98	●
4	Côte d'Ivoire	5.43	87.39	0.97	●
5	India	5.20	85.45	0.96	●
6	Ireland	5.05	84.12	0.95	●
7	Cambodia	4.99	83.60	0.95	●
8	Romania	4.68	80.93	0.94	●
9	Indonesia	4.62	80.44	0.93	●
10	Mozambique	4.42	78.71	0.92	●
11	Sri Lanka	4.33	77.98	0.91	●
12	Zambia	4.31	77.77	0.90	●
13	Dominican Republic	4.29	77.64	0.89	●
14	Tanzania, United Rep.	4.07	75.75	0.88	●
15	Philippines	4.03	75.40	0.87	●
16	Bangladesh	3.85	73.82	0.86	●
17	Tajikistan	3.77	73.10	0.85	●
18	Iran, Islamic Rep.	3.57	71.46	0.85	●
19	Thailand	2.98	66.41	0.84	●
20	Czech Republic	2.97	66.26	0.83	
21	Niger	2.87	65.40	0.82	●
22	Kenya	2.83	65.06	0.81	●
23	Bolivia, Plurinational St.	2.82	65.03	0.80	●
24	Mali	2.75	64.36	0.79	●
25	Malta	2.73	64.25	0.78	
26	Morocco	2.71	64.08	0.77	●
27	Bulgaria	2.61	63.19	0.76	
28	Sweden	2.57	62.85	0.75	
29	Kyrgyzstan	2.55	62.71	0.75	●
30	Pakistan	2.52	62.44	0.74	●
31	Armenia	2.40	61.37	0.73	
32	Georgia	2.38	61.24	0.72	
33	Cameroon	2.37	61.14	0.71	●
34	Luxembourg	2.27	60.30	0.70	
35	Poland	2.20	59.70	0.69	
36	Uganda	2.19	59.56	0.68	●
37	Algeria	2.01	58.05	0.67	●
38	Burkina Faso	1.90	57.10	0.66	●
39	Peru	1.83	56.50	0.65	
40	Malawi	1.76	55.88	0.65	●
41	Slovakia	1.59	54.42	0.64	
42	Slovenia	1.43	53.04	0.63	
43	Turkey	1.42	52.98	0.62	
44	Latvia	1.37	52.55	0.61	
45	TFYR of Macedonia	1.34	52.35	0.60	
46	Bosnia and Herzegovina	1.30	51.98	0.59	
47	United Arab Emirates	1.29	51.85	0.58	
48	Korea, Rep.	1.28	51.79	0.57	
49	Senegal	1.28	51.79	0.56	
50	Uruguay	1.24	51.47	0.55	
51	Madagascar	1.13	50.53	0.55	
52	Netherlands	1.08	50.05	0.54	○
53	Saudi Arabia	1.04	49.70	0.53	
54	Norway	1.01	49.50	0.52	○
55	Hong Kong (China)	1.00	49.37	0.51	
56	Guatemala	1.00	49.36	0.50	
57	Kazakhstan	0.99	49.33	0.49	
58	Malaysia	0.92	48.70	0.48	
59	New Zealand	0.91	48.59	0.47	○
60	Finland	0.90	48.51	0.46	○
61	Germany	0.85	48.14	0.45	○
62	Australia	0.85	48.07	0.45	○
63	France	0.81	47.73	0.44	○
64	Bahrain	0.80	47.67	0.43	
65	United Kingdom	0.79	47.56	0.42	○
66	Cyprus	0.72	46.95	0.41	
67	United States of America	0.71	46.91	0.40	○
68	Colombia	0.68	46.63	0.39	
69	Egypt	0.68	46.62	0.38	
70	Qatar	0.60	45.98	0.37	
71	Belgium	0.46	44.73	0.36	○
72	Jordan	0.44	44.61	0.35	
73	Montenegro	0.41	44.31	0.35	
74	Serbia	0.41	44.31	0.34	
75	Canada	0.32	43.54	0.33	○
76	Lithuania	0.31	43.43	0.32	
77	Chile	0.29	43.27	0.31	○
78	Spain	0.27	43.11	0.30	○
79	Austria	0.23	42.78	0.29	○
80	Italy	0.20	42.56	0.28	○
81	Iceland	0.18	42.33	0.27	○
82	Israel	0.15	42.12	0.26	○
83	Mexico	0.12	41.87	0.25	
84	Hungary	0.10	41.69	0.25	○
85	Japan	0.07	41.43	0.24	○
86	Portugal	0.07	41.39	0.23	○
87	Denmark	0.06	41.30	0.22	○
88	Costa Rica	–0.02	40.64	0.21	
89	Croatia	–0.04	40.43	0.20	○
90	Argentina	–0.16	39.40	0.19	
91	Singapore	–0.21	39.01	0.18	○
92	Tunisia	–0.43	37.08	0.17	○
93	Jamaica	–0.46	36.89	0.16	
94	Switzerland	–0.63	35.44	0.15	○
95	Azerbaijan	–0.66	35.12	0.15	
96	Oman	–0.74	34.47	0.14	
97	Ukraine	–0.93	32.80	0.13	○
98	Trinidad and Tobago	–0.98	32.40	0.12	
99	Ecuador	–1.10	31.42	0.11	
100	Kuwait	–1.28	29.82	0.10	○
101	Estonia	–1.76	25.76	0.09	○
102	Greece	–2.11	22.71	0.08	○
103	Zimbabwe	–2.42	20.08	0.07	
104	Belarus	–2.43	19.95	0.06	○
105	South Africa	–2.54	19.04	0.05	○
106	Albania	–2.68	17.82	0.05	○
107	Nigeria	–2.69	17.73	0.04	○
108	Moldova, Rep.	–3.52	10.60	0.03	○
109	Brazil	–4.07	5.91	0.02	○
110	Russian Federation	–4.76	0.00	0.00	○
110	Yemen	–31.13	0.00	0.00	○
n/a	Benin	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Mauritius	n/a	n/a	n/a	
n/a	Mongolia	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Panama	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	

SOURCE: The Conference Board Total Economy Database™ Output, Labor and Labor Productivity, 1950–2016, May 2016
NOTE: ● indicates a strength; ○ a weakness

6.2.2 New business density

New business density (new registrations per thousand population 15–64 years old) | 2014

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Hong Kong (China)	31.30	100.00	0.99	●
1	Malta	17.26	100.00	0.99	●
3	New Zealand	16.63	96.35	0.98	●
4	Estonia	16.05	92.99	0.97	●
5	Australia	14.91	86.38	0.96	●
6	Panama (2012)	14.10	81.69	0.95	●
7	Cyprus	13.70	79.37	0.94	●
8	Botswana	13.11	75.95	0.93	●
9	United Kingdom (2012)	12.90	74.73	0.92	
10	Latvia	10.61	61.46	0.91	●
11	Singapore	9.51	55.09	0.90	
12	Iceland	9.48	54.92	0.89	
13	Bulgaria	8.86	51.32	0.88	●
14	Chile	8.03	46.51	0.88	●
15	Norway	7.72	44.72	0.87	
16	Sweden	6.87	39.79	0.86	
17	Montenegro	6.85	39.68	0.85	●
18	South Africa (2012)	6.54	37.86	0.84	●
19	Mongolia	6.31	36.55	0.83	●
20	Luxembourg (2012)	6.10	35.33	0.82	
21	Ireland	5.78	33.48	0.81	
22	Georgia	5.65	32.72	0.80	
23	Netherlands	5.34	30.93	0.79	
24	Mauritius	5.14	29.77	0.78	●
25	Croatia	4.63	26.81	0.77	
26	Portugal	4.62	26.75	0.76	
27	Slovenia	4.44	25.71	0.75	
28	Denmark	4.36	25.25	0.74	
29	Russian Federation	4.20	24.32	0.73	
30	Lithuania	4.19	24.26	0.72	
31	Romania	4.07	23.57	0.71	
32	TFYR of Macedonia	3.70	21.42	0.70	
33	Hungary	3.66	21.19	0.69	
34	Finland	3.43	19.86	0.68	
35	Czech Republic	3.42	19.80	0.67	
36	Israel	3.11	18.00	0.66	
37	Slovakia	3.10	17.94	0.65	
38	Spain	2.97	17.19	0.64	
39	Brazil	2.88	16.67	0.63	
40	Switzerland (2012)	2.53	14.64	0.63	
41	Uruguay (2012)	2.49	14.41	0.62	
42	Peru	2.44	14.12	0.61	
43	Malaysia	2.37	13.71	0.60	
44	Italy	2.32	13.42	0.59	
45	Korea, Rep.	2.30	13.31	0.58	
46	France	2.26	13.08	0.57	○
47	Belgium (2013)	2.05	11.86	0.56	
48	Colombia (2012)	2.00	11.57	0.55	
49	Kenya	1.80	10.41	0.54	
50	Kazakhstan (2012)	1.71	9.89	0.53	
51	Qatar	1.70	9.83	0.52	
52	Moldova, Rep. (2009)	1.63	9.43	0.51	
53	Serbia	1.62	9.37	0.50	
54	Morocco	1.54	8.91	0.49	
55	Armenia	1.52	8.79	0.47	
55	Tunisia (2013)	1.52	8.79	0.47	
57	Rwanda	1.49	8.62	0.46	
58	United Arab Emirates (2012)	1.38	7.98	0.45	
59	Zambia	1.33	7.69	0.44	●
60	Germany (2013)	1.29	7.46	0.43	○
61	Canada	1.28	7.40	0.42	○
62	Dominican Republic	1.20	6.93	0.41	
63	Uganda (2012)	1.17	6.76	0.40	
64	Turkey	1.13	6.53	0.39	
65	Albania (2013)	1.11	6.41	0.38	
66	Costa Rica	1.10	6.36	0.38	
67	Kyrgyzstan	1.08	6.24	0.37	
68	Belarus	1.05	6.07	0.36	
69	Oman (2013)	1.02	5.89	0.35	
70	Jamaica	1.00	5.78	0.34	
71	Azerbaijan	0.99	5.72	0.32	
71	Jordan	0.99	5.72	0.32	
73	Mexico	0.94	5.43	0.31	
74	Ukraine (2012)	0.92	5.31	0.30	
75	Thailand	0.90	5.20	0.29	
76	Namibia (2012)	0.85	4.91	0.28	
77	Bosnia and Herzegovina	0.83	4.79	0.27	
78	Greece (2010)	0.77	4.42	0.26	○
79	Nigeria	0.76	4.39	0.25	
80	Austria	0.73	4.21	0.24	○
81	Madagascar	0.70	4.04	0.23	
82	Nepal	0.69	3.98	0.22	
83	Algeria	0.58	3.34	0.21	
84	Bolivia, Plurinational St.	0.57	3.28	0.20	
85	Poland (2009)	0.53	3.05	0.19	○
86	El Salvador	0.52	2.99	0.17	
86	Guatemala (2012)	0.52	2.99	0.17	
88	Sri Lanka (2012)	0.51	2.94	0.16	
89	Argentina	0.43	2.47	0.15	
90	Senegal	0.30	1.72	0.14	
91	Indonesia (2012)	0.29	1.66	0.13	
92	Philippines (2012)	0.27	1.55	0.13	○
93	Tajikistan (2012)	0.26	1.49	0.11	
93	Togo	0.26	1.49	0.11	
95	Cambodia (2009)	0.22	1.24	0.10	
96	Burkina Faso (2012)	0.15	0.85	0.08	
96	Japan	0.15	0.85	0.08	○
98	Guinea	0.13	0.73	0.07	
99	Egypt (2009)	0.13	0.72	0.06	○
100	India	0.12	0.68	0.05	○
101	Bangladesh (2012)	0.09	0.50	0.04	○
102	Malawi (2009)	0.08	0.44	0.03	○
103	Pakistan	0.04	0.21	0.02	○
104	Ethiopia (2009)	0.03	0.15	0.01	○
105	Niger (2009)	0.00	0.00	0.00	○
n/a	Bahrain	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	China	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Ecuador	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	United States of America	n/a	n/a	n/a	
n/a	Viet Nam	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: World Bank, *Doing Business 2016, Entrepreneurship*
NOTE: ● indicates a strength; ○ a weakness

6.2.3 Total computer software spending

Total computer software spending (% of GDP) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United States of America	1.09	100.00	1.00	●
2	Ireland	0.83	75.82	0.99	●
3	Canada	0.80	72.98	0.98	●
4	United Kingdom	0.77	70.23	0.98	●
5	Switzerland	0.74	67.71	0.97	
6	Ukraine	0.70	63.48	0.96	●
7	Spain	0.66	59.88	0.95	●
8	Belgium	0.65	59.24	0.94	●
9	Norway	0.64	58.20	0.94	
10	Netherlands	0.63	57.77	0.93	
11	Portugal	0.62	56.77	0.92	●
12	Denmark	0.62	56.35	0.91	
13	France	0.60	54.54	0.90	
14	Austria	0.59	54.12	0.90	
15	Italy	0.58	53.07	0.89	●
16	Sweden	0.58	52.80	0.88	
17	Greece	0.58	52.41	0.87	●
18	Turkey	0.55	49.68	0.86	●
19	Finland	0.55	49.67	0.85	
20	Germany	0.55	49.65	0.85	
21	Kuwait	0.44	40.24	0.84	●
22	Montenegro	0.43	38.54	0.83	●
23	Saudi Arabia	0.41	37.25	0.82	●
24	Zimbabwe	0.41	36.75	0.81	●
25	Malta	0.40	36.40	0.81	
26	China	0.40	36.39	0.80	
27	Bahrain	0.39	35.74	0.79	
28	Hong Kong (China)	0.38	34.46	0.78	
29	Malaysia	0.37	33.91	0.77	
30	South Africa	0.37	33.45	0.77	
31	Qatar	0.35	31.68	0.76	
32	Iceland	0.34	31.07	0.75	
33	Sri Lanka	0.34	30.48	0.74	●
34	Singapore	0.34	30.46	0.73	
35	Russian Federation	0.33	30.06	0.73	
36	Indonesia	0.33	29.80	0.72	●
37	United Arab Emirates	0.33	29.42	0.71	
38	Jamaica	0.32	28.59	0.70	●
39	Viet Nam	0.32	28.57	0.69	
40	Tunisia	0.31	28.05	0.69	●
41	Czech Republic	0.31	27.93	0.68	
42	Hungary	0.31	27.75	0.67	
43	Slovakia	0.30	27.24	0.66	
44	Poland	0.30	26.96	0.65	
45	Romania	0.30	26.76	0.65	
46	Egypt	0.30	26.63	0.64	●
47	Thailand	0.29	26.05	0.63	
48	Bulgaria	0.28	25.57	0.62	
49	Chile	0.28	25.39	0.61	
50	Korea, Rep.	0.28	25.37	0.60	
51	Australia	0.28	25.20	0.60	
52	Costa Rica	0.28	24.97	0.59	
53	Israel	0.28	24.92	0.58	
54	Jordan	0.28	24.88	0.57	
55	Honduras	0.27	24.45	0.56	●
56	Senegal	0.27	24.44	0.56	
57	Mexico	0.26	23.66	0.55	
58	New Zealand	0.26	23.61	0.54	
59	Pakistan	0.26	23.60	0.53	●
60	Japan	0.26	23.11	0.52	
61	Philippines	0.25	22.83	0.52	
62	Morocco	0.25	22.47	0.51	
63	Ecuador	0.25	22.39	0.50	
64	Peru	0.24	21.79	0.49	
65	Uruguay	0.24	21.47	0.48	
66	India	0.24	21.33	0.48	
67	Iran, Islamic Rep.	0.24	21.20	0.47	
68	Argentina	0.23	20.45	0.46	
69	Colombia	0.21	18.80	0.45	
70	Panama	0.21	18.51	0.44	
71	Bolivia, Plurinational St.	0.21	18.31	0.44	
72	Brazil	0.20	18.17	0.43	
73	Luxembourg	0.19	16.74	0.42	
74	Kenya	0.17	15.45	0.41	
75	Mauritius	0.17	15.44	0.40	
76	Cameroon	0.17	15.12	0.40	
77	Bangladesh	0.17	14.95	0.39	
78	Cyprus	0.17	14.80	0.38	
79	Estonia	0.16	13.73	0.37	○
80	TFYR of Macedonia	0.15	12.97	0.36	
81	Nigeria	0.13	11.19	0.35	
82	Mongolia	0.13	11.16	0.35	
83	Moldova, Rep.	0.12	10.88	0.34	
84	Namibia	0.12	10.38	0.33	
85	Botswana	0.12	10.23	0.32	
86	Albania	0.12	10.13	0.31	
87	Latvia	0.11	9.90	0.31	○
88	Armenia	0.11	9.26	0.30	
89	Bosnia and Herzegovina	0.10	8.81	0.29	
90	Kyrgyzstan	0.10	8.28	0.28	
91	Georgia	0.10	8.16	0.27	
92	Slovenia	0.09	8.07	0.27	○
93	Togo	0.08	7.14	0.26	
94	Burundi	0.08	6.95	0.25	
95	Tajikistan	0.08	6.47	0.24	
96	Lithuania	0.08	6.45	0.23	○
97	Azerbaijan	0.06	4.98	0.23	
98	Croatia	0.06	4.64	0.22	○
99	Oman	0.05	4.21	0.21	
100	Rwanda	0.05	4.12	0.20	
101	Benin	0.05	4.07	0.19	
102	Malawi	0.05	4.03	0.19	
103	Serbia	0.05	3.62	0.18	○
104	Lebanon	0.05	3.57	0.17	
105	El Salvador	0.05	3.56	0.16	
106	Paraguay	0.04	3.50	0.15	
107	Guinea	0.04	3.49	0.15	
108	Belarus	0.04	3.11	0.14	○
109	Niger	0.04	2.82	0.13	
110	Burkina Faso	0.03	2.56	0.12	
111	Mali	0.03	2.56	0.11	
112	Cambodia	0.03	2.51	0.10	
113	Mozambique	0.03	2.31	0.10	
114	Zambia	0.03	2.24	0.09	
115	Madagascar	0.03	2.12	0.08	
116	Nepal	0.02	1.59	0.07	
117	Dominican Republic	0.02	1.56	0.06	○
118	Yemen	0.02	1.55	0.06	
119	Kazakhstan	0.02	1.39	0.05	○
120	Côte d'Ivoire	0.02	1.24	0.04	○
121	Guatemala	0.02	1.01	0.03	○
122	Uganda	0.02	0.83	0.02	○
123	Tanzania, United Rep.	0.01	0.44	0.02	○
124	Algeria	0.01	0.41	0.01	○
125	Ethiopia	0.01	0.00	0.00	○
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	

SOURCE: IHS Global Insight, *Information and Communication Technology Database*
NOTE: ● indicates a strength; ○ a weakness

6.2.4 ISO 9001 quality certificates

ISO 9001 Quality management systems—Requirements: Number of certificates issued (per billion PPP$ GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Italy	61.08	100.00	1.00	●
2	Romania	49.49	81.02	0.99	●
3	Bulgaria	39.68	64.96	0.98	●
4	Slovakia	35.23	57.67	0.98	●
5	Malta	32.76	53.64	0.97	●
6	Israel	31.85	52.14	0.96	
7	Czech Republic	31.50	51.57	0.95	●
8	Estonia	30.06	49.21	0.94	●
9	Cyprus	29.25	47.88	0.94	●
10	Croatia	27.71	45.36	0.93	●
11	Portugal	25.83	42.28	0.92	●
12	Serbia	25.71	42.09	0.91	●
13	Switzerland	25.29	41.40	0.90	
14	Slovenia	23.22	38.02	0.90	●
15	Latvia	22.77	37.28	0.89	
16	Hungary	22.35	36.60	0.88	●
17	Belarus	21.73	35.58	0.87	●
18	Greece	21.59	35.35	0.87	●
19	Spain	20.22	33.11	0.86	
20	Bosnia and Herzegovina	19.38	31.74	0.85	●
21	Colombia	18.48	30.25	0.84	●
22	Uruguay	18.04	29.53	0.83	●
23	Lithuania	15.00	24.56	0.83	●
24	United Kingdom	14.86	24.33	0.82	
25	China	14.85	24.32	0.81	
26	Malaysia	14.63	23.96	0.80	
27	Germany	13.73	22.48	0.79	
28	Chile	12.48	20.43	0.79	
29	TFYR of Macedonia	12.48	20.43	0.78	●
30	Netherlands	12.35	20.22	0.77	
31	Singapore	12.24	20.04	0.76	
32	Australia	11.95	19.57	0.75	
33	Finland	11.54	18.89	0.75	
34	Austria	11.04	18.07	0.74	
35	Poland	10.61	17.36	0.73	
36	France	10.44	17.10	0.72	
37	Japan	9.73	15.92	0.71	
38	Mauritius	9.70	15.88	0.71	
39	Sweden	9.09	14.88	0.70	
40	Albania	8.54	13.99	0.69	●
41	Montenegro	8.43	13.80	0.68	
42	Argentina	8.04	13.17	0.67	
43	Tunisia	7.84	12.84	0.67	
44	Thailand	7.82	12.81	0.66	
45	United Arab Emirates	7.68	12.57	0.65	
46	Ireland	7.62	12.47	0.64	
47	Lebanon	7.58	12.41	0.63	
48	Viet Nam	7.50	12.27	0.63	
49	Moldova, Rep.	7.25	11.86	0.62	
50	Denmark	7.21	11.80	0.61	
51	Belgium	7.20	11.78	0.60	
52	New Zealand	7.16	11.73	0.60	
53	Norway	6.91	11.31	0.59	
54	Ecuador	6.89	11.29	0.58	●
55	Korea, Rep.	6.47	10.59	0.57	
56	Hong Kong (China)	6.06	9.92	0.56	
57	South Africa	5.99	9.80	0.56	
58	Bahrain	5.84	9.57	0.55	
59	Paraguay	5.51	9.02	0.54	●
60	Brazil	5.48	8.97	0.53	
61	Turkey	5.35	8.76	0.52	
62	Iceland	4.94	8.09	0.52	
63	Zimbabwe	4.64	7.59	0.51	●
64	Kenya	4.61	7.55	0.50	
65	India	4.54	7.43	0.49	
66	Luxembourg	4.50	7.37	0.48	
67	Honduras	4.18	6.84	0.48	
68	El Salvador	4.17	6.82	0.47	
69	Jordan	4.09	6.70	0.46	
70	Canada	3.93	6.43	0.45	○
71	Costa Rica	3.74	6.13	0.44	
72	Sri Lanka	3.58	5.87	0.44	
73	Morocco	3.54	5.79	0.43	
74	Mexico	3.33	5.45	0.42	
75	Peru	3.31	5.42	0.41	
76	Oman	3.21	5.25	0.40	
77	Bolivia, Plurinational St.	3.10	5.07	0.40	
78	Ukraine	3.09	5.06	0.39	
79	Brunei Darussalam	3.07	5.03	0.38	
80	Indonesia	3.02	4.95	0.37	
81	Philippines	2.96	4.84	0.37	
82	Madagascar	2.70	4.42	0.36	
83	Pakistan	2.67	4.37	0.35	
84	Trinidad and Tobago	2.65	4.33	0.34	
85	Russian Federation	2.44	3.99	0.33	
86	Georgia	2.38	3.90	0.33	
87	Egypt	2.36	3.87	0.32	
88	Panama	2.25	3.69	0.31	
89	Benin	2.18	3.57	0.30	
90	Qatar	2.12	3.47	0.29	
91	Côte d'Ivoire	2.03	3.33	0.29	
92	Togo	2.02	3.31	0.28	
93	Iran, Islamic Rep.	1.91	3.13	0.27	
94	United States of America	1.84	3.00	0.26	○
95	Saudi Arabia	1.79	2.93	0.25	
96	Guatemala	1.78	2.92	0.25	
97	Namibia	1.76	2.88	0.24	
98	Mozambique	1.71	2.80	0.23	
99	Senegal	1.66	2.72	0.22	
100	Burkina Faso	1.62	2.65	0.21	
101	Azerbaijan	1.43	2.34	0.21	
102	Nepal	1.40	2.29	0.20	
103	Dominican Republic	1.29	2.11	0.19	
104	Kuwait	1.19	1.94	0.18	
105	Uganda	1.10	1.80	0.17	
106	Kazakhstan	1.07	1.75	0.17	
107	Armenia	1.06	1.74	0.16	
108	Jamaica	1.05	1.72	0.15	
109	Algeria	0.98	1.60	0.14	
110	Cameroon	0.95	1.55	0.13	
111	Malawi	0.83	1.36	0.13	
112	Zambia	0.80	1.31	0.12	
113	Tanzania, United Rep.	0.79	1.29	0.11	
114	Bangladesh	0.78	1.28	0.10	
115	Cambodia	0.74	1.20	0.10	
116	Ethiopia	0.61	1.00	0.09	
117	Guinea	0.59	0.96	0.08	
118	Mongolia	0.50	0.81	0.07	○
119	Botswana	0.43	0.70	0.06	○
120	Niger	0.42	0.69	0.06	
121	Yemen	0.29	0.48	0.05	
122	Nigeria	0.18	0.30	0.04	○
123	Mali	0.17	0.28	0.03	○
124	Tajikistan	0.17	0.27	0.02	○
125	Rwanda	0.15	0.24	0.02	○
126	Kyrgyzstan	0.05	0.08	0.01	○
127	Burundi	0.00	0.00	0.00	○

SOURCE: International Organization for Standardization, *The ISO Survey 2015*; International Monetary Fund, *World Economic Outlook Database*, October 2016 (PPP$ GDP)
NOTE: ● indicates a strength; ○ a weakness

6.2.5 High-tech and medium-high-tech output

High-tech and medium-high-tech output (% of total manufactures output) | 2014

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Switzerland	0.65	100.00	1.00	●
2	Singapore	0.65	99.72	0.99	●
3	Hungary	0.58	88.97	0.98	●
4	Slovakia	0.58	88.38	0.97	●
5	Ireland (2013)	0.55	84.74	0.96	●
6	Germany	0.54	83.01	0.95	
7	Czech Republic	0.52	79.97	0.94	●
8	Korea, Rep.	0.52	79.79	0.93	
9	Japan (2012)	0.50	76.49	0.92	
10	Slovenia	0.47	71.88	0.91	●
11	Sweden	0.46	69.58	0.90	
12	Qatar (2013)	0.44	66.55	0.89	●
13	United States of America (2008)	0.43	65.58	0.88	
14	China (2011)	0.43	65.36	0.87	
15	Austria	0.43	65.07	0.86	
16	Mexico (2013)	0.42	63.52	0.85	●
17	Denmark	0.42	62.85	0.84	
18	Philippines (2012)	0.41	61.98	0.83	●
19	Thailand (2011)	0.41	61.60	0.82	
20	Netherlands	0.39	58.47	0.81	
21	Brazil (2013)	0.38	57.40	0.80	●
22	Finland	0.38	56.54	0.79	
23	France	0.37	55.87	0.78	
24	Oman	0.37	55.05	0.77	●
25	United Kingdom	0.36	54.58	0.76	
26	Italy	0.36	54.41	0.75	
27	Romania (2013)	0.36	54.14	0.74	
28	Malaysia (2012)	0.36	53.58	0.73	
29	Saudi Arabia (2009)	0.36	53.41	0.72	
30	Estonia	0.35	52.82	0.71	
31	Belgium	0.35	51.90	0.70	
32	Norway	0.34	51.45	0.69	
33	Spain	0.33	49.71	0.68	
34	Tunisia (2007)	0.32	47.75	0.67	
35	Poland	0.32	47.19	0.66	
36	Iran, Islamic Rep.	0.31	45.50	0.65	●
37	Israel	0.30	44.06	0.64	
38	Canada	0.29	43.52	0.63	
39	Algeria (2010)	0.29	42.91	0.62	●
40	India	0.29	42.82	0.61	
41	Belarus	0.29	42.02	0.60	
42	Morocco (2013)	0.28	41.86	0.59	
43	Indonesia (2013)	0.28	41.69	0.58	
44	South Africa (2010)	0.27	40.07	0.57	
45	Serbia	0.27	38.87	0.56	
46	Viet Nam (2012)	0.26	38.22	0.55	
47	Portugal	0.26	37.95	0.54	
48	Turkey	0.25	36.70	0.53	
49	Australia (2013)	0.25	36.59	0.52	
50	Malta (2010)	0.24	35.60	0.51	
51	Russian Federation	0.24	35.52	0.50	
52	Pakistan (2006)	0.24	34.36	0.50	
53	Hong Kong (China)	0.23	32.67	0.49	
54	Lebanon (2007)	0.22	31.63	0.48	
55	Jordan (2013)	0.21	30.81	0.47	
56	Ukraine	0.20	29.23	0.46	
57	Bulgaria	0.20	28.58	0.45	
58	Colombia (2012)	0.20	28.49	0.44	
59	TFYR of Macedonia (2011)	0.20	27.77	0.43	
60	Egypt (2012)	0.19	27.45	0.42	
61	Lithuania	0.19	26.21	0.41	
62	Luxembourg	0.18	25.40	0.40	
63	Chile (2013)	0.17	23.85	0.39	
64	Senegal (2012)	0.16	21.60	0.38	
65	Latvia (2013)	0.16	21.59	0.37	
66	Cyprus	0.15	20.36	0.36	
67	Kazakhstan (2013)	0.15	19.68	0.35	
68	Uruguay (2011)	0.14	19.62	0.34	
69	Kuwait (2013)	0.14	18.94	0.33	
70	Ecuador (2008)	0.14	18.80	0.32	
71	Ethiopia	0.14	18.11	0.31	
72	Paraguay (2010)	0.13	17.83	0.30	
73	New Zealand (2012)	0.13	17.50	0.29	○
74	Azerbaijan (2013)	0.13	17.19	0.28	
75	Greece	0.13	17.13	0.27	○
76	Georgia (2013)	0.13	16.82	0.26	
77	Costa Rica (2013)	0.12	15.67	0.25	
78	Kenya (2013)	0.11	14.24	0.24	
79	Bosnia and Herzegovina (2011)	0.11	14.16	0.23	
80	Moldova, Rep. (2013)	0.10	12.77	0.22	
81	Bahrain (2013)	0.10	12.75	0.21	
82	Tanzania, United Rep. (2010)	0.10	12.46	0.20	
83	Peru (2011)	0.09	11.27	0.19	○
84	Bangladesh (2011)	0.09	10.98	0.18	
85	Bolivia, Plurinational St. (2010)	0.09	10.45	0.17	
86	Malawi (2012)	0.09	10.28	0.16	
87	Mauritius (2012)	0.08	9.54	0.15	○
88	Albania (2013)	0.08	8.98	0.14	
89	Panama (2013)	0.08	8.81	0.13	
90	Iceland (2006)	0.07	7.90	0.12	○
91	Nepal (2011)	0.07	7.23	0.11	
92	Sri Lanka (2012)	0.06	6.35	0.10	○
93	Mongolia (2011)	0.06	5.34	0.09	○
94	Namibia (2013)	0.05	4.01	0.08	○
95	Kyrgyzstan (2013)	0.04	3.39	0.07	
96	Cameroon (2008)	0.04	3.37	0.06	○
97	Armenia (2013)	0.04	2.94	0.05	○
98	Burundi (2012)	0.04	2.52	0.04	
99	Brunei Darussalam (2010)	0.03	0.82	0.03	○
100	Tajikistan (2013)	0.02	0.49	0.02	○
101	Madagascar (2006)	0.02	0.37	0.01	○
102	Yemen (2012)	0.02	0.00	0.00	○
n/a	Argentina	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Croatia	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: United Nations Industrial Development Organization (UNIDO), *Industrial Statistics Database*, 3- and 4-digit level of International Standard Industrial Classification ISIC Revision 3 (INDSTAT4 2016); OECD, Directorate for Science, Technology and Industry, Economic Analysis and Statistics Division, 'ISIC REV. 3 Technology Intensity Definition: Classification of Manufacturing Industries into Categories Based on R&D Intensities', 7 July 2011

NOTE: ● indicates a strength; ○ a weakness

6.3.1 Intellectual property receipts

Charges for use of intellectual property n.i.e., receipts (% of total trade) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United States of America	5.09	100.00	1.00	●
2	Japan	4.71	96.20	0.99	●
3	Sweden	4.21	90.88	0.98	●
4	Switzerland	3.82	86.32	0.97	
5	Netherlands	3.71	84.98	0.96	●
6	Finland	2.90	74.02	0.95	
7	Iceland	2.82	72.79	0.94	
8	Ireland	2.39	65.92	0.93	
9	Malta	2.13	61.41	0.93	
10	United Kingdom	1.98	58.58	0.92	
11	France	1.88	56.50	0.91	
12	Denmark	1.41	46.66	0.90	
13	Hungary	1.41	46.56	0.89	●
14	Korea, Rep.	1.04	37.47	0.88	
15	Luxembourg	0.98	35.71	0.87	
16	Germany	0.94	34.54	0.86	
17	Israel	0.87	32.65	0.85	
18	Canada	0.83	31.30	0.84	
19	Belgium	0.78	30.02	0.83	
20	Singapore	0.69	27.18	0.82	
21	New Zealand	0.63	25.29	0.81	
22	Italy	0.58	23.39	0.80	
23	United Arab Emirates	0.50	20.92	0.79	
24	Madagascar (2013)	0.46	19.17	0.79	●
25	Austria	0.45	18.86	0.78	
26	Spain	0.43	18.12	0.77	
27	Yemen (2009)	0.40	17.00	0.76	●
28	Kenya (2014)	0.39	16.80	0.75	●
29	Norway	0.38	16.48	0.74	
30	El Salvador	0.33	14.61	0.73	●
31	Australia	0.32	13.89	0.72	
32	Czech Republic	0.31	13.69	0.71	
33	Egypt (2007)	0.25	11.36	0.70	●
34	Brazil	0.25	11.26	0.69	
35	Argentina	0.24	10.64	0.68	
36	Bolivia, Plurinational St.	0.23	10.46	0.67	●
37	Russian Federation	0.22	9.86	0.66	
38	Croatia	0.20	9.13	0.65	
39	Serbia	0.20	9.03	0.64	
40	Slovenia	0.19	8.62	0.64	
41	Poland	0.18	8.47	0.63	
42	Bosnia and Herzegovina	0.18	8.35	0.62	
43	Ukraine	0.18	8.17	0.61	
44	TFYR of Macedonia	0.16	7.45	0.60	
45	Bulgaria	0.13	6.32	0.59	
46	Moldova, Rep.	0.13	6.15	0.58	
47	Romania	0.12	5.75	0.57	
48	Tunisia (2014)	0.12	5.52	0.56	
49	Portugal	0.11	5.01	0.55	
50	South Africa	0.11	4.98	0.54	
51	Jamaica	0.10	4.91	0.53	
52	Chile (2014)	0.10	4.85	0.52	
53	India	0.10	4.82	0.51	
54	Hong Kong (China) (2014)	0.10	4.75	0.50	
55	Guatemala	0.10	4.74	0.50	
56	Colombia	0.10	4.63	0.49	
57	Greece	0.09	4.32	0.48	
58	Mexico	0.07	3.56	0.47	
59	Lebanon (2014)	0.07	3.56	0.46	
60	Thailand	0.07	3.45	0.45	
61	Belarus	0.07	3.40	0.44	
62	Lithuania	0.07	3.38	0.43	
63	Senegal (2014)	0.07	3.28	0.42	
64	Uganda	0.07	3.20	0.41	
65	Estonia	0.07	3.16	0.40	○
66	Peru	0.05	2.48	0.39	
67	China	0.05	2.35	0.38	
68	Mongolia	0.05	2.30	0.37	
69	Albania	0.05	2.29	0.36	
70	Latvia	0.04	2.01	0.36	
71	Pakistan	0.04	2.00	0.35	
72	Mauritius (2014)	0.04	1.99	0.34	
73	Malaysia	0.04	1.98	0.33	
74	Montenegro	0.04	1.80	0.32	
75	Slovakia	0.03	1.61	0.31	○
76	Indonesia	0.03	1.57	0.30	
77	Kyrgyzstan (2014)	0.03	1.48	0.29	
78	Zimbabwe (2012)	0.03	1.28	0.28	
79	Costa Rica (2014)	0.02	1.19	0.27	
80	Burkina Faso (2014)	0.02	1.10	0.26	
81	Panama	0.02	1.07	0.25	
82	Iran, Islamic Rep. (2014)	0.01	0.72	0.24	
83	Rwanda (2009)	0.01	0.71	0.23	
84	Philippines	0.01	0.69	0.22	
85	Honduras	0.01	0.53	0.21	
86	Cyprus (2014)	0.01	0.48	0.21	○
87	Burundi (2013)	0.01	0.44	0.20	
88	Georgia	0.01	0.37	0.19	
89	Tajikistan (2013)	0.01	0.35	0.18	
90	Guinea (2008)	0.01	0.31	0.17	
91	Côte d'Ivoire (2013)	0.01	0.28	0.16	
92	Cambodia	0.00	0.20	0.15	
93	Ethiopia (2010)	0.00	0.17	0.14	
94	Mali (2012)	0.00	0.16	0.13	
95	Morocco (2013)	0.00	0.13	0.12	○
96	Cameroon (2013)	0.00	0.12	0.11	
97	Uruguay	0.00	0.11	0.10	○
98	Bangladesh (2014)	0.00	0.11	0.09	
99	Botswana (2014)	0.00	0.10	0.08	○
100	Namibia (2014)	0.00	0.10	0.07	○
101	Kazakhstan	0.00	0.09	0.07	○
102	Mozambique (2012)	0.00	0.07	0.06	
103	Togo (2010)	0.00	0.04	0.05	
104	Algeria (2014)	0.00	0.03	0.04	
105	Benin (2014)	0.00	0.01	0.03	○
106	Niger (2007)	0.00	0.01	0.02	
107	Azerbaijan (2012)	0.00	0.01	0.01	○
108	Tanzania, United Rep. (2007)	0.00	0.00	0.00	○
n/a	Armenia	n/a	n/a	n/a	
n/a	Bahrain	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	Ecuador	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Sri Lanka	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Turkey	n/a	n/a	n/a	
n/a	Viet Nam	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	

SOURCE: World Trade Organization, *Trade in Commercial Services* database, based on the sixth (2009) edition of the International Monetary Fund's *Balance of Payments Manual* and *Balance of Payments* database

NOTE: ● indicates a strength; ○ a weakness

6.3.2 High-tech exports

High-tech net exports (% of total trade) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	China	29.38	100.00	0.99	●
1	Malaysia	32.31	100.00	0.99	●
3	Singapore	29.08	98.97	0.98	●
4	Viet Nam	26.83	91.32	0.98	●
5	Korea, Rep.	24.79	84.36	0.97	
6	Panama (2011)	17.12	58.25	0.96	●
7	Czech Republic	16.72	56.90	0.95	●
8	Israel	15.76	53.62	0.94	
9	Thailand	15.23	51.82	0.94	●
10	Mexico	14.79	50.32	0.93	●
11	France	14.45	49.17	0.92	●
12	Switzerland	14.43	49.11	0.91	
13	Germany	13.93	47.41	0.90	
14	Hungary	13.89	47.28	0.90	●
15	Netherlands	13.00	44.22	0.89	
16	Japan	12.82	43.62	0.88	
17	Estonia	11.66	39.68	0.87	
18	Ireland	11.66	39.66	0.86	
19	Belgium	11.07	37.68	0.85	
20	Slovakia	9.32	31.72	0.85	●
21	United Kingdom	9.23	31.39	0.84	
22	Austria	9.18	31.22	0.83	
23	Sweden	9.04	30.75	0.82	
24	Latvia	8.05	27.37	0.81	
25	Poland	7.25	24.67	0.81	
26	United States of America	7.10	24.16	0.80	
27	Denmark	6.83	23.25	0.79	
28	Lithuania	6.10	20.75	0.78	
29	Romania	6.04	20.53	0.77	
30	Kazakhstan	5.91	20.12	0.77	●
31	Italy	5.65	19.22	0.76	
32	Canada	5.63	19.15	0.75	
33	Costa Rica	5.12	17.42	0.74	
34	Finland	5.03	17.11	0.73	
35	Slovenia	4.97	16.91	0.73	
36	Malta	4.71	16.01	0.72	
37	Tunisia	4.34	14.76	0.71	●
38	Brazil	4.06	13.81	0.70	
39	Spain	3.98	13.52	0.69	
40	Croatia	3.86	13.11	0.69	
41	Norway	3.85	13.11	0.68	
42	Bulgaria	3.70	12.57	0.67	
43	Indonesia	3.49	11.87	0.66	
44	Russian Federation	3.41	11.60	0.65	
45	India	3.19	10.86	0.65	
46	Ukraine	3.11	10.57	0.64	
47	Niger (2014)	2.95	10.02	0.63	
48	Portugal	2.62	8.89	0.62	
49	El Salvador	2.40	8.16	0.61	●
50	Uruguay	2.28	7.76	0.60	
51	Greece	2.27	7.72	0.60	
52	South Africa	2.27	7.70	0.59	
53	Serbia	2.19	7.44	0.58	
54	TFYR of Macedonia	2.16	7.33	0.57	
55	Australia	2.04	6.93	0.56	
56	Argentina	2.03	6.91	0.56	
57	Belarus	1.76	5.98	0.55	
58	Namibia (2014)	1.61	5.46	0.54	
59	Morocco	1.53	5.19	0.53	
60	Colombia	1.52	5.15	0.52	
61	Guatemala	1.52	5.14	0.52	
62	Brunei Darussalam	1.39	4.72	0.51	
63	Bosnia and Herzegovina	1.38	4.70	0.50	
64	New Zealand	1.37	4.66	0.49	
65	Iceland	1.34	4.55	0.48	
66	Turkey	1.32	4.48	0.48	
67	Kyrgyzstan	1.20	4.07	0.47	
68	Dominican Republic	1.13	3.82	0.46	
69	Cambodia	0.93	3.15	0.45	
70	Chile	0.81	2.73	0.44	
71	Pakistan	0.73	2.47	0.44	
72	Luxembourg	0.68	2.31	0.43	
73	Jordan	0.67	2.27	0.42	
74	Moldova, Rep.	0.62	2.08	0.41	
75	Zambia	0.61	2.06	0.40	
76	Côte d'Ivoire	0.58	1.95	0.40	
77	Montenegro	0.57	1.93	0.39	
78	Senegal	0.56	1.90	0.38	
79	Kenya (2013)	0.56	1.88	0.37	
80	Honduras (2014)	0.53	1.79	0.36	
81	Iran, Islamic Rep. (2011)	0.53	1.78	0.35	
82	Botswana	0.51	1.73	0.35	
83	Georgia	0.51	1.72	0.34	
84	Peru	0.51	1.72	0.33	
85	Oman (2014)	0.49	1.65	0.32	
86	Cyprus	0.48	1.61	0.31	
87	Ecuador	0.46	1.54	0.31	
88	Paraguay	0.45	1.53	0.30	
89	Rwanda	0.45	1.52	0.29	
90	Mozambique	0.42	1.40	0.28	
91	Albania	0.41	1.38	0.27	
92	Sri Lanka	0.32	1.07	0.27	
93	Armenia	0.32	1.07	0.26	
94	Qatar	0.27	0.91	0.25	
95	United Arab Emirates	0.27	0.90	0.24	○
96	Kuwait	0.27	0.89	0.23	
97	Bolivia, Plurinational St.	0.24	0.79	0.23	
98	Zimbabwe (2014)	0.22	0.72	0.22	
99	Malawi	0.19	0.64	0.21	
100	Lebanon (2014)	0.19	0.62	0.20	
101	Burkina Faso	0.17	0.58	0.19	
102	Cameroon	0.17	0.57	0.19	
103	Nigeria (2014)	0.17	0.55	0.18	
104	Egypt	0.16	0.54	0.17	
105	Uganda	0.16	0.52	0.16	
106	Guinea (2014)	0.15	0.48	0.15	
107	Bangladesh (2011)	0.14	0.45	0.15	
108	Ethiopia	0.13	0.43	0.14	
109	Saudi Arabia	0.13	0.42	0.13	○
110	Bahrain	0.12	0.40	0.12	
111	Mali (2012)	0.11	0.36	0.11	
112	Tanzania, United Rep.	0.09	0.27	0.10	
113	Hong Kong (China)	0.08	0.26	0.10	○
114	Burundi (2014)	0.07	0.23	0.09	
115	Azerbaijan	0.07	0.23	0.08	○
116	Mongolia	0.07	0.22	0.07	○
117	Nepal	0.06	0.18	0.06	○
118	Benin	0.05	0.16	0.06	
119	Madagascar	0.05	0.14	0.05	
120	Trinidad and Tobago (2010)	0.03	0.10	0.04	○
121	Togo (2014)	0.02	0.06	0.03	○
122	Mauritius	0.02	0.06	0.02	○
123	Yemen (2014)	0.01	0.02	0.02	
124	Jamaica	0.01	0.02	0.01	○
125	Algeria	0.01	0.00	0.00	○
n/a	Philippines	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	

SOURCE: United Nations, *COMTRADE* database; Eurostat, *Annex 5: High-tech aggregation by SITC Rev. 4*, April 2009

NOTE: ● indicates a strength; ○ a weakness

6.3.3 ICT services exports

Telecommunications, computers, and information services exports (% of total trade) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Costa Rica	14.62	100.00	0.98	●
1	India	12.63	100.00	0.98	●
1	Ireland	24.01	100.00	0.98	●
1	Israel	10.63	100.00	0.98	●
5	Finland	9.88	93.00	0.97	●
6	Cyprus (2014)	9.59	90.18	0.96	●
7	Netherlands	7.15	67.22	0.95	
8	Sweden	7.10	66.70	0.94	
9	Nepal (2014)	6.61	62.04	0.94	●
10	Niger (2014)	6.00	56.34	0.93	●
11	Senegal (2014)	5.23	49.03	0.92	●
12	Kuwait	4.86	45.53	0.91	●
13	Moldova, Rep.	4.74	44.40	0.90	●
14	Mali (2014)	4.69	43.91	0.90	●
15	Ukraine	4.38	41.03	0.89	●
16	Philippines	4.33	40.50	0.88	●
17	Kenya (2014)	4.27	39.96	0.87	●
18	Romania	4.09	38.31	0.86	●
19	Sri Lanka	4.02	37.63	0.86	●
20	Luxembourg	3.90	36.44	0.85	
21	Switzerland	3.68	34.39	0.84	
22	Armenia	3.51	32.78	0.83	●
23	Serbia	3.38	31.54	0.82	●
24	United Kingdom	3.34	31.19	0.82	
25	Bahrain (2014)	3.34	31.18	0.81	●
26	Montenegro	3.18	29.72	0.80	
27	Burundi (2014)	3.18	29.68	0.79	●
28	Estonia	3.18	29.65	0.78	
29	Belarus	3.08	28.73	0.78	●
30	Belgium	2.96	27.63	0.77	
31	Morocco (2013)	2.91	27.14	0.76	●
32	Austria	2.91	27.13	0.75	
33	Guatemala	2.90	27.07	0.74	●
34	Honduras	2.87	26.79	0.74	●
35	Spain	2.86	26.63	0.73	
36	Lebanon (2014)	2.79	25.96	0.72	●
37	Albania	2.77	25.78	0.71	●
38	Iceland	2.76	25.69	0.70	
39	Bulgaria	2.69	25.06	0.70	
40	Guinea (2013)	2.68	24.98	0.69	●
41	Mauritius (2014)	2.64	24.54	0.68	
42	Uruguay	2.57	23.95	0.67	
43	TFYR of Macedonia	2.52	23.48	0.66	
44	Latvia	2.50	23.23	0.66	
45	Croatia	2.50	23.21	0.65	
46	Denmark	2.48	23.03	0.64	
47	Jamaica	2.29	21.28	0.63	
48	Argentina	2.29	21.27	0.62	
49	France	2.18	20.23	0.62	
50	Pakistan	2.16	20.02	0.61	●
51	El Salvador	2.10	19.46	0.60	
52	Germany	1.99	18.44	0.59	
53	Yemen (2014)	1.95	18.06	0.58	●
54	Poland	1.91	17.66	0.58	
55	Benin (2014)	1.84	16.97	0.57	●
56	Slovenia	1.82	16.82	0.56	
57	Czech Republic	1.76	16.30	0.55	
58	Hungary	1.74	16.08	0.54	
59	Egypt (2014)	1.71	15.79	0.54	
60	Bosnia and Herzegovina	1.66	15.32	0.53	
61	United Arab Emirates	1.66	15.31	0.52	
62	Madagascar (2013)	1.65	15.26	0.51	
63	Ethiopia (2012)	1.65	15.22	0.50	●
64	Tunisia (2014)	1.57	14.48	0.50	
65	Norway	1.55	14.30	0.49	○
66	Greece	1.53	14.09	0.48	
67	Italy	1.49	13.74	0.47	
68	United States of America	1.49	13.72	0.46	
69	Canada	1.47	13.54	0.46	
70	Portugal	1.40	12.85	0.45	○
71	Malaysia	1.34	12.28	0.44	
72	Burkina Faso (2014)	1.32	12.13	0.43	
73	Togo (2014)	1.31	12.05	0.42	●
74	Cameroon (2013)	1.25	11.47	0.42	●
75	New Zealand	1.24	11.33	0.41	○
76	Russian Federation	1.18	10.82	0.40	
77	China	1.10	10.01	0.39	
78	Bangladesh (2014)	1.09	9.96	0.38	
79	Panama	1.09	9.94	0.38	
80	Slovakia	1.07	9.71	0.37	
81	Dominican Republic (2014)	1.05	9.59	0.36	
82	Malta	1.03	9.37	0.35	○
83	Uganda	1.03	9.34	0.34	
84	Singapore	1.01	9.20	0.34	○
85	Bolivia, Plurinational St.	0.96	8.71	0.33	
86	Rwanda (2014)	0.92	8.36	0.32	
87	Malawi (2014)	0.92	8.32	0.31	
88	Lithuania	0.85	7.64	0.30	○
89	Australia	0.81	7.25	0.30	○
90	Côte d'Ivoire (2013)	0.74	6.58	0.29	
91	Qatar	0.73	6.55	0.28	
92	Brazil	0.68	6.03	0.27	
93	Kyrgyzstan	0.65	5.82	0.26	
94	Korea, Rep.	0.61	5.44	0.26	○
95	Indonesia	0.61	5.36	0.25	
96	Georgia	0.60	5.27	0.24	
97	South Africa	0.58	5.14	0.23	○
98	Tajikistan	0.57	5.04	0.22	
99	Chile (2014)	0.54	4.73	0.22	○
100	Colombia	0.53	4.60	0.21	○
101	Hong Kong (China) (2014)	0.45	3.92	0.20	○
102	Azerbaijan	0.45	3.91	0.19	
103	Cambodia	0.44	3.78	0.18	
104	Tanzania, United Rep. (2014)	0.43	3.66	0.18	
105	Japan	0.42	3.59	0.17	○
106	Ecuador	0.39	3.34	0.16	
107	Brunei Darussalam (2009)	0.37	3.17	0.15	○
108	Peru	0.34	2.83	0.14	○
109	Kazakhstan	0.30	2.48	0.14	○
110	Zambia (2014)	0.29	2.40	0.13	
111	Botswana (2014)	0.29	2.34	0.12	○
112	Algeria (2014)	0.29	2.33	0.11	
113	Mongolia	0.22	1.70	0.10	
114	Mozambique	0.22	1.69	0.10	
115	Oman (2014)	0.20	1.56	0.09	○
116	Iran, Islamic Rep. (2014)	0.19	1.40	0.08	○
117	Thailand	0.18	1.32	0.07	○
118	Paraguay	0.14	0.93	0.06	○
119	Nigeria	0.12	0.81	0.06	
120	Saudi Arabia	0.12	0.75	0.05	○
121	Turkey	0.10	0.58	0.04	○
122	Viet Nam (2014)	0.09	0.48	0.03	○
123	Trinidad and Tobago (2011)	0.08	0.42	0.02	○
124	Namibia (2014)	0.05	0.10	0.02	○
125	Zimbabwe (2012)	0.05	0.07	0.01	○
126	Mexico	0.04	0.00	0.00	○
n/a	Jordan	n/a	n/a	n/a	

SOURCE: World Trade Organization, *Trade in Commercial Services* database, based on the sixth (2009) edition of the International Monetary Fund's *Balance of Payments Manual* and *Balance of Payments* database

NOTE: ● indicates a strength; ○ a weakness

6.3.4 Foreign direct investment net outflows

Foreign direct investment (FDI), net outflows (% of GDP, three-year average) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Cyprus	17.24	100.00	0.95	●
1	Hong Kong (China)	32.79	100.00	0.95	●
1	Ireland	39.57	100.00	0.95	●
1	Kuwait	7.46	100.00	0.95	●
1	Luxembourg	48.39	100.00	0.95	●
1	Netherlands	23.13	100.00	0.95	●
1	Singapore	12.69	100.00	0.95	●
8	Switzerland	7.01	95.76	0.94	
9	Trinidad and Tobago	5.57	82.14	0.94	●
10	Chile	5.04	77.08	0.93	●
11	Togo	4.11	68.36	0.92	●
12	Malaysia	4.08	68.02	0.91	●
13	Canada	3.85	65.85	0.90	
14	Norway	3.66	64.04	0.90	
15	Brunei Darussalam	3.64	63.83	0.89	●
16	Azerbaijan	3.57	63.19	0.88	●
17	Spain	3.37	61.33	0.87	
18	Sweden	3.35	61.14	0.86	
19	Qatar	3.25	60.20	0.85	
20	Denmark	3.00	57.82	0.85	
21	Japan	2.94	57.23	0.84	
22	Germany	2.87	56.63	0.83	
23	Lebanon	2.80	55.94	0.82	●
24	Russian Federation	2.77	55.69	0.81	
25	Czech Republic	2.53	53.35	0.81	
26	United Arab Emirates	2.34	51.58	0.80	
27	Portugal	2.31	51.33	0.79	
28	Israel	2.12	49.52	0.78	
29	United States of America	2.09	49.23	0.77	
30	Korea, Rep.	2.05	48.89	0.77	
31	Iceland	2.04	48.79	0.76	
32	Estonia	1.93	47.76	0.75	
33	Philippines	1.89	47.31	0.74	●
34	South Africa	1.86	47.09	0.73	
35	Thailand	1.86	47.02	0.73	
36	Georgia	1.84	46.84	0.72	
37	Panama	1.82	46.66	0.71	
38	Austria	1.81	46.60	0.70	
39	Bahrain	1.53	43.95	0.69	
40	Colombia	1.50	43.61	0.69	
41	Latvia	1.33	42.04	0.68	
42	Mozambique	1.28	41.58	0.67	●
43	France	1.22	40.98	0.66	
44	Kyrgyzstan	1.22	40.97	0.65	
45	China	1.21	40.94	0.65	
46	Kazakhstan	1.21	40.87	0.64	
47	Croatia	1.19	40.72	0.63	
48	Indonesia	1.16	40.43	0.62	
49	Oman	1.09	39.80	0.61	
50	Costa Rica	1.09	39.79	0.60	
51	Niger	1.04	39.30	0.60	
52	Slovakia	0.99	38.83	0.59	
53	Mexico	0.89	37.90	0.58	
54	Italy	0.89	37.90	0.57	
55	Mauritius	0.85	37.52	0.56	
56	Serbia	0.82	37.19	0.56	
57	Brazil	0.81	37.17	0.55	
58	Lithuania	0.79	36.93	0.54	
59	Viet Nam	0.78	36.81	0.53	
60	Honduras	0.77	36.78	0.52	
61	Bulgaria	0.77	36.75	0.52	
62	Saudi Arabia	0.74	36.51	0.51	
63	Greece	0.69	36.03	0.50	
64	Turkey	0.68	35.88	0.49	
65	Botswana	0.62	35.33	0.48	
66	Albania	0.50	34.16	0.48	
67	Poland	0.50	34.16	0.47	
68	Morocco	0.49	34.08	0.46	
69	El Salvador	0.47	33.91	0.45	
70	Mongolia	0.44	33.63	0.44	
71	Burkina Faso	0.44	33.62	0.44	
72	Montenegro	0.44	33.61	0.43	
73	Slovenia	0.41	33.32	0.42	
74	Benin	0.38	33.05	0.41	
75	Moldova, Rep.	0.35	32.83	0.40	
76	India	0.34	32.71	0.40	
77	Zimbabwe	0.29	32.18	0.39	
78	Nigeria	0.27	32.07	0.38	
79	Bosnia and Herzegovina	0.27	32.04	0.37	
80	Cambodia	0.25	31.85	0.36	
81	Ukraine	0.23	31.64	0.35	
82	Romania	0.23	31.62	0.35	
83	Argentina	0.22	31.60	0.34	
84	Belarus	0.22	31.52	0.33	
85	Senegal	0.20	31.37	0.32	
86	Paraguay	0.19	31.31	0.31	
87	Uruguay	0.19	31.30	0.31	
88	Armenia	0.16	30.98	0.30	
89	Namibia	0.16	30.96	0.29	
90	Bangladesh	0.14	30.78	0.28	
91	Australia	0.12	30.64	0.27	○
92	Jordan	0.09	30.36	0.27	
93	Rwanda	0.09	30.32	0.26	
94	Egypt	0.08	30.24	0.25	
95	Sri Lanka	0.08	30.22	0.24	
96	Madagascar	0.07	30.17	0.23	
97	Ecuador	0.07	30.11	0.23	
98	Peru	0.06	30.05	0.22	
99	Tunisia	0.06	30.01	0.21	
100	Pakistan	0.05	29.95	0.20	
101	Iran, Islamic Rep.	0.03	29.73	0.19	
102	Yemen	0.02	29.67	0.19	
103	Côte d'Ivoire	0.02	29.64	0.18	
104	Mali	0.01	29.59	0.17	
105	Guinea	0.01	29.55	0.16	
106	Guatemala	0.01	29.54	0.15	
107	New Zealand	0.01	29.53	0.15	○
108	Burundi	0.00	29.51	0.14	
109	Bolivia, Plurinational St.	0.00	29.48	0.12	
109	Tanzania, United Rep.	0.00	29.48	0.12	
111	Kenya	–0.01	29.37	0.11	○
112	Algeria	–0.03	29.22	0.10	
113	Uganda	–0.03	29.19	0.10	
114	Hungary	–0.05	29.01	0.09	○
115	TFYR of Macedonia	–0.07	28.80	0.08	○
116	Malawi	–0.08	28.73	0.07	
117	Dominican Republic	–0.11	28.45	0.06	○
118	Jamaica	–0.20	27.63	0.06	○
119	Cameroon	–0.41	25.59	0.05	○
120	Finland	–0.99	20.14	0.04	○
121	Zambia	–1.16	18.54	0.03	○
122	United Kingdom	–1.51	15.23	0.02	○
123	Tajikistan	–1.87	11.81	0.02	○
124	Belgium	–3.12	0.00	0.00	○
124	Malta	–81.54	0.00	0.00	○
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	

SOURCE: International Monetary Fund, Balance of Payments database, supplemented by data from the United Nations Conference on Trade and Development and official national sources; extracted from the World Bank's *World Development Indicators* database

NOTE: ● indicates a strength; ○ a weakness

7.1.1 Trademark application class count by origin

Number of trademark applications issued to residents at a given national or regional office (per billion PPP$ GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Mongolia	194.51	100.00	0.99	●
1	Paraguay (2010)	296.27	100.00	0.99	●
3	Moldova, Rep.	149.83	76.91	0.98	●
4	China	134.99	69.24	0.97	●
5	Luxembourg	131.62	67.50	0.97	●
6	Jamaica	126.41	64.81	0.96	●
7	Turkey	122.04	62.55	0.95	●
8	Bulgaria	113.56	58.17	0.94	●
9	Slovenia (2010)	111.20	56.95	0.93	●
10	France	108.98	55.80	0.92	●
11	Armenia	107.42	55.00	0.91	●
12	Ukraine	106.83	54.69	0.90	●
13	Malta	104.63	53.55	0.90	
14	Korea, Rep.	103.32	52.88	0.89	
15	Portugal	95.36	48.77	0.88	●
16	New Zealand	93.90	48.01	0.87	
17	Iceland	87.72	44.81	0.86	
18	El Salvador	83.68	42.73	0.85	●
19	Estonia	82.92	42.34	0.84	
20	Viet Nam	81.73	41.72	0.83	●
21	Switzerland	79.82	40.73	0.83	
22	Costa Rica	79.76	40.70	0.82	●
23	Cyprus	75.36	38.43	0.81	
24	Latvia	72.77	37.09	0.80	
25	Australia	70.83	36.09	0.79	
26	Hong Kong (China)	69.53	35.42	0.78	
27	Chile	68.28	34.77	0.77	
28	Germany	66.92	34.06	0.77	
29	Czech Republic	66.17	33.68	0.76	
30	Slovakia	65.95	33.57	0.75	
31	Ecuador (2010)	63.94	32.53	0.74	●
32	Namibia	62.93	32.00	0.73	●
33	Netherlands	61.08	31.05	0.72	
34	Austria	61.06	31.04	0.71	
35	Japan	59.93	30.45	0.70	
36	Spain	59.20	30.08	0.70	
37	Argentina	59.05	30.00	0.69	
38	Madagascar	56.99	28.93	0.68	●
39	Panama	56.36	28.61	0.67	
40	Sweden	55.75	28.29	0.66	○
41	Georgia	53.67	27.22	0.65	
42	Romania	52.73	26.73	0.64	
43	United Kingdom	52.69	26.71	0.63	○
44	Finland	51.52	26.11	0.63	
45	Canada	51.11	25.90	0.62	
46	Peru	51.05	25.87	0.61	
47	Croatia	50.65	25.66	0.60	
48	Lithuania	50.63	25.65	0.59	
49	Uruguay	50.14	25.39	0.58	
50	Italy (2014)	49.87	25.25	0.57	
51	Honduras	49.65	25.14	0.57	●
52	Morocco	49.38	25.00	0.56	
53	Belgium	49.34	24.98	0.55	○
54	Dominican Republic	45.63	23.07	0.54	
55	Poland	45.03	22.75	0.53	
56	Russian Federation	43.41	21.92	0.52	
57	Brazil	40.86	20.60	0.51	
58	Mexico	40.66	20.50	0.50	
59	Mauritius	40.21	20.26	0.50	
60	Guatemala (2010)	39.25	19.77	0.49	
61	Denmark	36.59	18.39	0.48	○
62	Colombia	36.16	18.17	0.47	
63	Hungary	35.79	17.98	0.46	
64	Nepal	35.10	17.62	0.45	●
65	Bolivia, Plurinational St. (2014)	35.06	17.60	0.44	
66	Mozambique	34.69	17.41	0.43	●
67	Kenya	32.93	16.50	0.43	
68	Jordan	32.91	16.49	0.42	
69	Norway	32.04	16.04	0.41	○
70	Serbia	32.01	16.02	0.40	
71	India	31.33	15.67	0.39	
72	Thailand	30.03	15.00	0.38	
73	South Africa	29.68	14.82	0.37	
74	Philippines	28.22	14.07	0.37	
75	Sri Lanka	26.77	13.32	0.36	
76	Belarus	26.68	13.27	0.35	
77	Albania	26.52	13.19	0.34	
78	Pakistan	25.27	12.54	0.33	
79	Algeria	24.94	12.37	0.32	
80	Cambodia (2014)	23.52	11.64	0.31	
81	United States of America	21.52	10.60	0.30	○
82	Malawi	20.98	10.33	0.30	
83	Nigeria (2013)	19.84	9.74	0.29	
84	Malaysia	19.50	9.56	0.28	○
85	Singapore	17.90	8.73	0.27	○
86	Yemen	17.48	8.52	0.26	●
87	Trinidad and Tobago	17.34	8.45	0.25	
88	Bosnia and Herzegovina	16.91	8.22	0.24	
89	Kyrgyzstan	16.81	8.17	0.23	
90	Kazakhstan (2013)	16.70	8.11	0.23	
91	Azerbaijan	16.50	8.01	0.22	
92	Bangladesh	16.07	7.79	0.21	
93	Lebanon	15.06	7.26	0.20	
94	Guinea	13.80	6.62	0.19	
95	Indonesia	13.22	6.32	0.18	
96	Uganda	13.10	6.25	0.17	
97	Israel	13.00	6.20	0.17	○
98	Rwanda	12.03	5.70	0.16	
99	Egypt	11.73	5.55	0.15	
100	Senegal	11.48	5.42	0.14	
101	United Arab Emirates (2014)	11.41	5.38	0.13	○
102	Botswana (2014)	10.36	4.84	0.12	○
103	Zimbabwe	10.16	4.74	0.11	
104	Côte d'Ivoire	9.47	4.38	0.10	
105	Tajikistan	9.15	4.21	0.10	
106	Zambia (2014)	8.79	4.02	0.09	
107	Togo	8.73	4.00	0.08	
108	Benin	7.50	3.36	0.07	
109	Cameroon	7.26	3.23	0.06	○
110	Bahrain	5.92	2.54	0.05	○
111	Mali	5.43	2.29	0.04	
112	Qatar (2014)	4.58	1.85	0.03	○
113	Saudi Arabia	4.40	1.76	0.03	○
114	Burkina Faso	3.17	1.12	0.02	○
115	Brunei Darussalam (2012)	2.55	0.80	0.01	○
116	Niger	1.00	0.00	0.00	○
n/a	Burundi	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Greece	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Ireland	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	
n/a	Tunisia	n/a	n/a	n/a	

SOURCE: World Intellectual Property Organization, *Intellectual Property Statistics*; International Monetary Fund, *World Economic Outlook Database*, October 2016 (PPP$ GDP)
NOTE: ● indicates a strength; ○ a weakness

7.1.2 Industrial designs by origin

Number of designs contained in industrial design applications filed at a given national or regional office (per billion PPP$ GDP) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	China	28.00	100.00	0.96	●
1	Italy (2014)	18.51	100.00	0.96	●
1	Korea, Rep.	35.56	100.00	0.96	●
1	Moldova, Rep.	67.28	100.00	0.96	●
1	Turkey	24.26	100.00	0.96	●
6	Germany	16.48	89.00	0.96	●
7	Luxembourg	13.82	74.60	0.95	
8	Morocco	13.60	73.44	0.94	●
9	Malta (2014)	12.97	70.00	0.93	
10	Spain	12.79	69.04	0.92	●
11	Ukraine	12.61	68.06	0.91	●
12	Bulgaria	10.84	58.47	0.90	●
13	Switzerland	10.06	54.25	0.89	
14	Portugal	9.66	52.10	0.88	●
15	Austria	7.91	42.62	0.88	
16	Denmark	7.61	41.01	0.87	
17	France	7.46	40.21	0.86	
18	Mongolia (2014)	7.35	39.62	0.85	●
19	Iran, Islamic Rep. (2014)	6.46	34.77	0.84	●
20	Madagascar	5.77	31.05	0.83	●
21	Croatia	5.53	29.77	0.82	●
22	Cyprus	5.41	29.10	0.81	
23	Finland	5.33	28.68	0.80	
24	Japan	5.12	27.57	0.79	
25	Czech Republic	5.12	27.53	0.79	
26	Sweden	5.03	27.03	0.78	
27	Georgia	4.90	26.38	0.77	
28	Guinea	4.64	24.97	0.76	●
29	Estonia	4.25	22.85	0.75	
30	Greece	4.21	22.63	0.74	
31	Latvia	3.90	20.95	0.73	
32	Israel	3.68	19.74	0.72	
33	Viet Nam	3.32	17.82	0.71	
34	Hungary	3.26	17.49	0.71	
35	Hong Kong (China)	3.21	17.21	0.70	
36	Netherlands	3.13	16.76	0.69	
37	Thailand	3.05	16.32	0.68	
38	Belgium	2.91	15.57	0.67	
39	Jamaica	2.63	14.09	0.66	
40	Romania	2.52	13.47	0.65	
41	Australia	2.47	13.22	0.64	
42	Bangladesh	2.21	11.82	0.63	●
43	Slovakia	2.09	11.14	0.63	
44	New Zealand	2.05	10.95	0.62	
45	Lithuania	1.95	10.39	0.61	
46	Sri Lanka	1.74	9.28	0.60	
47	Norway	1.72	9.16	0.59	
48	Singapore	1.68	8.93	0.58	○
49	TFYR of Macedonia	1.65	8.77	0.57	
50	Côte d'Ivoire	1.64	8.74	0.56	●
51	Egypt	1.55	8.21	0.55	
52	Algeria (2014)	1.49	7.91	0.54	●
53	Ireland	1.32	7.01	0.54	○
54	United States of America	1.25	6.63	0.53	
55	Serbia	1.25	6.60	0.52	
56	Armenia	1.22	6.44	0.51	
57	Belarus	1.20	6.33	0.50	
58	Argentina	1.15	6.06	0.49	
59	Iceland	1.05	5.54	0.48	
60	Kyrgyzstan	1.04	5.44	0.47	
61	Brazil	1.03	5.40	0.46	
62	Tunisia	1.01	5.33	0.46	
63	South Africa	1.00	5.23	0.45	
64	Indonesia	0.93	4.88	0.44	
65	Mozambique	0.90	4.71	0.43	
66	India	0.85	4.46	0.42	
67	Nigeria (2013)	0.85	4.44	0.41	
68	Montenegro	0.80	4.18	0.40	
69	Mexico	0.78	4.03	0.39	
70	Malaysia	0.77	3.99	0.38	
71	Philippines	0.72	3.76	0.38	
72	Russian Federation	0.70	3.64	0.37	
73	Jordan	0.66	3.43	0.36	
74	Senegal	0.63	3.22	0.35	
75	Bosnia and Herzegovina	0.59	3.03	0.34	
76	Colombia	0.54	2.74	0.33	
77	Mali	0.53	2.72	0.32	
78	Kenya	0.51	2.62	0.31	
79	Canada	0.49	2.48	0.30	○
80	Zambia (2014)	0.48	2.45	0.29	
81	Mauritius (2013)	0.45	2.26	0.29	
82	Albania (2014)	0.45	2.25	0.28	
83	Trinidad and Tobago	0.41	2.04	0.27	
84	Pakistan	0.39	1.95	0.26	
85	Bolivia, Plurinational St. (2014)	0.37	1.84	0.25	
86	Togo	0.37	1.83	0.24	
87	Cameroon	0.36	1.77	0.23	
88	Benin	0.35	1.73	0.22	
89	Botswana (2014)	0.35	1.71	0.21	
90	Peru	0.34	1.66	0.21	
91	Dominican Republic	0.32	1.57	0.20	
92	Rwanda	0.24	1.16	0.19	
93	Nepal	0.23	1.07	0.18	
94	Panama	0.22	1.02	0.17	
95	El Salvador	0.21	0.97	0.16	
96	Kazakhstan	0.21	0.95	0.15	
97	Saudi Arabia	0.19	0.87	0.14	○
98	Honduras	0.17	0.76	0.13	
99	Cambodia	0.17	0.73	0.13	
100	Burkina Faso	0.16	0.71	0.12	
101	Guatemala	0.16	0.70	0.11	
102	United Arab Emirates (2014)	0.15	0.64	0.10	○
103	Costa Rica	0.13	0.56	0.09	○
104	Brunei Darussalam (2014)	0.12	0.49	0.08	○
105	Uruguay	0.11	0.43	0.07	○
106	Chile	0.10	0.39	0.06	○
107	Azerbaijan	0.06	0.19	0.05	○
108	Niger (2014)	0.06	0.14	0.04	
109	Yemen	0.05	0.12	0.04	
110	Tajikistan (2013)	0.05	0.10	0.03	○
111	Bahrain	0.05	0.09	0.02	○
112	Namibia	0.04	0.05	0.01	○
113	Oman	0.03	0.00	0.00	○
n/a	Burundi	n/a	n/a	n/a	
n/a	Ecuador	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Lebanon	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Poland	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	Slovenia	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	
n/a	United Kingdom	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: World Intellectual Property Organization, *Intellectual Property Statistics*; International Monetary Fund, *World Economic Outlook Database*, October 2016 (PPP$ GDP)
NOTE: ● indicates a strength; ○ a weakness

7.1.3 ICTs and business model creation

Average answer to the question: In your country, to what extent do ICTs enable new business models? [1 = not at all; 7 = to a great extent] | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United Kingdom	6.03	83.79	1.00	●
2	Switzerland	6.00	83.28	0.99	●
3	Netherlands	5.99	83.17	0.98	●
4	Finland	5.98	83.07	0.98	●
5	Sweden	5.98	83.03	0.97	
6	Luxembourg	5.96	82.72	0.96	
7	Singapore	5.89	81.47	0.95	
8	Israel	5.85	80.87	0.94	
9	Ireland	5.83	80.44	0.93	
10	United Arab Emirates	5.79	79.92	0.93	●
11	Qatar	5.77	79.45	0.92	●
12	United States of America	5.75	79.20	0.91	
13	Norway	5.75	79.14	0.90	
14	Iceland	5.72	78.62	0.89	
15	Germany	5.64	77.31	0.89	
16	Portugal	5.61	76.79	0.88	●
17	France	5.60	76.73	0.87	
18	Korea, Rep.	5.60	76.68	0.86	
19	Belgium	5.59	76.42	0.85	
20	Malaysia	5.57	76.19	0.84	
21	New Zealand	5.57	76.10	0.84	
22	Estonia	5.55	75.91	0.83	
23	Canada	5.55	75.79	0.82	
24	Denmark	5.52	75.31	0.81	
25	Spain	5.42	73.68	0.80	
26	Austria	5.37	72.86	0.80	
27	Panama	5.31	71.78	0.79	●
28	Chile	5.29	71.49	0.78	
29	Japan	5.28	71.34	0.77	
30	Lithuania	5.25	70.89	0.76	
31	Hong Kong (China)	5.24	70.69	0.75	
32	Malta	5.19	69.90	0.75	
33	Saudi Arabia	5.13	68.83	0.74	
34	Czech Republic	5.12	68.66	0.73	
35	Australia	5.11	68.54	0.72	
36	Rwanda	5.08	68.02	0.71	●
37	Kenya	5.07	67.80	0.70	
38	Uruguay	5.06	67.59	0.70	
39	Thailand	5.03	67.11	0.69	
40	Slovakia	5.02	67.06	0.68	
41	Costa Rica	5.02	66.95	0.67	
42	Bahrain	5.01	66.84	0.66	
43	Mexico	4.99	66.57	0.66	
44	Dominican Republic	4.93	65.56	0.65	●
45	South Africa	4.93	65.46	0.64	
46	China	4.92	65.36	0.63	
47	Guatemala	4.91	65.25	0.62	●
48	Jordan	4.87	64.58	0.61	
49	Hungary	4.83	63.79	0.61	
50	Azerbaijan	4.83	63.78	0.60	
51	Turkey	4.79	63.16	0.59	
52	Indonesia	4.77	62.91	0.58	
53	Morocco	4.74	62.30	0.57	
54	Slovenia	4.73	62.11	0.57	
55	Jamaica	4.72	62.05	0.56	
56	Bulgaria	4.72	62.02	0.55	
57	Italy	4.70	61.65	0.54	
58	Colombia	4.69	61.50	0.53	
59	Poland	4.66	61.00	0.52	
60	Philippines	4.65	60.88	0.52	
61	Cambodia	4.64	60.73	0.51	
62	Sri Lanka	4.64	60.62	0.50	
63	Latvia	4.63	60.45	0.49	
64	Mauritius	4.60	59.96	0.48	
65	Peru	4.59	59.79	0.48	
66	Senegal	4.58	59.71	0.47	
67	Honduras	4.57	59.44	0.46	
68	Armenia	4.54	59.00	0.45	
69	Tunisia	4.53	58.86	0.44	
70	Iran, Islamic Rep.	4.53	58.78	0.43	
71	Brazil	4.49	58.19	0.43	
72	Namibia	4.48	58.02	0.42	
73	TFYR of Macedonia	4.48	57.93	0.41	
74	Croatia	4.47	57.76	0.40	
75	Nigeria	4.45	57.47	0.39	
76	Ecuador	4.44	57.37	0.39	
77	Romania	4.43	57.15	0.38	
78	Viet Nam	4.42	57.05	0.37	
79	Montenegro	4.40	56.71	0.36	
80	India	4.39	56.57	0.35	
81	Côte d'Ivoire	4.38	56.27	0.34	
82	Mongolia	4.35	55.82	0.34	
83	Oman	4.32	55.30	0.33	
84	Uganda	4.28	54.69	0.32	
85	Kazakhstan	4.26	54.39	0.31	
86	Cyprus	4.26	54.29	0.30	
87	Greece	4.25	54.17	0.30	
88	Madagascar	4.20	53.37	0.29	
89	Kuwait	4.20	53.36	0.28	
90	Trinidad and Tobago	4.19	53.15	0.27	
91	Russian Federation	4.16	52.67	0.26	
92	Botswana	4.15	52.51	0.25	
93	Brunei Darussalam	4.11	51.85	0.25	
94	Tanzania, United Rep.	4.11	51.84	0.24	
95	Cameroon	4.08	51.35	0.23	
96	Pakistan	4.08	51.27	0.22	
97	Egypt	4.02	50.30	0.21	
98	Benin	4.01	50.14	0.20	
99	Georgia	4.00	50.00	0.20	
100	Paraguay	4.00	49.93	0.19	
101	Serbia	3.98	49.65	0.18	○
102	Albania	3.97	49.58	0.17	
103	Bangladesh	3.97	49.55	0.16	
104	Moldova, Rep.	3.97	49.46	0.16	○
105	Mozambique	3.96	49.30	0.15	
106	El Salvador	3.94	49.07	0.14	
107	Mali	3.93	48.77	0.13	
108	Zambia	3.92	48.61	0.12	
109	Lebanon	3.91	48.48	0.11	○
110	Bolivia, Plurinational St.	3.85	47.44	0.11	
111	Tajikistan	3.84	47.29	0.10	
112	Ukraine	3.82	46.97	0.09	○
113	Zimbabwe	3.80	46.60	0.08	
114	Argentina	3.79	46.57	0.07	○
115	Algeria	3.71	45.23	0.07	
116	Bosnia and Herzegovina	3.68	44.73	0.06	○
117	Ethiopia	3.66	44.36	0.05	
118	Kyrgyzstan	3.47	41.12	0.04	○
119	Nepal	3.47	41.09	0.03	○
120	Malawi	3.36	39.41	0.02	○
121	Guinea (2015)	3.15	35.86	0.02	○
122	Burundi	2.91	31.90	0.01	○
123	Yemen	2.79	29.90	0.00	○
n/a	Belarus	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	

SOURCE: World Economic Forum, *Executive Opinion Survey 2016–2017*
NOTE: ● indicates a strength; ○ a weakness

7.1.4 ICTs and organizational model creation

Average answer to the question: In your country, to what extent do ICTs enable new organizational models (e.g., virtual teams, remote working, telecommuting) within companies? [1 = not at all; 7 = to a great extent] | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United States of America	5.94	82.31	1.00	●
2	United Kingdom	5.88	81.30	0.99	●
3	Norway	5.84	80.65	0.98	●
4	Sweden	5.83	80.50	0.98	●
5	Estonia	5.80	79.94	0.97	●
6	Netherlands	5.75	79.18	0.96	
7	Finland	5.71	78.47	0.95	
8	Iceland	5.67	77.84	0.94	
9	Singapore	5.60	76.69	0.93	
10	Switzerland	5.57	76.23	0.93	
11	Israel	5.53	75.53	0.92	
12	Canada	5.49	74.78	0.91	
13	United Arab Emirates	5.47	74.45	0.90	●
14	Luxembourg	5.45	74.21	0.89	
15	Denmark	5.45	74.12	0.89	
16	Qatar	5.45	74.10	0.88	●
17	Germany	5.44	73.97	0.87	
18	Malaysia	5.42	73.74	0.86	
19	Ireland	5.33	72.23	0.85	
20	France	5.28	71.35	0.84	
21	Hong Kong (China)	5.27	71.20	0.84	
22	Belgium	5.22	70.36	0.83	
23	New Zealand	5.15	69.11	0.82	
24	Lithuania	5.14	68.94	0.81	
25	Austria	5.02	67.07	0.80	
26	Korea, Rep.	5.01	66.84	0.80	
27	Japan	4.98	66.34	0.79	
28	Australia	4.89	64.80	0.78	
29	China	4.86	64.40	0.77	
30	Czech Republic	4.82	63.65	0.76	
31	Slovakia	4.76	62.72	0.75	
32	Portugal	4.76	62.64	0.75	
33	Costa Rica	4.74	62.31	0.74	
34	Panama	4.72	62.07	0.73	
35	India	4.71	61.88	0.72	
36	Malta	4.67	61.23	0.71	
37	Azerbaijan	4.65	60.80	0.70	●
38	Indonesia	4.59	59.75	0.70	●
39	Spain	4.56	59.35	0.69	
40	Guatemala	4.55	59.21	0.68	●
41	South Africa	4.54	59.03	0.67	
42	Slovenia	4.54	58.94	0.66	
43	Thailand	4.53	58.87	0.66	
44	Bulgaria	4.51	58.57	0.65	
45	Bahrain	4.49	58.22	0.64	
46	Kenya	4.45	57.47	0.63	
47	Colombia	4.43	57.18	0.62	
48	Uruguay	4.42	56.98	0.61	
49	Mexico	4.42	56.96	0.61	
50	Latvia	4.40	56.59	0.60	
51	Saudi Arabia	4.39	56.49	0.59	
52	Cambodia	4.34	55.59	0.58	●
53	Dominican Republic	4.33	55.57	0.57	●
54	Chile	4.33	55.45	0.57	
55	Russian Federation	4.31	55.13	0.56	
56	Honduras	4.30	54.94	0.55	●
57	Philippines	4.29	54.82	0.54	
58	Armenia	4.28	54.60	0.53	
59	Hungary	4.27	54.48	0.52	
60	Croatia	4.26	54.29	0.52	
61	Viet Nam	4.25	54.16	0.51	
62	Poland	4.24	54.00	0.50	
63	Sri Lanka	4.22	53.61	0.49	
64	Jordan	4.20	53.25	0.48	
65	Senegal	4.18	52.96	0.48	
66	Ukraine	4.13	52.25	0.47	
67	Ecuador	4.13	52.16	0.46	
68	Rwanda	4.10	51.67	0.45	
69	Brazil	4.08	51.33	0.44	
70	TFYR of Macedonia	4.07	51.23	0.43	
71	Mauritius	4.05	50.91	0.43	
72	Côte d'Ivoire	4.05	50.81	0.42	●
73	Turkey	4.05	50.75	0.41	
74	Jamaica	4.04	50.71	0.40	
75	Italy	4.03	50.47	0.39	○
76	Namibia	4.01	50.13	0.39	
77	Kazakhstan	3.95	49.24	0.38	
78	Morocco	3.93	48.84	0.37	
79	Romania	3.92	48.71	0.36	
80	Argentina	3.91	48.50	0.35	
81	Brunei Darussalam	3.86	47.69	0.34	
82	Madagascar	3.86	47.65	0.34	
83	Oman	3.82	47.04	0.33	
84	Peru	3.82	46.97	0.32	
85	Kuwait	3.82	46.96	0.31	
86	Cyprus	3.80	46.64	0.30	
87	Benin	3.74	45.74	0.30	
88	Egypt	3.74	45.68	0.29	
89	Trinidad and Tobago	3.74	45.59	0.28	
90	Montenegro	3.73	45.50	0.27	○
91	Nigeria	3.71	45.21	0.26	
92	Moldova, Rep.	3.70	45.06	0.25	
93	Tanzania, United Rep.	3.68	44.69	0.25	
94	Greece	3.68	44.68	0.24	○
95	El Salvador	3.67	44.54	0.23	
96	Ethiopia	3.65	44.22	0.22	
97	Zambia	3.64	44.01	0.21	
98	Cameroon	3.62	43.74	0.20	
99	Tunisia	3.62	43.73	0.20	
100	Iran, Islamic Rep.	3.61	43.44	0.19	
101	Uganda	3.61	43.43	0.18	
102	Tajikistan	3.53	42.14	0.17	
103	Serbia	3.52	42.07	0.16	○
104	Bangladesh	3.52	42.03	0.16	
105	Lebanon	3.48	41.36	0.15	○
106	Botswana	3.48	41.34	0.14	
107	Georgia	3.48	41.34	0.13	○
108	Mongolia	3.47	41.23	0.12	
109	Mali	3.34	38.93	0.11	
110	Bosnia and Herzegovina	3.30	38.41	0.11	○
111	Kyrgyzstan	3.28	37.97	0.10	
112	Pakistan	3.28	37.96	0.09	
113	Mozambique	3.22	36.97	0.08	
114	Paraguay	3.17	36.20	0.07	
115	Bolivia, Plurinational St.	3.17	36.11	0.07	
116	Nepal	3.04	34.03	0.06	○
117	Zimbabwe	2.99	33.20	0.05	
118	Albania	2.96	32.61	0.04	○
119	Malawi	2.83	30.51	0.03	
120	Algeria	2.77	29.55	0.02	
121	Guinea (2015)	2.71	28.57	0.02	○
122	Burundi	2.59	26.47	0.01	○
123	Yemen	2.54	25.68	0.00	○
n/a	Belarus	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	

SOURCE: World Economic Forum, *Executive Opinion Survey 2016–2017*
NOTE: ● indicates a strength; ○ a weakness

7.2.1 Cultural and creative services exports

Cultural and creative services exports (% of total trade) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Costa Rica	10.05	100.00	0.98	●
1	Luxembourg (2014)	5.02	100.00	0.98	●
1	United States of America (2014)	1.98	100.00	0.98	●
4	Belgium (2014)	1.65	83.11	0.97	●
5	Romania (2014)	1.56	78.88	0.96	●
6	Croatia (2014)	1.55	77.97	0.95	●
7	Estonia (2014)	1.51	76.37	0.93	●
8	Israel (2014)	1.26	63.52	0.92	
9	Latvia (2014)	1.21	60.82	0.91	●
10	France (2014)	1.17	58.83	0.90	
11	Benin	1.15	58.16	0.89	●
12	Austria (2014)	1.10	55.47	0.88	
13	Bulgaria (2014)	1.10	55.26	0.87	●
14	Netherlands (2014)	1.07	54.04	0.86	
15	United Kingdom	1.03	52.16	0.85	
16	Poland (2014)	1.00	50.45	0.84	●
17	Russian Federation (2014)	0.94	47.51	0.82	
18	Slovenia (2014)	0.89	44.76	0.81	
19	Sweden (2014)	0.88	44.46	0.80	
20	Niger (2014)	0.74	37.24	0.79	●
21	Denmark (2014)	0.68	34.08	0.78	
22	Germany (2014)	0.66	33.33	0.77	
23	Canada (2014)	0.65	33.00	0.76	
24	Greece (2014)	0.64	32.36	0.75	
25	Hungary (2014)	0.62	31.16	0.74	
26	Portugal (2014)	0.60	30.52	0.73	
27	Czech Republic (2014)	0.50	25.46	0.71	
28	Cyprus (2014)	0.49	24.83	0.70	
29	Lithuania (2014)	0.44	22.45	0.69	
30	Guinea (2014)	0.40	20.41	0.68	●
31	Argentina	0.39	19.61	0.67	
32	Moldova, Rep.	0.38	19.38	0.66	
33	Burundi (2014)	0.34	17.08	0.65	●
34	Slovakia (2014)	0.33	16.64	0.64	
35	Armenia	0.33	16.60	0.63	
36	Iceland	0.33	16.56	0.62	
37	Ecuador	0.33	16.48	0.60	●
38	Australia (2014)	0.32	16.02	0.59	
39	Finland (2013)	0.31	15.77	0.58	
40	Burkina Faso	0.30	14.94	0.57	●
41	Italy (2014)	0.29	14.76	0.56	
42	Korea, Rep. (2014)	0.29	14.75	0.55	
43	TFYR of Macedonia	0.25	12.54	0.54	
44	Lebanon	0.25	12.43	0.53	
45	Serbia	0.23	11.48	0.52	
46	Ireland (2014)	0.21	10.74	0.51	○
47	Senegal	0.21	10.51	0.49	
48	South Africa	0.16	7.94	0.48	
49	Hong Kong (China) (2014)	0.15	7.71	0.47	
50	Panama	0.15	7.56	0.46	
51	Colombia (2014)	0.13	6.62	0.45	
52	India	0.13	6.37	0.44	
53	Ukraine	0.12	5.89	0.43	
54	Peru	0.10	5.04	0.42	
55	Japan	0.09	4.58	0.41	○
56	Brazil	0.09	4.53	0.40	
57	Montenegro	0.09	4.47	0.38	
58	Morocco	0.08	4.09	0.37	
59	Georgia	0.08	4.09	0.36	
60	Jamaica	0.07	3.70	0.35	
61	Bolivia, Plurinational St.	0.06	3.19	0.34	
62	Norway	0.06	2.97	0.33	○
63	Philippines	0.06	2.94	0.32	
64	Cameroon (2013)	0.06	2.92	0.31	
65	Albania	0.05	2.42	0.30	
66	Azerbaijan	0.05	2.29	0.29	
67	Belarus	0.05	2.29	0.27	
68	Malawi	0.04	2.03	0.26	
69	Mauritius	0.04	2.01	0.25	
70	China	0.03	1.66	0.24	
71	Mozambique (2014)	0.03	1.55	0.23	
72	Côte d'Ivoire	0.03	1.33	0.22	
73	Madagascar	0.03	1.29	0.21	
74	Mali	0.02	1.23	0.20	
75	Mexico	0.02	1.05	0.19	○
76	Guatemala	0.02	0.93	0.18	
77	Kazakhstan	0.01	0.74	0.16	
78	Pakistan (2012)	0.01	0.54	0.15	
79	Turkey	0.01	0.32	0.14	○
80	Uganda	0.01	0.26	0.13	
81	Bosnia and Herzegovina	0.00	0.26	0.12	○
82	Paraguay	0.00	0.20	0.11	
83	Bangladesh	0.00	0.17	0.10	
84	Algeria	0.00	0.16	0.09	
85	Togo (2014)	0.00	0.15	0.08	
86	Ethiopia	0.00	0.10	0.07	
87	Rwanda (2014)	0.00	0.03	0.05	○
88	Kenya (2014)	0.00	0.01	0.04	○
89	El Salvador (2013)	0.00	0.01	0.03	○
90	Malta (2013)	0.00	0.01	0.02	○
91	Mongolia (2007)	0.00	0.01	0.01	○
92	Honduras (2014)	0.00	0.00	0.00	○
n/a	Bahrain	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Chile	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	Egypt	n/a	n/a	n/a	
n/a	Indonesia	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Kyrgyzstan	n/a	n/a	n/a	
n/a	Malaysia	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	New Zealand	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Oman	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Singapore	n/a	n/a	n/a	
n/a	Spain	n/a	n/a	n/a	
n/a	Sri Lanka	n/a	n/a	n/a	
n/a	Switzerland	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Thailand	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Tunisia	n/a	n/a	n/a	
n/a	United Arab Emirates	n/a	n/a	n/a	
n/a	Uruguay	n/a	n/a	n/a	
n/a	Viet Nam	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: World Trade Organization, *Trade in Commercial Services* database, based on the sixth (2009) edition of the International Monetary Fund's *Balance of Payments Manual* and *Balance of Payments* database; Bureau of Economic Analysis (BEA) released October 2016

NOTE: ● indicates a strength; ○ a weakness

7.2.2 National feature films produced

Number of national feature films produced (per million population 15–69 years old) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Estonia	27.16	100.00	0.98	●
1	Iceland	55.95	100.00	0.98	●
1	Luxembourg (2011)	42.41	100.00	0.98	●
4	Malta	22.84	84.10	0.97	●
5	Mongolia	20.02	73.72	0.96	●
6	Denmark	17.68	65.10	0.95	
7	Switzerland	16.94	62.38	0.94	
8	Armenia	16.58	61.03	0.93	●
9	Slovenia	13.40	49.35	0.92	●
10	Montenegro	13.29	48.92	0.91	●
11	Latvia	12.23	45.04	0.90	●
12	Finland	11.58	42.65	0.89	
13	Nigeria (2011)	11.16	41.09	0.88	●
14	Hong Kong (China)	10.40	38.28	0.88	
15	Ireland	10.11	37.22	0.87	
16	Mauritius	9.42	34.68	0.86	●
17	New Zealand	8.83	32.51	0.85	
18	Belgium	8.69	31.99	0.84	
19	Spain	7.74	28.50	0.83	
20	Sweden	7.38	27.16	0.82	
21	Azerbaijan	7.36	27.11	0.81	●
22	Czech Republic	7.24	26.68	0.80	
23	Netherlands	7.19	26.48	0.79	
24	Korea, Rep.	6.94	25.55	0.78	
25	France	6.82	25.12	0.77	
26	Japan	6.72	24.76	0.76	
27	United Kingdom	6.57	24.18	0.75	
28	Austria	6.50	23.91	0.74	
29	TFYR of Macedonia	6.41	23.61	0.73	
30	Slovakia	6.32	23.25	0.72	
31	Argentina	6.22	22.91	0.71	
32	Norway	6.18	22.74	0.70	
33	Israel	6.13	22.55	0.69	
34	Hungary	5.69	20.96	0.68	
35	Georgia	5.53	20.36	0.67	
36	Greece	5.48	20.17	0.66	
37	Serbia	5.43	19.99	0.65	
38	Singapore	4.84	17.83	0.64	
39	Bulgaria	4.82	17.75	0.63	
40	Bosnia and Herzegovina	4.80	17.68	0.63	
41	Uruguay	4.70	17.30	0.62	
42	Togo	4.62	17.03	0.61	●
43	Cyprus	4.58	16.88	0.60	
44	Croatia	4.58	16.87	0.59	
45	Italy	4.42	16.28	0.58	
46	Lithuania	4.39	16.17	0.57	
47	Portugal	4.22	15.55	0.56	
48	Costa Rica	4.04	14.89	0.55	
49	Germany	3.95	14.53	0.54	
50	Canada	3.91	14.40	0.53	
51	Malaysia	3.66	13.46	0.52	
52	Lebanon	3.63	13.37	0.51	
53	United States of America	3.45	12.70	0.50	
54	Albania	3.30	12.17	0.49	
55	Cambodia	3.11	11.46	0.48	
56	Chile	2.92	10.76	0.47	
57	Madagascar	2.62	9.66	0.46	
58	Turkey	2.51	9.24	0.45	
59	India	2.15	7.90	0.44	
60	Ecuador	2.14	7.89	0.43	
61	Australia	1.93	7.12	0.42	○
62	Romania	1.83	6.75	0.41	
63	Cameroon (2009)	1.83	6.74	0.40	●
64	Tajikistan (2013)	1.77	6.51	0.39	
65	Mozambique	1.70	6.24	0.38	
66	Colombia	1.63	5.99	0.38	
67	Mexico	1.62	5.96	0.37	
68	Iran, Islamic Rep.	1.47	5.40	0.36	
69	Poland	1.45	5.35	0.35	○
70	Peru	1.41	5.20	0.34	
71	United Arab Emirates	1.40	5.17	0.33	
72	Tunisia	1.37	5.03	0.32	
73	Kazakhstan	1.32	4.87	0.31	
74	Paraguay (2009)	1.29	4.74	0.30	
75	Guatemala (2010)	1.17	4.31	0.29	
76	Russian Federation	1.14	4.20	0.28	
77	Sri Lanka (2013)	1.04	3.84	0.27	
78	Thailand (2010)	0.98	3.61	0.26	
79	Dominican Republic (2009)	0.96	3.52	0.25	
80	Honduras	0.95	3.50	0.24	
81	Bolivia, Plurinational St.	0.89	3.26	0.23	
82	Brazil	0.86	3.17	0.22	○
83	Philippines (2013)	0.84	3.08	0.21	
84	Guinea (2010)	0.83	3.04	0.20	
85	Morocco	0.76	2.81	0.19	
86	Niger (2011)	0.73	2.69	0.18	
87	Bangladesh (2009)	0.66	2.43	0.17	
88	China	0.65	2.39	0.16	○
89	South Africa	0.60	2.20	0.15	○
90	Egypt	0.58	2.14	0.14	
91	Kyrgyzstan (2013)	0.53	1.93	0.13	
92	Burkina Faso	0.52	1.92	0.13	
93	Indonesia (2012)	0.51	1.86	0.12	
94	Panama (2010)	0.41	1.52	0.11	
95	Senegal	0.36	1.34	0.10	
96	Moldova, Rep.	0.32	1.17	0.09	○
97	El Salvador (2008)	0.26	0.96	0.08	
98	Viet Nam (2009)	0.19	0.71	0.07	○
99	Burundi	0.17	0.61	0.06	
100	Belarus (2011)	0.14	0.52	0.05	○
101	Mali (2011)	0.12	0.46	0.04	○
102	Ukraine	0.09	0.33	0.03	○
103	Pakistan	0.01	0.03	0.02	○
104	Bahrain (2013)	0.00	0.00	0.00	○
104	Oman (2009)	0.00	0.00	0.00	○
n/a	Algeria	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Jordan	n/a	n/a	n/a	
n/a	Kenya	n/a	n/a	n/a	
n/a	Kuwait	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Qatar	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Saudi Arabia	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	
n/a	Yemen	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: UNESCO Institute for Statistics, *UIS online database*; United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2015 Revision*

NOTE: ● indicates a strength; ○ a weakness

7.2.3 Global entertainment and media market

Global entertainment and media market (per thousand population 15–69 years old) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Norway	2.87	100.00	1.00	●
2	Switzerland	2.83	98.69	0.98	●
3	United States of America	2.78	97.10	0.97	●
4	Denmark	2.18	75.97	0.95	
5	United Kingdom	2.06	71.62	0.94	
6	Sweden	2.05	71.47	0.92	
7	Austria	1.88	65.32	0.90	
8	Australia	1.84	63.93	0.89	
9	Finland	1.80	62.57	0.87	
10	Japan	1.78	61.79	0.85	
11	Germany	1.67	57.82	0.84	
12	New Zealand	1.64	56.78	0.82	
13	Hong Kong (China)	1.62	56.17	0.81	
14	Canada	1.60	55.57	0.79	
15	France	1.53	53.11	0.77	
16	Belgium	1.52	52.84	0.76	
17	Netherlands	1.45	50.35	0.74	
18	Ireland	1.42	49.29	0.73	
19	Korea, Rep.	1.36	47.05	0.71	
20	Singapore	1.22	42.16	0.69	
21	Israel	1.04	35.90	0.68	
22	Portugal	0.94	32.24	0.66	
23	Italy	0.82	28.07	0.65	
24	Spain	0.76	25.99	0.63	
25	Qatar	0.76	25.94	0.61	
26	Czech Republic	0.60	20.30	0.60	
27	Greece	0.55	18.57	0.58	
28	United Arab Emirates	0.49	16.46	0.56	
29	Argentina	0.40	13.41	0.55	
30	Hungary	0.38	12.62	0.53	
31	Saudi Arabia	0.34	11.31	0.52	
32	Malaysia	0.34	11.19	0.50	
33	Chile	0.34	11.17	0.48	
34	Poland	0.33	11.05	0.47	
35	Kuwait	0.33	10.71	0.45	
36	Malta	0.27	8.79	0.44	
37	South Africa	0.26	8.58	0.42	
38	Mexico	0.26	8.27	0.40	
39	Bahrain	0.25	8.04	0.39	
40	Brazil	0.25	7.89	0.37	
41	Turkey	0.22	6.95	0.35	
42	Peru	0.19	5.94	0.34	
43	Thailand	0.18	5.52	0.32	
44	China	0.16	5.02	0.31	
45	Romania	0.16	4.89	0.29	
46	Oman	0.16	4.76	0.27	
47	Colombia	0.16	4.73	0.26	
48	Russian Federation	0.15	4.59	0.24	○
49	Lebanon	0.10	2.96	0.23	
50	Kenya	0.09	2.34	0.21	
51	Philippines	0.09	2.33	0.19	
52	Indonesia	0.07	1.80	0.18	
53	Jordan	0.07	1.66	0.16	○
54	Iran, Islamic Rep.	0.06	1.29	0.15	
55	Algeria	0.05	1.14	0.13	
56	Egypt	0.05	1.01	0.11	
57	Viet Nam	0.05	0.91	0.10	○
58	Tunisia	0.05	0.90	0.08	○
59	Nigeria	0.04	0.81	0.06	
60	Morocco	0.04	0.55	0.05	○
61	India	0.03	0.30	0.03	○
62	Pakistan	0.03	0.20	0.02	○
63	Yemen	0.02	0.00	0.00	○
n/a	Albania	n/a	n/a	n/a	
n/a	Armenia	n/a	n/a	n/a	
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Belarus	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Bosnia and Herzegovina	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Bulgaria	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	Costa Rica	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Croatia	n/a	n/a	n/a	
n/a	Cyprus	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	Ecuador	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Estonia	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Georgia	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Iceland	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Kazakhstan	n/a	n/a	n/a	
n/a	Kyrgyzstan	n/a	n/a	n/a	
n/a	Latvia	n/a	n/a	n/a	
n/a	Lithuania	n/a	n/a	n/a	
n/a	Luxembourg	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Mauritius	n/a	n/a	n/a	
n/a	Moldova, Rep.	n/a	n/a	n/a	
n/a	Mongolia	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Panama	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Senegal	n/a	n/a	n/a	
n/a	Serbia	n/a	n/a	n/a	
n/a	Slovakia	n/a	n/a	n/a	
n/a	Slovenia	n/a	n/a	n/a	
n/a	Sri Lanka	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	TFYR of Macedonia	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	
n/a	Ukraine	n/a	n/a	n/a	
n/a	Uruguay	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: PwC's *Global Entertainment and Media Outlook, 2016–2020*; United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2015 Revision* (population); International Monetary Fund, *World Economic Outlook Database*, October 2016 (current US$ GDP); Middle East & North Africa in World Bank's *DataBank*

NOTE: ● indicates a strength; ○ a weakness

7.2.4 Printing and publishing output

Printing and publishing manufactures output (% of manufactures total output) | 2014

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Iceland (2006)	6.36	100.00	0.99	●
1	Malta (2009)	36.18	100.00	0.99	●
3	Lebanon (2007)	4.18	64.70	0.98	●
4	Kenya (2013)	3.82	58.79	0.97	●
5	Mauritius (2012)	3.24	49.44	0.96	●
6	Panama (2013)	3.20	48.80	0.95	●
7	Georgia (2013)	3.12	47.41	0.94	●
8	Latvia (2013)	3.00	45.41	0.93	●
9	Mongolia (2011)	2.94	44.52	0.92	●
10	Tanzania, United Rep. (2010)	2.84	42.87	0.91	●
11	Peru (2011)	2.66	39.93	0.90	●
12	TFYR of Macedonia (2011)	2.62	39.24	0.89	●
13	Cyprus	2.60	39.05	0.88	
14	United Arab Emirates (2012)	2.50	37.35	0.87	
15	South Africa (2010)	2.44	36.30	0.86	●
16	Costa Rica (2013)	2.39	35.64	0.85	●
17	Saudi Arabia (2009)	2.31	34.33	0.84	●
18	Colombia (2012)	2.23	33.01	0.83	●
19	Australia (2013)	2.09	30.66	0.82	
20	Japan (2012)	2.09	30.64	0.81	
21	Madagascar (2006)	2.08	30.51	0.80	●
22	Estonia	1.99	29.14	0.79	
23	United Kingdom	1.95	28.36	0.78	
24	United States of America (2008)	1.88	27.35	0.77	
25	Armenia (2013)	1.82	26.38	0.76	
26	Ethiopia	1.79	25.78	0.74	●
27	New Zealand (2012)	1.75	25.20	0.73	
28	Slovenia	1.75	25.19	0.72	
29	Moldova, Rep. (2013)	1.75	25.16	0.71	
30	Malawi (2012)	1.74	24.95	0.70	●
31	Sri Lanka (2012)	1.74	24.94	0.69	●
32	Serbia	1.60	22.76	0.68	
33	Ecuador (2008)	1.55	21.95	0.67	●
34	Bahrain (2013)	1.53	21.63	0.66	
35	Spain	1.49	20.99	0.65	
36	Netherlands	1.35	18.69	0.64	○
37	Paraguay (2010)	1.33	18.33	0.63	●
38	Bulgaria	1.31	18.05	0.62	
39	Norway	1.29	17.77	0.61	
40	Sweden	1.29	17.65	0.60	○
41	Cameroon (2008)	1.28	17.60	0.59	●
42	Austria	1.28	17.58	0.58	○
43	Portugal	1.27	17.35	0.57	
44	Uruguay (2011)	1.23	16.73	0.56	
45	Belgium	1.23	16.65	0.55	
46	Israel	1.22	16.62	0.54	
47	Russian Federation	1.22	16.59	0.53	
48	Italy	1.21	16.37	0.52	
49	Algeria (2008)	1.21	16.33	0.51	●
50	Finland	1.20	16.21	0.50	○
51	Jordan (2013)	1.19	16.11	0.49	
52	Burundi (2012)	1.18	15.88	0.48	
53	Tajikistan (2013)	1.17	15.73	0.47	
54	Luxembourg	1.17	15.68	0.46	
55	France	1.15	15.48	0.45	○
56	Bolivia, Plurinational St. (2010)	1.14	15.23	0.44	
57	Poland	1.14	15.20	0.43	
58	Switzerland	1.12	14.94	0.42	○
59	Germany	1.12	14.86	0.41	○
60	Lithuania	1.09	14.38	0.40	
61	Chile (2013)	1.06	13.98	0.39	
62	Romania (2013)	1.06	13.95	0.38	
63	Bosnia and Herzegovina (2011)	1.06	13.94	0.37	
64	Denmark	1.02	13.29	0.36	○
65	Czech Republic	1.01	13.20	0.35	○
66	Ukraine	0.97	12.46	0.34	
67	Turkey	0.93	11.88	0.33	
68	Qatar (2013)	0.91	11.58	0.32	
69	Greece	0.91	11.57	0.31	
70	Malaysia (2012)	0.86	10.71	0.30	
71	Ireland (2013)	0.83	10.16	0.29	○
72	Senegal (2012)	0.82	10.14	0.28	
73	Hungary	0.81	9.88	0.27	○
74	Morocco (2013)	0.80	9.81	0.26	
75	Singapore	0.79	9.49	0.24	○
76	Thailand (2011)	0.77	9.17	0.23	
77	Brazil (2013)	0.76	9.14	0.22	
78	Oman	0.73	8.65	0.21	
79	Kazakhstan (2013)	0.73	8.53	0.20	
80	Tunisia (2007)	0.72	8.37	0.19	
81	Viet Nam (2012)	0.70	8.06	0.18	
82	Azerbaijan (2013)	0.66	7.51	0.17	
83	Kyrgyzstan (2013)	0.66	7.43	0.16	
84	Kuwait (2013)	0.64	7.20	0.15	
85	India	0.60	6.48	0.14	
86	Slovakia	0.59	6.37	0.13	○
87	Mexico (2011)	0.57	5.99	0.12	○
88	Indonesia (2013)	0.52	5.24	0.11	○
89	China (2011)	0.52	5.18	0.10	○
90	Philippines (2012)	0.51	5.06	0.09	○
91	Brunei Darussalam (2010)	0.48	4.58	0.08	○
92	Nepal (2011)	0.43	3.80	0.07	
93	Egypt (2012)	0.43	3.80	0.06	○
94	Canada	0.39	3.04	0.05	○
95	Yemen (2012)	0.36	2.60	0.04	
96	Pakistan (2006)	0.33	2.12	0.03	○
97	Korea, Rep.	0.28	1.31	0.02	○
98	Iran, Islamic Rep.	0.21	0.22	0.01	○
99	Bangladesh (2011)	0.20	0.00	0.00	○
n/a	Albania	n/a	n/a	n/a	
n/a	Argentina	n/a	n/a	n/a	
n/a	Belarus	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Croatia	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Hong Kong (China)	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Montenegro	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Nigeria	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Uganda	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: United Nations Industrial Development Organization, *Industrial Statistics Database;* 2-digit level of International Standard Industrial Classification ISIC Revision 3 (INDSTAT2 2015)

NOTE: ● indicates a strength; ○ a weakness

7.2.5 Creative goods exports

Creative goods exports (% of total trade) | 2015

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	China	12.83	100.00	1.00	●
2	Malaysia	10.27	92.06	0.99	●
3	Mexico	9.98	91.02	0.98	●
4	Czech Republic	9.75	90.21	0.98	●
5	Thailand	9.53	89.39	0.97	●
6	Slovakia	9.33	88.65	0.96	●
7	Viet Nam	5.98	73.44	0.95	●
8	Hungary	5.86	72.78	0.94	●
9	Poland	5.48	70.59	0.94	●
10	Singapore	5.16	68.60	0.93	
11	Netherlands	4.69	65.52	0.92	
12	Latvia	4.17	61.80	0.91	●
13	Indonesia	3.89	59.72	0.90	●
14	Switzerland	3.80	58.98	0.90	
15	United Kingdom	3.60	57.37	0.89	
16	Korea, Rep.	3.11	53.01	0.88	
17	Turkey	3.05	52.48	0.87	●
18	India	2.57	47.56	0.86	●
19	Italy	2.28	44.42	0.85	
20	Japan	2.24	43.89	0.85	
21	Dominican Republic	2.20	43.47	0.84	●
22	Germany	2.18	43.23	0.83	
23	Lithuania	2.12	42.48	0.82	
24	Tunisia	2.06	41.75	0.81	●
25	Ireland	1.95	40.26	0.81	
26	Egypt	1.94	40.22	0.80	●
27	Israel	1.82	38.59	0.79	
28	Belgium	1.81	38.52	0.78	
29	Denmark	1.80	38.38	0.77	
30	France	1.69	36.85	0.77	
31	United States of America	1.67	36.57	0.76	
32	Sweden	1.65	36.17	0.75	
33	United Arab Emirates	1.62	35.85	0.74	
34	Bahrain	1.25	30.11	0.73	
35	Bolivia, Plurinational St.	1.25	30.08	0.73	●
36	Greece	1.25	29.97	0.72	
37	Portugal	1.23	29.69	0.71	
38	Estonia	1.20	29.19	0.70	
39	Romania	1.19	28.96	0.69	
40	Austria	1.17	28.71	0.69	
41	Mauritius	1.14	28.11	0.68	
42	Jordan	1.02	26.06	0.67	●
43	Bulgaria	0.96	24.92	0.66	
44	Croatia	0.94	24.49	0.65	
45	Slovenia	0.91	23.77	0.65	
46	Spain	0.88	23.34	0.64	
47	Lebanon (2014)	0.81	21.80	0.63	
48	Australia	0.80	21.65	0.62	
49	Russian Federation	0.79	21.45	0.61	
50	Serbia	0.76	20.81	0.60	
51	Namibia (2014)	0.67	18.85	0.60	
52	El Salvador	0.66	18.61	0.59	
53	Finland	0.64	18.24	0.58	
54	Canada	0.63	18.04	0.57	
55	South Africa	0.59	17.04	0.56	
56	Cambodia	0.56	16.27	0.56	●
57	Costa Rica	0.55	15.98	0.55	
58	Iran, Islamic Rep. (2011)	0.53	15.60	0.54	
59	Norway	0.52	15.27	0.53	
60	Armenia	0.43	13.04	0.52	
61	Guatemala	0.43	12.96	0.52	
62	Kuwait	0.41	12.49	0.51	
63	Ukraine	0.40	12.21	0.50	
64	Malta	0.36	11.26	0.49	
65	Bosnia and Herzegovina	0.34	10.63	0.48	
66	New Zealand	0.29	9.14	0.48	○
67	Peru	0.28	8.91	0.47	
68	Kenya (2013)	0.28	8.85	0.46	
69	Sri Lanka	0.26	8.43	0.45	
70	Zimbabwe (2014)	0.26	8.36	0.44	
71	Colombia	0.24	7.73	0.44	
72	Brazil	0.23	7.53	0.43	
73	Nepal	0.22	7.35	0.42	●
74	Belarus	0.21	6.98	0.41	
75	Montenegro	0.19	6.22	0.40	
76	Botswana	0.18	6.14	0.40	
77	Morocco	0.18	6.09	0.39	
78	Qatar	0.18	5.92	0.38	
79	Hong Kong (China)	0.17	5.75	0.37	○
80	Kazakhstan	0.16	5.40	0.36	
81	TFYR of Macedonia	0.16	5.28	0.35	
82	Chile	0.16	5.23	0.35	
83	Paraguay	0.15	4.98	0.34	
84	Rwanda	0.15	4.97	0.33	
85	Brunei Darussalam	0.13	4.37	0.32	
86	Argentina	0.12	4.23	0.31	
87	Madagascar	0.12	4.20	0.31	
88	Albania	0.12	4.10	0.30	
89	Luxembourg	0.12	3.94	0.29	○
90	Côte d'Ivoire	0.10	3.57	0.28	
91	Georgia	0.10	3.45	0.27	
92	Malawi	0.10	3.35	0.27	
93	Senegal	0.10	3.35	0.26	
94	Honduras (2014)	0.10	3.34	0.25	
95	Iceland	0.08	2.92	0.24	○
96	Saudi Arabia	0.08	2.66	0.23	
97	Uruguay	0.07	2.56	0.23	
98	Kyrgyzstan	0.07	2.47	0.22	
99	Pakistan	0.07	2.32	0.21	
100	Bangladesh (2011)	0.06	2.14	0.20	
101	Tanzania, United Rep. (2014)	0.06	2.11	0.19	
102	Moldova, Rep.	0.06	2.10	0.19	
103	Trinidad and Tobago (2010)	0.06	2.00	0.18	
104	Ecuador	0.06	1.94	0.17	
105	Uganda	0.06	1.93	0.16	
106	Zambia	0.04	1.45	0.15	
107	Cyprus	0.04	1.44	0.15	○
108	Jamaica	0.03	1.19	0.14	○
109	Burkina Faso	0.03	0.91	0.13	
110	Oman (2014)	0.02	0.66	0.12	○
111	Ethiopia	0.02	0.59	0.11	
112	Niger (2014)	0.02	0.53	0.10	
113	Burundi (2014)	0.01	0.46	0.10	
114	Guinea (2014)	0.01	0.45	0.09	
115	Nigeria (2014)	0.01	0.38	0.08	
116	Panama	0.01	0.36	0.07	○
117	Benin	0.01	0.31	0.06	
118	Cameroon	0.01	0.29	0.06	○
119	Azerbaijan	0.01	0.27	0.05	○
120	Mongolia	0.01	0.17	0.04	○
121	Mozambique	0.01	0.17	0.03	○
122	Mali (2012)	0.00	0.13	0.02	○
123	Togo (2014)	0.00	0.11	0.02	○
124	Yemen (2014)	0.00	0.02	0.01	
125	Algeria	0.00	0.00	0.00	○
n/a	Philippines	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	

SOURCE: United Nations, *COMTRADE* database; 2009 UNESCO Framework for Cultural Statistics, Table 3, *International trade of cultural goods and services based on the 2007 Harmonised System (HS 2007)*; World Trade Organization, *Trade in Commercial Services* database, itself based on the sixth (2009) edition of the International Monetary Fund's *Balance of Payments Manual* and *Balance of Payments* database

NOTE: ● indicates a strength; ○ a weakness

7.3.1 Generic top-level domains (gTLDs)

Generic top-level domains (gTLDs) (per thousand population 15–69 years old) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Iceland	100.00	100.00	0.99	●
1	United States of America	100.00	100.00	0.99	●
3	Malta	94.51	94.51	0.98	●
4	Luxembourg	92.55	92.55	0.98	●
5	Netherlands	77.94	77.94	0.97	●
6	Canada	76.36	76.36	0.96	●
7	Hong Kong (China)	70.80	70.80	0.95	
8	Cyprus	68.23	68.23	0.94	●
9	Australia	63.61	63.61	0.94	
10	United Kingdom	61.89	61.89	0.93	
11	Ireland	61.44	61.44	0.92	
12	Switzerland	60.48	60.48	0.91	
13	Germany	55.34	55.34	0.90	
14	Norway	51.48	51.48	0.90	
15	Denmark	48.45	48.45	0.89	
16	Panama	44.64	44.64	0.88	●
17	Sweden	43.00	43.00	0.87	
18	France	41.31	41.31	0.87	
19	Austria	36.92	36.92	0.86	
20	New Zealand	34.29	34.29	0.85	
21	Finland	29.25	29.25	0.84	
22	Spain	28.10	28.10	0.83	
23	Singapore	25.84	25.84	0.83	
24	Israel	23.19	23.19	0.82	
25	Italy	23.13	23.13	0.81	
26	Bulgaria	22.70	22.70	0.80	
27	Belgium	22.13	22.13	0.79	
28	Slovenia	21.12	21.12	0.79	
29	Portugal	18.90	18.90	0.78	
30	Czech Republic	17.08	17.08	0.77	
31	Japan	15.09	15.09	0.76	
32	Croatia	14.14	14.14	0.75	
33	Lithuania	13.81	13.81	0.75	
34	Mauritius	12.72	12.72	0.74	
35	Greece	12.42	12.42	0.73	
36	Turkey	12.20	12.20	0.72	
37	Costa Rica	11.51	11.51	0.71	
38	United Arab Emirates	11.20	11.20	0.71	
39	Hungary	10.33	10.33	0.70	
40	Latvia	9.43	9.43	0.69	
41	Estonia	9.22	9.22	0.68	
42	Namibia	8.66	8.66	0.67	
43	Korea, Rep.	8.19	8.19	0.67	
44	Kuwait	8.14	8.14	0.66	
45	Albania	7.29	7.29	0.65	
46	Poland	7.07	7.07	0.64	
47	Brunei Darussalam	7.05	7.05	0.63	
48	Lebanon	6.87	6.87	0.63	
49	Jordan	6.63	6.63	0.62	
50	TFYR of Macedonia	6.57	6.57	0.61	
51	Uruguay	6.38	6.38	0.60	
52	Malaysia	6.34	6.34	0.60	
53	Bahrain	5.44	5.44	0.59	
54	Thailand	5.37	5.37	0.58	
55	Peru	5.30	5.30	0.57	
56	Trinidad and Tobago	4.54	4.54	0.56	●
57	Romania	4.46	4.46	0.56	
58	Qatar	4.41	4.41	0.55	
59	Ukraine	4.39	4.39	0.54	
60	Guatemala	4.30	4.30	0.53	
61	Russian Federation	3.34	3.34	0.52	
62	South Africa	3.23	3.23	0.52	
63	Saudi Arabia	3.10	3.10	0.51	
64	Slovakia	3.08	3.08	0.50	
65	Argentina	3.07	3.07	0.49	
66	Dominican Republic	2.92	2.92	0.48	
67	Colombia	2.90	2.90	0.48	
68	Armenia	2.79	2.79	0.47	
69	Tunisia	2.71	2.71	0.46	
70	Viet Nam	2.56	2.56	0.45	
71	Mexico	2.55	2.55	0.44	
72	El Salvador	2.55	2.55	0.44	
73	Bosnia and Herzegovina	2.44	2.44	0.43	
74	China	2.36	2.36	0.42	
75	Chile	2.18	2.18	0.41	
76	Ecuador	2.13	2.13	0.40	
77	Moldova, Rep.	2.12	2.12	0.40	
78	Jamaica	1.90	1.90	0.39	
79	Iran, Islamic Rep.	1.84	1.84	0.38	
80	Bolivia, Plurinational St.	1.83	1.83	0.37	
81	Oman	1.81	1.81	0.37	
82	Belarus	1.77	1.77	0.36	
83	Georgia	1.76	1.76	0.35	
84	Paraguay	1.69	1.69	0.34	
85	Morocco	1.60	1.60	0.33	
86	Brazil	1.59	1.59	0.33	
87	Indonesia	1.57	1.57	0.32	
88	Serbia	1.51	1.51	0.31	
89	Montenegro	1.42	1.42	0.30	
90	Egypt	1.24	1.24	0.29	
91	Philippines	1.16	1.16	0.29	
92	Cambodia	1.11	1.11	0.28	
93	Kenya	1.06	1.06	0.27	
94	Botswana	1.05	1.05	0.26	
95	Senegal	1.05	1.05	0.25	
96	Azerbaijan	1.03	1.03	0.25	
97	Niger	1.02	1.02	0.24	
98	India	0.95	0.95	0.23	
99	Sri Lanka	0.78	0.78	0.22	
100	Honduras	0.65	0.65	0.21	
101	Togo	0.64	0.64	0.21	
102	Mongolia	0.64	0.64	0.20	
103	Pakistan	0.62	0.62	0.19	
104	Benin	0.60	0.60	0.18	
105	Nigeria	0.52	0.52	0.17	
106	Côte d'Ivoire	0.51	0.51	0.17	
107	Algeria	0.49	0.49	0.16	
108	Nepal	0.47	0.47	0.15	
109	Zimbabwe	0.40	0.40	0.14	
110	Yemen	0.37	0.37	0.13	
111	Bangladesh	0.36	0.36	0.13	
112	Kazakhstan	0.33	0.33	0.12	○
113	Uganda	0.23	0.23	0.11	
114	Kyrgyzstan	0.20	0.20	0.10	
115	Malawi	0.19	0.19	0.10	
116	Cameroon	0.17	0.17	0.09	
117	Tanzania, United Rep.	0.17	0.17	0.08	
118	Rwanda	0.16	0.16	0.07	○
119	Mali	0.15	0.15	0.06	
120	Madagascar	0.13	0.13	0.06	
121	Zambia	0.11	0.11	0.05	○
122	Burkina Faso	0.07	0.07	0.04	○
123	Tajikistan	0.05	0.05	0.03	○
124	Guinea	0.05	0.05	0.02	
125	Burundi	0.04	0.04	0.02	○
126	Mozambique	0.03	0.03	0.01	○
127	Ethiopia	0.00	0.00	0.00	○

SOURCE: ZookNIC Inc; United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2015 Revision* (population)
NOTE: ● indicates a strength; ○ a weakness

7.3.2 Country-code top-level domains (ccTLDs)

Country-code top-level domains (ccTLDs) (per thousand population 15–69 years old) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Montenegro	100.00	100.00	0.98	●
1	Netherlands	100.00	100.00	0.98	●
1	Switzerland	100.00	100.00	0.98	●
4	Denmark	98.36	98.36	0.98	●
5	Germany	83.84	83.84	0.97	●
6	Iceland	77.01	77.01	0.96	
7	United Kingdom	69.54	69.54	0.95	
8	Luxembourg	63.94	63.94	0.94	
9	Sweden	63.56	63.56	0.94	
10	New Zealand	62.42	62.42	0.93	
11	Austria	61.44	61.44	0.92	●
12	Belgium	58.05	58.05	0.91	●
13	Norway	56.82	56.82	0.90	
14	Australia	52.79	52.79	0.90	
15	Czech Republic	49.65	49.65	0.89	●
16	Latvia	43.03	43.03	0.88	
17	Estonia	40.66	40.66	0.87	
18	Portugal	35.57	35.57	0.87	●
19	Finland	31.59	31.59	0.86	
20	Hungary	29.08	29.08	0.85	●
21	Canada	28.65	28.65	0.84	
22	Poland	27.93	27.93	0.83	●
23	Lithuania	26.56	26.56	0.83	●
24	Slovakia	25.47	25.47	0.82	●
25	Slovenia	24.40	24.40	0.81	
26	Italy	21.40	21.40	0.80	
27	France	20.19	20.19	0.79	
28	Ireland	20.18	20.18	0.79	
29	Romania	18.39	18.39	0.78	●
30	Hong Kong (China)	17.49	17.49	0.77	
31	Colombia	17.24	17.24	0.76	
32	Spain	16.65	16.65	0.75	
33	Greece	16.30	16.30	0.75	
34	Russian Federation	15.18	15.18	0.74	
35	Israel	13.48	13.48	0.73	
36	Singapore	11.89	11.89	0.72	
37	Chile	11.85	11.85	0.71	
38	Mali	11.07	11.07	0.71	●
39	Uruguay	10.02	10.02	0.70	
40	Croatia	9.53	9.53	0.69	
41	South Africa	8.90	8.90	0.68	
42	Korea, Rep.	8.03	8.03	0.67	
43	Brazil	7.66	7.66	0.67	
44	Malta	7.30	7.30	0.66	
45	Argentina	5.79	5.79	0.65	
46	China	5.78	5.78	0.64	
47	United Arab Emirates	5.63	5.63	0.63	
48	Belarus	5.18	5.18	0.63	
49	Japan	5.06	5.06	0.62	
50	Ukraine	5.05	5.05	0.61	
51	Armenia	4.89	4.89	0.60	
52	Cyprus	4.70	4.70	0.60	
53	Serbia	4.35	4.35	0.59	
54	Malaysia	4.34	4.34	0.58	
55	Iran, Islamic Rep.	4.29	4.29	0.57	
56	Qatar	3.45	3.45	0.56	
57	Kazakhstan	3.09	3.09	0.56	
58	United States of America	2.92	2.92	0.55	
59	Mexico	2.77	2.77	0.54	
60	Viet Nam	2.59	2.59	0.53	
61	Moldova, Rep.	2.34	2.34	0.52	
62	Mauritius	2.31	2.31	0.52	
63	Georgia	2.14	2.14	0.51	
64	Turkey	2.05	2.05	0.50	
65	Bulgaria	2.03	2.03	0.49	
66	Indonesia	1.98	1.98	0.48	
67	Bosnia and Herzegovina	1.96	1.96	0.48	
68	Costa Rica	1.61	1.61	0.47	
69	Trinidad and Tobago	1.48	1.48	0.46	
70	Mongolia	1.44	1.44	0.45	
71	TFYR of Macedonia	1.37	1.37	0.44	
72	Peru	1.36	1.36	0.44	
73	Botswana	1.35	1.35	0.43	
74	Albania	1.34	1.34	0.42	
75	Paraguay	1.26	1.26	0.41	
76	Bahrain	1.24	1.24	0.40	
77	Panama	1.19	1.19	0.40	
78	Ecuador	1.15	1.15	0.39	
79	Azerbaijan	1.08	1.08	0.38	
80	Dominican Republic	1.07	1.07	0.37	
81	Jamaica	0.96	0.96	0.37	
82	Brunei Darussalam	0.93	0.93	0.36	
83	Nepal	0.83	0.83	0.35	
84	Morocco	0.79	0.79	0.34	
85	India	0.73	0.73	0.33	
86	Kenya	0.69	0.69	0.33	
87	Saudi Arabia	0.62	0.62	0.32	
88	El Salvador	0.57	0.57	0.31	
89	Bolivia, Plurinational St.	0.49	0.49	0.30	
90	Guatemala	0.45	0.45	0.29	
91	Honduras	0.44	0.44	0.29	
92	Kyrgyzstan	0.40	0.40	0.28	
93	Kuwait	0.40	0.40	0.27	
94	Thailand	0.38	0.38	0.26	
95	Tajikistan	0.37	0.37	0.25	
96	Malawi	0.31	0.31	0.25	
97	Philippines	0.31	0.31	0.24	
98	Jordan	0.29	0.29	0.23	○
99	Lebanon	0.27	0.27	0.22	
100	Cameroon	0.27	0.27	0.21	
101	Tunisia	0.20	0.20	0.21	
102	Sri Lanka	0.17	0.17	0.20	
103	Senegal	0.17	0.17	0.19	
104	Côte d'Ivoire	0.14	0.14	0.18	
105	Oman	0.13	0.13	0.17	
106	Tanzania, United Rep.	0.13	0.13	0.17	
107	Burundi	0.11	0.11	0.16	
108	Pakistan	0.11	0.11	0.15	
109	Nigeria	0.10	0.10	0.14	
110	Algeria	0.09	0.09	0.13	
111	Mozambique	0.08	0.08	0.13	
112	Rwanda	0.06	0.06	0.12	
113	Cambodia	0.06	0.06	0.11	
114	Zimbabwe	0.06	0.06	0.10	
115	Guinea	0.05	0.05	0.10	
116	Uganda	0.05	0.05	0.09	
117	Namibia	0.04	0.04	0.08	○
118	Madagascar	0.04	0.04	0.07	
119	Burkina Faso	0.04	0.04	0.06	
120	Egypt	0.04	0.04	0.06	○
121	Benin	0.02	0.02	0.05	○
122	Yemen	0.02	0.02	0.04	
123	Bangladesh	0.01	0.01	0.03	○
124	Ethiopia	0.01	0.01	0.02	
125	Niger	0.00	0.00	0.02	
126	Zambia	0.00	0.00	0.01	○
127	Togo	0.00	0.00	0.00	○

SOURCE: ZookNIC Inc; United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2015 Revision* (population)
NOTE: ● indicates a strength; ○ a weakness

7.3.3 Wikipedia yearly edits

Wikipedia yearly page edits (per million population 15–69 years old) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	Serbia	100.00	100.00	1.00	●
2	Norway	75.54	75.54	0.99	●
3	Israel	73.40	73.40	0.98	●
4	Sweden	71.00	71.00	0.98	●
5	Estonia	70.73	70.73	0.97	●
6	Finland	69.98	69.98	0.96	
7	Armenia	69.57	69.57	0.95	●
8	Netherlands	69.27	69.27	0.94	
9	Hong Kong (China)	68.02	68.02	0.94	
10	France	67.25	67.25	0.93	●
11	Iceland (2014)	67.15	67.15	0.92	
12	United Kingdom	66.89	66.89	0.91	
13	New Zealand	66.67	66.67	0.90	
14	Latvia	66.63	66.63	0.90	●
15	Germany	65.49	65.49	0.89	
16	Hungary	65.47	65.47	0.88	●
17	Luxembourg (2014)	65.40	65.40	0.87	
18	Spain	65.22	65.22	0.87	
19	Austria	65.00	65.00	0.86	
20	Slovenia	64.86	64.86	0.85	
21	Switzerland	64.72	64.72	0.84	
22	Czech Republic	64.62	64.62	0.83	
23	Canada	64.13	64.13	0.83	
24	Australia	63.80	63.80	0.82	
25	Denmark	63.25	63.25	0.81	
26	Bulgaria	63.20	63.20	0.80	
27	Ireland	63.14	63.14	0.79	
28	Uruguay	62.96	62.96	0.79	●
29	Italy	62.52	62.52	0.78	
30	Lithuania	61.59	61.59	0.77	
31	Poland	60.22	60.22	0.76	
32	Cyprus (2014)	60.15	60.15	0.75	
33	Belgium	59.91	59.91	0.75	
34	Russian Federation	59.63	59.63	0.74	
35	Greece	59.42	59.42	0.73	
36	TFYR of Macedonia (2014)	59.41	59.41	0.72	
37	Croatia	59.35	59.35	0.71	
38	Slovakia	59.05	59.05	0.71	
39	Ukraine	58.93	58.93	0.70	
40	Georgia	58.86	58.86	0.69	
41	United States of America	58.84	58.84	0.68	
42	Malta (2014)	58.61	58.61	0.67	
43	Bosnia and Herzegovina	58.22	58.22	0.67	
44	Singapore	57.68	57.68	0.66	
45	Portugal	56.40	56.40	0.65	
46	Belarus	55.33	55.33	0.64	
47	Japan	54.76	54.76	0.63	
48	Azerbaijan	54.42	54.42	0.63	
49	Chile	53.86	53.86	0.62	
50	Korea, Rep.	53.57	53.57	0.61	
51	Montenegro (2014)	53.06	53.06	0.60	
52	Jordan	51.96	51.96	0.60	
53	Argentina	51.47	51.47	0.59	
54	Turkey	50.32	50.32	0.58	
55	Iran, Islamic Rep.	50.10	50.10	0.57	
56	Kazakhstan	49.76	49.76	0.56	
57	Moldova, Rep. (2014)	49.68	49.68	0.56	
58	Kuwait (2014)	49.43	49.43	0.55	
59	Romania	49.35	49.35	0.54	
60	Albania (2014)	49.10	49.10	0.53	
61	Bahrain (2014)	49.05	49.05	0.52	
62	Mongolia (2014)	48.87	48.87	0.52	
63	Panama (2014)	48.16	48.16	0.51	
64	Viet Nam	47.72	47.72	0.50	
65	Costa Rica (2014)	45.42	45.42	0.49	
66	Saudi Arabia	44.85	44.85	0.48	
67	Brazil	44.65	44.65	0.48	
68	United Arab Emirates (2014)	44.38	44.38	0.47	
69	Malaysia	44.29	44.29	0.46	
70	Qatar (2014)	43.94	43.94	0.45	
71	Trinidad and Tobago (2014)	42.41	42.41	0.44	
72	Lebanon (2014)	41.71	41.71	0.44	
73	Kyrgyzstan (2014)	41.50	41.50	0.43	
74	Peru	41.39	41.39	0.42	
75	Thailand	41.22	41.22	0.41	
76	Colombia	41.00	41.00	0.40	
77	Sri Lanka (2014)	39.88	39.88	0.40	
78	Nepal (2014)	39.81	39.81	0.39	
79	Mauritius (2014)	39.42	39.42	0.38	
80	Dominican Republic (2014)	39.21	39.21	0.37	
81	Brunei Darussalam (2014)	38.96	38.96	0.37	
82	Philippines	38.89	38.89	0.36	
83	Oman (2014)	38.42	38.42	0.35	
84	Morocco	38.29	38.29	0.34	
85	Mexico	38.21	38.21	0.33	
86	Ecuador (2014)	37.87	37.87	0.33	
87	El Salvador (2014)	37.65	37.65	0.32	
88	Paraguay (2014)	36.36	36.36	0.31	
89	South Africa	36.32	36.32	0.30	
90	Guatemala (2014)	35.60	35.60	0.29	
91	Egypt	34.75	34.75	0.29	
92	Namibia (2014)	34.56	34.56	0.28	
93	Bolivia, Plurinational St. (2014)	34.56	34.56	0.27	
94	Indonesia	34.45	34.45	0.26	
95	Honduras (2014)	33.60	33.60	0.25	
96	Tunisia (2014)	32.79	32.79	0.25	
97	Tajikistan (2014)	31.78	31.78	0.24	
98	Jamaica (2014)	30.93	30.93	0.23	
99	Algeria (2014)	28.87	28.87	0.22	
100	India	28.40	28.40	0.21	
101	Pakistan	28.25	28.25	0.21	
102	Cambodia (2014)	28.14	28.14	0.20	
103	Bangladesh	26.33	26.33	0.19	
104	Yemen (2014)	24.03	24.03	0.18	
105	Kenya (2014)	23.60	23.60	0.17	
106	Benin (2014)	21.56	21.56	0.17	
107	Uganda (2014)	18.08	18.08	0.16	
108	Côte d'Ivoire (2014)	16.58	16.58	0.15	
109	Madagascar (2014)	15.39	15.39	0.14	
110	China	15.13	15.13	0.13	○
111	Botswana (2014)	14.13	14.13	0.13	
112	Nigeria (2014)	12.64	12.64	0.12	
113	Zimbabwe (2014)	11.85	11.85	0.11	
114	Senegal (2014)	10.60	10.60	0.10	
115	Tanzania, United Rep. (2014)	10.13	10.13	0.10	
116	Mozambique (2014)	9.81	9.81	0.09	
117	Rwanda (2014)	9.31	9.31	0.08	
118	Togo (2014)	9.16	9.16	0.07	
119	Cameroon (2014)	6.64	6.64	0.06	○
120	Zambia (2014)	6.58	6.58	0.06	○
121	Mali (2014)	4.50	4.50	0.05	
122	Burundi (2014)	2.85	2.85	0.04	
123	Ethiopia (2014)	2.65	2.65	0.03	
124	Malawi (2014)	2.07	2.07	0.02	○
125	Burkina Faso (2014)	1.11	1.11	0.02	○
126	Guinea (2014)	0.02	0.02	0.01	○
127	Niger (2014)	0.00	0.00	0.00	○

SOURCE: Wikimedia Foundation; United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2012 Revision* (population)
NOTE: ● indicates a strength; ○ a weakness

7.3.4 Video uploads on YouTube

Number of video uploads on YouTube (scaled by population 15–69 years old) | 2016

Rank	Country/Economy	Value	Score (0–100)	Percent rank	
1	United States of America	100.00	100.00	1.00	●
2	Latvia	81.80	81.80	0.99	●
3	United Kingdom	76.36	76.36	0.97	●
4	Israel	64.85	64.85	0.96	
5	Netherlands	64.02	64.02	0.94	
6	Sweden	63.18	63.18	0.93	
7	Estonia	62.97	62.97	0.92	
8	New Zealand	60.88	60.88	0.90	
9	Canada	58.58	58.58	0.89	
10	Ireland	57.32	57.32	0.88	
11	Denmark	56.07	56.07	0.85	
11	Finland	56.07	56.07	0.85	
13	Singapore	55.86	55.86	0.83	
14	Hong Kong (China)	54.60	54.60	0.82	
15	Spain	53.35	53.35	0.81	
16	Switzerland	49.16	49.16	0.79	
17	Norway	47.49	47.49	0.76	
17	Portugal	47.49	47.49	0.76	
19	Italy	47.28	47.28	0.75	
20	Kuwait	45.82	45.82	0.74	●
21	Korea, Rep.	45.40	45.40	0.71	
21	Saudi Arabia	45.40	45.40	0.71	
23	Australia	44.77	44.77	0.68	
23	Czech Republic	44.77	44.77	0.68	
25	Belgium	44.14	44.14	0.67	
26	France	43.31	43.31	0.65	
27	Bahrain	42.89	42.89	0.64	
28	Russian Federation	42.05	42.05	0.63	
29	Brazil	39.75	39.75	0.60	
29	Greece	39.75	39.75	0.60	
31	Lithuania	39.54	39.54	0.58	
32	United Arab Emirates	39.12	39.12	0.57	
33	Hungary	38.91	38.91	0.56	
34	Qatar	37.66	37.66	0.54	
35	Argentina	37.45	37.45	0.53	
36	Bulgaria	36.82	36.82	0.50	
36	Germany	36.82	36.82	0.50	
38	Chile	35.98	35.98	0.49	
39	Poland	35.77	35.77	0.47	
40	Romania	35.36	35.36	0.46	
41	Austria	34.94	34.94	0.43	○
41	Ukraine	34.94	34.94	0.43	
43	Croatia	30.33	30.33	0.42	
44	Turkey	29.50	29.50	0.40	
45	Slovenia	28.87	28.87	0.39	○
46	Thailand	28.24	28.24	0.38	
47	Serbia	26.99	26.99	0.36	
48	Slovakia	26.57	26.57	0.35	
49	Japan	25.31	25.31	0.33	○
50	TFYR of Macedonia	25.10	25.10	0.32	
51	Mexico	24.90	24.90	0.31	
52	Viet Nam	24.27	24.27	0.29	
53	Montenegro	23.85	23.85	0.28	
54	Colombia	23.43	23.43	0.26	
55	Bosnia and Herzegovina	23.22	23.22	0.25	
56	Indonesia	22.80	22.80	0.24	
57	Peru	20.29	20.29	0.22	
58	Malaysia	19.04	19.04	0.21	○
59	Jordan	18.83	18.83	0.19	○
60	Lebanon	16.95	16.95	0.18	
61	Oman	12.97	12.97	0.17	
62	Morocco	12.55	12.55	0.15	○
63	Philippines	9.21	9.21	0.13	○
63	Tunisia	9.21	9.21	0.13	○

Rank	Country/Economy	Score (0–100)	Score (0–100)	Percent rank	
65	Egypt	7.95	7.95	0.11	
66	Algeria	6.49	6.49	0.10	
67	South Africa	2.93	2.93	0.08	○
68	India	2.51	2.51	0.07	○
69	Senegal	1.88	1.88	0.06	○
70	Kenya	1.05	1.05	0.04	○
71	Yemen	0.84	0.84	0.03	
72	Nigeria	0.42	0.42	0.01	○
73	Uganda	0.00	0.00	0.00	○
n/a	Albania	n/a	n/a	n/a	
n/a	Armenia	n/a	n/a	n/a	
n/a	Azerbaijan	n/a	n/a	n/a	
n/a	Bangladesh	n/a	n/a	n/a	
n/a	Belarus	n/a	n/a	n/a	
n/a	Benin	n/a	n/a	n/a	
n/a	Bolivia, Plurinational St.	n/a	n/a	n/a	
n/a	Botswana	n/a	n/a	n/a	
n/a	Brunei Darussalam	n/a	n/a	n/a	
n/a	Burkina Faso	n/a	n/a	n/a	
n/a	Burundi	n/a	n/a	n/a	
n/a	Cambodia	n/a	n/a	n/a	
n/a	Cameroon	n/a	n/a	n/a	
n/a	China	n/a	n/a	n/a	
n/a	Costa Rica	n/a	n/a	n/a	
n/a	Côte d'Ivoire	n/a	n/a	n/a	
n/a	Cyprus	n/a	n/a	n/a	
n/a	Dominican Republic	n/a	n/a	n/a	
n/a	Ecuador	n/a	n/a	n/a	
n/a	El Salvador	n/a	n/a	n/a	
n/a	Ethiopia	n/a	n/a	n/a	
n/a	Georgia	n/a	n/a	n/a	
n/a	Guatemala	n/a	n/a	n/a	
n/a	Guinea	n/a	n/a	n/a	
n/a	Honduras	n/a	n/a	n/a	
n/a	Iceland	n/a	n/a	n/a	
n/a	Iran, Islamic Rep.	n/a	n/a	n/a	
n/a	Jamaica	n/a	n/a	n/a	
n/a	Kazakhstan	n/a	n/a	n/a	
n/a	Kyrgyzstan	n/a	n/a	n/a	
n/a	Luxembourg	n/a	n/a	n/a	
n/a	Madagascar	n/a	n/a	n/a	
n/a	Malawi	n/a	n/a	n/a	
n/a	Mali	n/a	n/a	n/a	
n/a	Malta	n/a	n/a	n/a	
n/a	Mauritius	n/a	n/a	n/a	
n/a	Moldova, Rep.	n/a	n/a	n/a	
n/a	Mongolia	n/a	n/a	n/a	
n/a	Mozambique	n/a	n/a	n/a	
n/a	Namibia	n/a	n/a	n/a	
n/a	Nepal	n/a	n/a	n/a	
n/a	Niger	n/a	n/a	n/a	
n/a	Pakistan	n/a	n/a	n/a	
n/a	Panama	n/a	n/a	n/a	
n/a	Paraguay	n/a	n/a	n/a	
n/a	Rwanda	n/a	n/a	n/a	
n/a	Sri Lanka	n/a	n/a	n/a	
n/a	Tajikistan	n/a	n/a	n/a	
n/a	Tanzania, United Rep.	n/a	n/a	n/a	
n/a	Togo	n/a	n/a	n/a	
n/a	Trinidad and Tobago	n/a	n/a	n/a	
n/a	Uruguay	n/a	n/a	n/a	
n/a	Zambia	n/a	n/a	n/a	
n/a	Zimbabwe	n/a	n/a	n/a	

SOURCE: Google, parent company of YouTube; United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2012 Revision* (population)

NOTE: ● indicates a strength; ○ a weakness